



PRODUCTS REVIEW CATALOGUE

2023

Bearings
Power Transmission
Engineered Solutions
Sealing Technology
Fasteners
Adhesives
Engineered Plastics
Lubrication Systems
Maintenance Tools & Equipment
Design & Manufacturing
Lighting
Autoelectrical Consumable
Alternators
Starter Motors
HVAC
Filtration Technology
Fleet Automation System

PT. CBC Indonesia – Branch and Sales Representatives Network



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About PT. CBC Indonesia

- A subsidiary of Motion Asia Pacific, which has a proud record of serving Australian industry for more than sixty years.
- Owned by GPC USA.
- A major distributor of Bearings, Power Transmission, Auto-Electrical and related services for the growing Indonesian market.
- Global network of quality manufacturers.
- Internationally recognised brands offer choice to our customers.
- Engineered solutions for maintaining plant and machinery at optimum output levels.
- Large inventory to service the needs of our customers.
- Years of practical, hands-on experience at solving technical issues for our customers.

Browse our Product Review Catalogue to find out how PT. CBC Indonesia can service your needs.

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ENGINEERED SOLUTIONS



ENGINEERED SOLUTIONS

ASSET PERFORMANCE OPTIMISATION

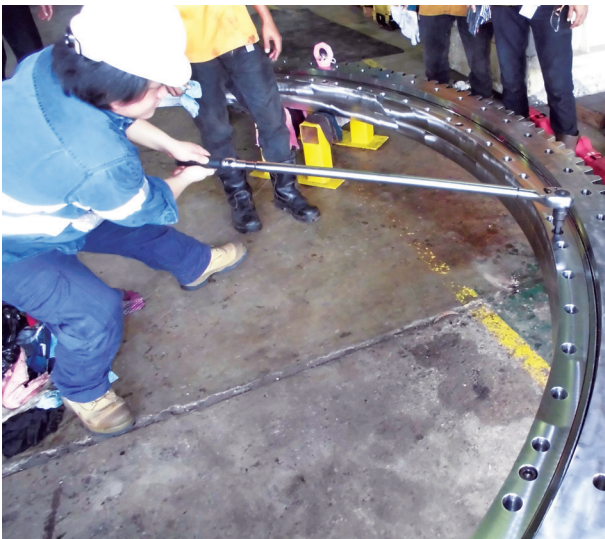
PT. CBC Indonesia's Engineered Solutions program is designed to deliver the maximum productivity for the life of your rotating shaft assets.

Run-In Phase: We can help you to avoid costly premature failure through recommendations and the implementation of correct fitting tolerances and practices.

Useful Life Phase: Our site surveys and software systems help you to identify your site's major mechanical componentry and parts. Our condition monitoring programs can detect early signs of impending failure. Our expertise will ensure that your equipment is lubricated correctly and efficiently.

Wear-Out Phase: We can increase monitoring to detect fatigue (normal wear from use) and provide detailed root cause analysis.

Optimising asset performance through improved uptime availability, extended maintenance cycles and enhanced reliability increases overall cost effectiveness, can dramatically improve returns on investment and improve your company's energy efficiency. Our approach is to build and run an asset performance optimisation program that gets real and measurable result a unique combination of services tailored to meet your specific needs and circumstances.



SPECIALISED ENGINEERING SUPPORT

PT. CBC Indonesia employs a team of qualified specialis engineers and service providers to assist with all your engineering requirements, including :

- Bearing arrangement design
- Bearing installation - supervision and assistance
- Assembly of special bearing units using induction heater and/or hydraulic press
- Slew ring inspection
- Engineering drawings
- Re-design and standardisation
- Belt alignment
- Commissioning of rotating and static equipment
- Design, repair and maintenance of mechanical seals
- Design, repair and maintenance of gland packing
- Drive design
- Dynamic balancing
- Faults and failure diagnosis
- Non-destructive testing
- Gearbox management, maintenance and overhaul
- Hydraulic hose maintenance
- Hydraulic nuts for oil injection and oil injection equipment
- Installation of mechanical equipment
- Machinery inspection• Machine balancing
- Pump overhaul
- Laser shaft alignment
- Pulley balancing
- Lubrication and oil sampling service and analysis
- Lubricant and wear particle management
- Protection of equipment during long term storage

ENVIRONMENTAL SOLUTIONS

Engineered Solutions can benefit the environment, increase efficiency and save you money by :

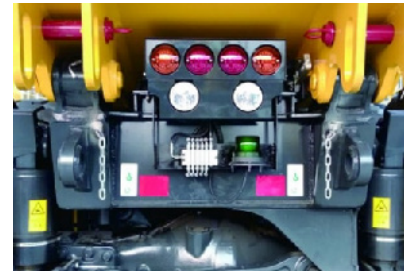
- Reducing energy consumption by improving equipment efficiency, which reduces greenhouse gases
- Reducing water consumption
- Reducing oil consumption, thereby reducing the risk to the environment
- Best practice fitting and maintenance techniques



PT. CBC Indonesia offers absolute commitment to quality in both products and services through its familiarity and superior knowledge to the industry and its applications.

Tailored Products & Solutions

We at PT. CBC Indonesia that no one alike thus we appreciate the unique our client have. We don't believe in mass solution thus we produce creative integrations of our products and services and then customize them to suit each unique client. this business model has ensured our clients they have the products and services they need to run their already established operations rather than having them having to change their operations to suit the common products and common services that are available.



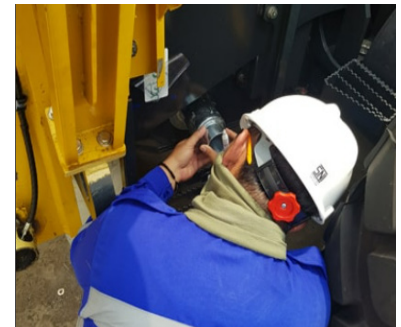
Heavy Mobile Equipment (HME) Fitment & Retrofitting

The combination of multi dimension engineering services and high quality product has enabled PT. CBC Indonesia to offer the High Quality Fitment and Retrofitting of any kind of HME to suit the clients needs, environment and operation style. PT. CBC Indonesia is capable of designing, delivering, testing and commissioning of Auto Electrical, Engine Safety Devices and Fire Supression System without compromising the OEM warranty policies.



Multilevel Skilled Labor Supply

Comprissing one of the most prominent learning center boasted by certified and experienced trainer PT. CBC Indonesia has abundant stocks of highly skilled labor supply and having been servicing the industry for the last 20 years PT. CBC Indonesia has the most coveted professional in the Region.



HME Electrical Assesment, Audit & Commissioning Programs

Having been servicing the industry fo 20 Years PT. CBC indonesia offer the most extensive Electrical Assesment, Audit and Commis-sioning Programs, usually conducted at workshop and jobsites. PT. CBC Indonesia have been maintaining thousands of machines and have been greatly reducing the unscheduled electrical down time as the result.



WAREHOUSING AND INVENTORY MANAGEMENT



CBC's warehousing and inventory management solutions are customised to assist our Business Partners reduce inventory while maintaining necessary levels of availability to sustain operations.

Our warehousing and inventory management solutions ensure:

- Identification of critical items required to run the business
- Identification of spare parts for equipment
- Identification of parts required in routine maintenance
- Rationalisation of spare parts inventory
- Reduction of obsolete inventories
- Reduction of excess inventories
- Reduction of duplicate inventories
- Correct handling of bearings and components
- Correct storage of bearings and components
- Refurbishment of damaged items or those in poor condition

MINCOM LINKONE

Mincom LinkOne is an innovative web-based software system which integrates SAP, Open Catalogue Interface (OCI) compliant applications and Webview for creating and delivering graphical parts catalogues that help users to find the right part, first time every time.

Mincom LinkOne's publishing, distribution and viewing systems make all forms of electronic parts and service information available at the touch of a key via the Internet, intranet, or CD, including:

- Parts catalogues
- Repair manuals
- Operating and commissioning instructions
- Maintenance and repair procedures
- Visual operational aids, such as video clips
- Product alerts and safety bulletins
- Product updates and notices



CONDITION MONITORING OIL SAMPLING

CBC Engineered Solutions provides a NATA accredited oil, grease and fluid analysis program, for monitoring operational factors such as friction, lubrication condition, wear, temperature and erosion using oil analysis techniques in engines, turbines, fuel systems, compressors, water quality, gears, pumps, hydraulic systems, and electro-hydraulic controls.

SITE SURVEYS

Identifying components of equipment and ensuring they are available when necessary is a critical part of plant uptime.

PT. CBC Indonesia's complete surveys of plant and equipment provide the customer with a document which is a comprehensive dossier of a site's major mechanical componentry in application order, cross-references OEM part numbers to CBC part numbers and lists a full range of spare parts for that componentry.



24 HOUR EMERGENCY BREAKDOWN SERVICE

All our clients have access to CBC's 24 hour, 365 days a year emergency assistance.

MAGNETIC FILTRATION

One Eye Industries (OEI) environmentally friendly filtration systems with built-in magnetic filter cores capture ferrous contaminants in fluid systems, to <1 µm, before they reach the conventional filter. Using static adhesion, the cores also retain some non-ferrous contaminants. Contamination monitoring and identification of potential wear-related issues are achieved by removing the magnetic core and examining the retained contamination under a microscope. Ferrous particles smaller than 10 microns generate more wear than larger particles in high pressure contact areas, causing damage to soft metals, seals, bearings and gaskets.

Magnetic Filter Pads

Complement existing disposable filters for lube oil, fuel, hydraulics and coolant applications.

Magnetic Filter Rods, Y Strainers and Scrubbers

Installed prior to traditional filter in reservoirs and applications previously unsuitable for filtration.

Add-Vantage 9000 Series

Replacing disposable filters, these combine cleanable stainless steel elements and magnetic filter technology in one filter with 40% greater flow capacity than traditional paper elements.

Filter Plugs

Replace filler and drain plugs with magnetic plugs to simply and efficiently capture ferrous contaminants.

Cone and Basket Strainers

Magnetic rods in cone and basket strainers capture small particles that would otherwise pass through the basket mesh, minimising erosion in large pipelines and damage to instruments.

TRAINING PROGRAMMES

Equipment productivity and reliability depends on the skillful accomplishment of maintenance practices.

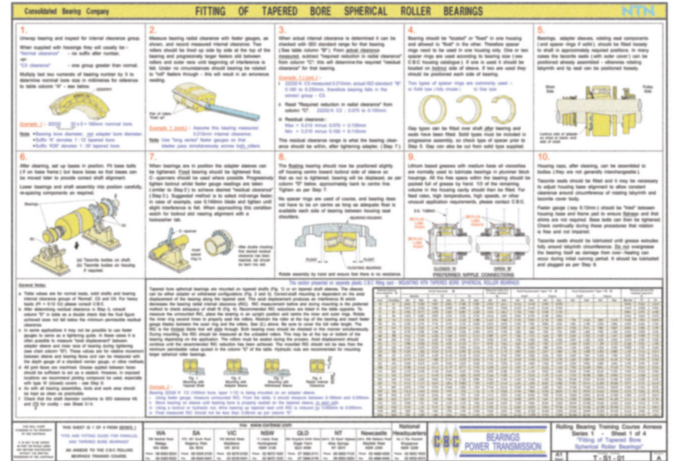
Training courses include:

- Bearing maintenance and replacement
- Dismounting and mounting rolling bearings
- Bearing failure mode and cause analysis
- Lubrication of rolling bearings - principles and application
- Shaft Seals - identification, handling and fitting
- Power Transmission - industrial maintenance, including
 - V-belt drives - identification, installation and alignment
 - Synchronous belt drives
 - Shaft couplings
 - Fluid couplings
 - Gear reducers
 - Electric motors
 - Inverters
 - Industrial brakes
 - Roller chain drives
- Tapered bore spherical roller bearings - identification, handling and fitting
- Pump barrel bearing adjustment
- Conveyor pulley bearing and housing assembly
- Split roller bearings
- Shaft laser alignment
- Truck and mobile equipment wheel bearing fitting and maintenance
- Loctite retaining and sealing compound application
- Hydraulic bolt tensioning



CUSTOMISED WALL CHARTS

CBC's range of practical, detailed, comprehensive wall charts contain all the essential information required for checking and repairing (or manufacturing) shafts, and maintaining bearings and housings to ensure the maximum life and efficiency of the unit's bearings.



MOBILE BEARING TRAINING UNIT (MBTU)

The course includes a comprehensive range of catalogues and handbooks from all major bearing manufacturers, ensuring that course participants receive complete, objective training.

The training course work book is designed to enable course participants to actively engage in the training and to record information about the fitting of any bearing to any application.

The eight-hour course is designed for a maximum of six participants and includes training in:

- Housing specifications
- Bearing housing components
- Measurement of bearing housing and shaft locking element hub bores using micrometers
- Measurement of shaft diameters using micrometers
- Bearing part number identification
- Measurement of bearing internal clearances using feeler gauges
- Mounting and dismounting bearings onto shafts using hydraulics
- Lubrication standards
- Measuring the flatness of the base plate using a straight edge and feeler gauge to relevant standard



MAINTENANCE TOOLS, INSTRUMENTS & EQUIPMENT



GATES BELT DRIVE MAINTENANCE KITS AND TOOLS

Gates Belt Drive Maintenance Kits and Tools are available and are backed by an Australian based service and repair agency.

Gates Belt Drive Maintenance Kits

Gates Australia has four industrial belt drive maintenance kits which contain all the tools required to install and maintain belt drives effectively and efficiently. The tough, waterproof PVC case keeps the contents of the kit protected from workplace hazards.

Gates 508C Sonic Tension Meter

The 508C Sonic Tension Meter is easily operated by one person for fast, accurate readings on all types of synchronous belt drive systems and V-belt drives. The standard cord sensor will reach inside cramped compartments where conventional measurements would be impossible.

An optional flexible sensor can be bent and repositioned for convenient, one hand operation. An optional inductive sensor can measure belt tensions in high noise or windy environments.



Gates AT-1 Laser Alignment Tool

A simple, easy to use, one person operated alignment device. Accurately gauges angular and parallel misalignment. Magnetically mounted to the pulleys, the unit allows the pulleys to be adjusted whilst still measuring the alignment. It's faster, simpler and more accurate than traditional straight edge or string lines. Measures angular and parallel misalignment separately by the simple movement of the targets. Fast, simple and economical.



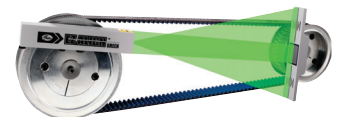
Gates Tension Testers

Gates have two tensioning tools for use in the servicing of belt drives. The single barrel (15kg) and the double barrel (30kg) tester can be used to accurately measure the tension of individual or joined belts at installation or during maintenance. Using the tension testers ensures that correct tension is maintained and is repeatable.



Gates EZ Align® Green - Laser Alignment Tool

The EZ Align® Green laser alignment tool is a more advanced unit than the Gates Laser AT-1. While the AT-1 checks both planes of misalignment individually, the EZ Align® Green checks both planes simultaneously, so adjustment can be made to the drive to align it correctly.



FENNER BELT DRIVE MAINTENANCE KITS AND TOOLS



Pulley Groove Gauge

When installing new belts, the condition of the pulleys is often overlooked. 50% of new belts are fitted to worn pulleys - which can waste up to 10% of your energy input. The Fenner groove gauge can quickly help you assess the health of your pulleys. Quick, simple visual inspection tool Highlights pulleys inefficiency due to wear.

Fenner Drive Alignment Laser

The Fenner Drive Alignment Laser is the perfect tool for pulley and sprocket alignment. Applied magnetically in just a few seconds, the laser line projects onto targets allowing rapid adjustment for perfect alignment. Reduces wear on belts, pulleys, chain, sprockets Increases drive efficiency for larger energy savings. Quick and easy to use, producing accurate results Shows parallel and angular misalignment. Suitable for both vertical and horizontal mounted machines.



Belt Efficiency Kit

For quick and simple installation - order yours today!

Belt Tension Indicator

Wedge belt drives can offer as much as 96% efficiency in power transmission on most applications, however to achieve and maintain such efficiency requires optimum drive design and care when installing the drives. A correctly tensioned drive avoids belt slippage that can decrease overall efficiency, reduces wear on belts and pulleys, and ensures belt drives are operating at the optimum efficiency. Allows simple accurate belt tensioning.



MAINTENANCE TOOLS, INSTRUMENTS & EQUIPMENT

HYDRAULIC NUTS

CBC Indonesia's Engineered Solutions manufactures a full range of hydraulic nuts and can make to order for your specification. FAG hydraulic nuts HYDNUT are also available for hire or sale in metric thread sizes from 50 to 380mm.

Hydraulic nuts can be used to press bearings and components with a tapered bore onto their tapered seat. They are primarily used when the drive-up forces required cannot be applied using other devices, eg shaft lock nuts or pressure screws.

They are mainly used for:

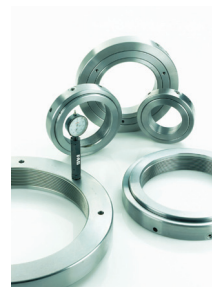
- Mounting of rolling bearings with a tapered bore. The bearings can be seated directly on a tapered shaft, on an adapter sleeve or an extraction sleeve. If the bearing is located using an extraction sleeve, the hydraulic nut can also be used for dismounting.
- Mounting of couplings, gears, ship propellers etc.

FAG DISPLACEMENT GAUGE FOR HYDRAULIC NUTS

If the radial internal clearance cannot be measured with a feeler gauge due to poor accessibility, the axial displacement of the bearing can be measured on the tapered seat. This can be achieved by means of an FAG displacement gauge attached to the front face of the hydraulic nut. The user can determine which of the measuring needles supplied should be used from the comprehensive user manual included with each gauge.

FAG TWIN STAGE OIL INJECTION HAND PUMP SET

win stage hand pump set is used for the mounting and dismounting of rolling bearings. Twin stage pumps have a high flow rate in the low pressure range (up to 50 bar) and then switch automatically to the high pressure stage, providing a high work rate.



TECHNOFAST BOLT TENSIONING EQUIPMENT

Technofast Ezitite Hydraulic Nut

The Ezitite Hydraulic Nut is a precision-engineered, high pressure, high performance, hydraulically operated bolt tensioning device.

Technofast Ezitite Clamp Nut

Ezitite Clamp Nuts are the modern, safe and efficient way to ensure precise tool clamping.

Technofast Ezitite Hydraulic Bolt

Ezitite Hydraulic Bolts are used to minimise the time required to carry out critical bolting procedures.

TECHNOFAST BOLT TENSIONING RANGE

EziJac Bolt Tensioner are safer and faster, offering consistent bolt loads.

Technofast Dedicated B2 Series EziJac

The B2 EziJac Dedicated Stud Tensioner utilises hydraulic power to produce the force necessary to tension bolts accurately and safely.

Technofast B3 Modular Series EziJac

The B3 Series Modular EziJac features either a manual or spring return function for resetting of the tooling following operation.

Technofast 2 Stage EziJac

The 2 Stage Series of Hydraulic Bolt Tensioners are a lightweight, user friendly range of tools which are quick and easily fitted in restricted spaces.

Custom Design EziJac for Application

A precision-engineered tool can be custom designed to resolve fastening problems requiring non-standard tensioning solutions.

Technofast Wind Turbine EziJacs

Designed specifically for wind turbine manufacturers and constructors, with two stage hydraulic power and fast run down onto the exposed bolt.

Technofast FastaJacsThe FastaJac

saves on production, labour and maintenance costs for servicing plate heat exchangers.



MAINTENANCE TOOLS, INSTRUMENTS & EQUIPMENT

BEGA SPECIAL TOOLS - MECHANICAL - HYDRAULIC - INDUCTION

Easy solutions for safe and effective mounting and dismantling of transmission parts.

PT. CBC Indonesia is the exclusive distributor of the expansive range of Bega BETEX® special purpose professional tools.

Bega BETEX® Impact Fitting Tool Set

For the safe, precise and quick mounting of bearings, bushings, sealing rings, wheels and pulleys, an Impact fitting tool set is essential.

BETEX® IMPACT 33 with 33 rings, suitable for ~ 375 bearing types and sizes.

BETEX® IMPACT 39 with 39 rings, suitable for ~ 600 bearing types and sizes.

BETEX® Mechanical and Hydraulic pullers

Compact, ergonomically designed and easily operated by one person. The range ensures safe and easy dismantling of bearings, couplings, rings etc. HSP and HXP series of self-centering 2 and 3 arm hydraulic pullers offers capacities of 4 to 50 tons force. integral hydraulic pump series and separate two-stage pump series are available.

BETEX® Heavy duty mobile hydraulic pullers -25, 50 and 100 tons capacity

Betex® HXPM self centring 2/3 arm pullers, and Mobipullers, are available.

BETEX® SPECIAL PURPOSE TOOLS

BETEX® TLS Hydraulic Spreader/Lifter

Loads are always lifted perpendicularly, and suitable for confined space operation. Ideal for numerous industrial maintenance and repair jobs such as shaft alignment work, height adjustment and pipe, valve or compartment flange separation etc. 15 and 25 ton capacity.

BETEX® KZZ Key Drawer

For safe, rapid and damage free perpendicular removal of shaft keys on any type of machinery. Suitable for keys from 5 to 35 mm in width. This unique professional tool saves time, labour and cost.

BETEX® INDUCTION HEATERS

Bega Special Tools develops and manufactures an unmatched range of BETEX® induction heaters for professional use in industry and industrial services.

The series includes standard and low energy consumption - high output TURBO heaters.

Bega also offer BETEX® MF middle frequency quick heaters for booth dismantling and mounting of thin walled metal components such as bearings, rings & housing.



BETEX® BLF 200 Portable

Portable heater for use in the workshop and on site.

- Min. ID Ø 10 mm
- Max. OD Ø 240 mm
- For bearings up to ±20 kg



BETEX® BLF 205 Portable

Powerful benchtop model heater for use in the workshop and on site.

- Min. ID Ø 30/135 mm
 - Max. OD Ø 850 mm
 - For bearings up to ±400 kg
- Smart Series is also available with touchscreen & double temperature measurement



BETEX® BLF 202 (Basic Series)

Basic bench-top type with swivel arm for use in the workshop.

- Min. ID Ø 30/70 mm
 - Max. OD Ø 500 mm
 - For bearings up to ±100 kg
- Smart Series is also available with touchscreen & double temperature measurement



BETEX® 40 RMD Turbo

Roll-around heater with swivel arm and convenient folding operating panel.

- Min. ID Ø 60/175 mm
- Max. OD Ø 920 mm
- For bearings up to ±600 kg
- 12 kVA



BETEX® MF Quick Heaters – Medium Frequency Technologies

Induction generators with medium frequency technology are suitable not only for thermal assembly, but also for disassembly. The MF Quick-Heater consists of a generator with a fixed or flexible inductor. Its compact dimensions make it easy to move.



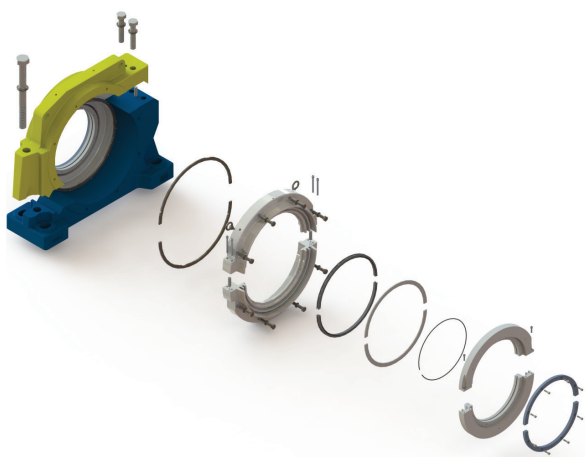
CUSTOM DESIGN



LOCAL MANUFACTURING

PT. CBC Indonesia also offers local manufacturing through its sister company PT. Nusa Utama Engineering. The Balikpapan workshop has a modern balancing machine used in the manufacture of new drive shafts and for the repair of drive shafts and fans. The Cilegon workshop has state of the art CNC machining centres, heat-treatment furnace and specialised welding capabilities to manufacture high precision machined parts and assemblies. In Cilegon, we also offer CAD and drawing services.





DESIGN & MANUFACTURING

CBC's total Machine Shop capability provides customised Engineering Solutions that are not available from any other Australian bearing company.

We have developed solutions for a number of specialised applications, including:

- Conveyor pulleys
- Tunnelling cutter heads
- Track rollers
- Swing gear cases
- Sealing assemblies
- Housings

CAD Drawing Capability

Our state of the art CAD drawing capability enables us to create design to suit your specific requirements.

Bearing Housings - Standard

In addition to the range of imported standard solid housings, we have an extensive range of standard solid and split housings ranging in mass from 0.5kg to 3,000kg, including:

- SB, WB WSB
- FC, FCM
- CFCN, RFS
- TH, THM, TU

Bearing Housings - Special

We manufacture customised solid and split housing solutions.

Assemblies

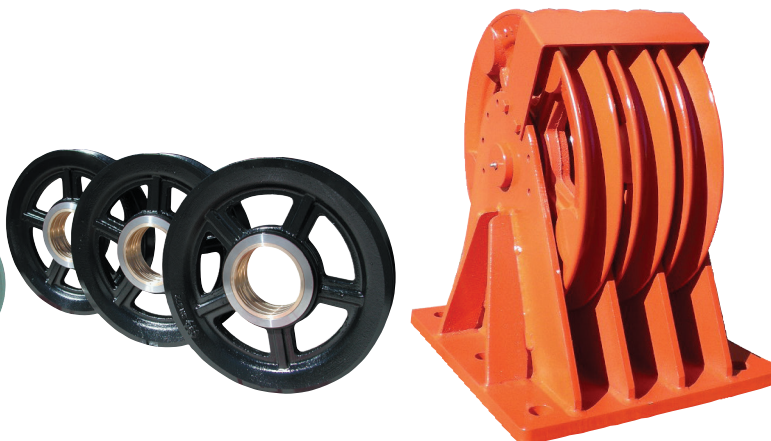
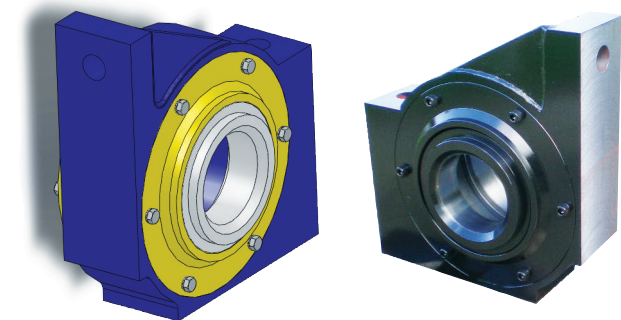
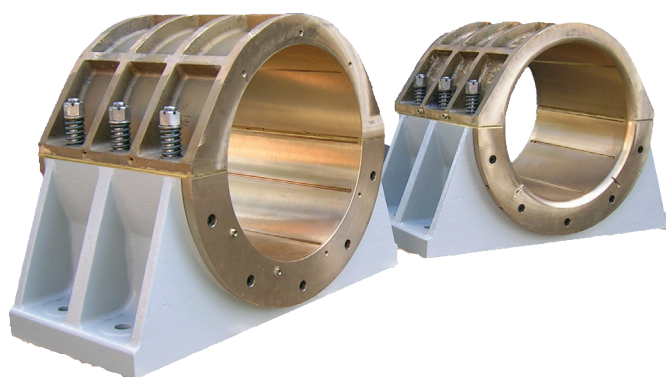
We supply machined components assembled with bearings and seals, providing complete customised solutions to meet your needs.

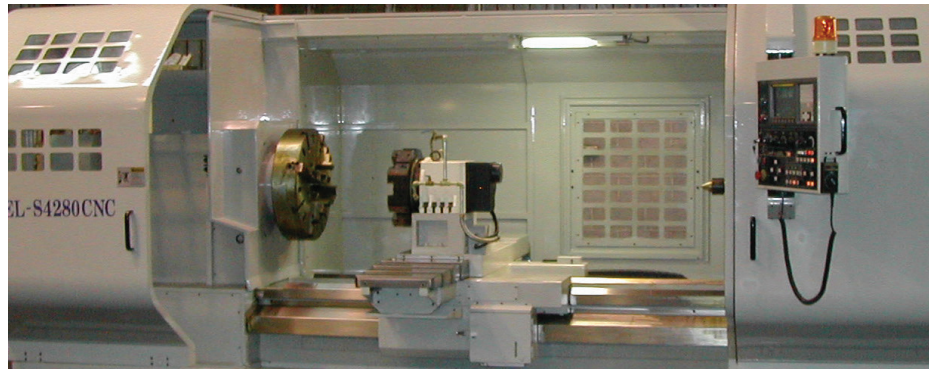
Hydraulic Nuts

A full range of hydraulic nuts and we can make to order for your specification.

Wire Rope Sheaves

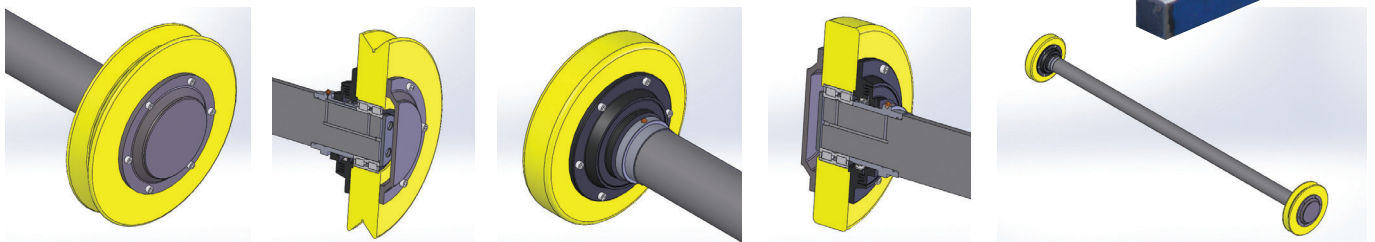
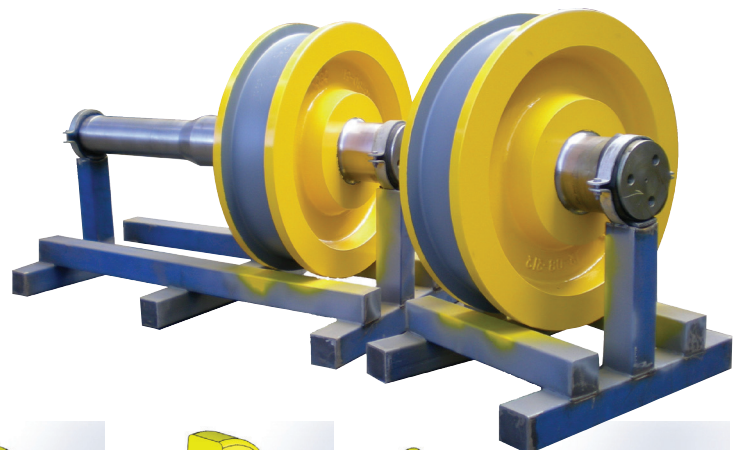
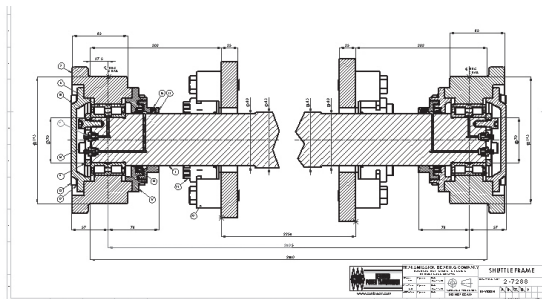
Our extensive range of wire rope sheaves is made in accordance with the Australian Crane code.





Manufacturing Capability

CBC's workshop facilities offer a range of options from CNC machining (pictured above) for volume orders or complex profiles, as well as a broad range of jobbing machines suitable for low volume or even 'one off' jobs.

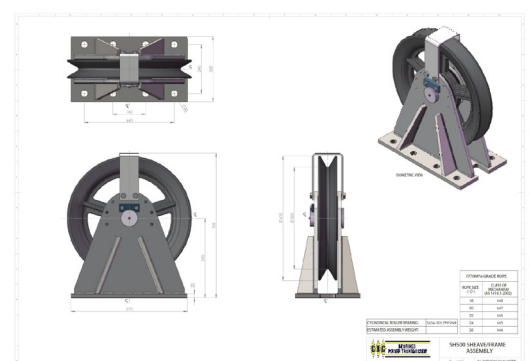
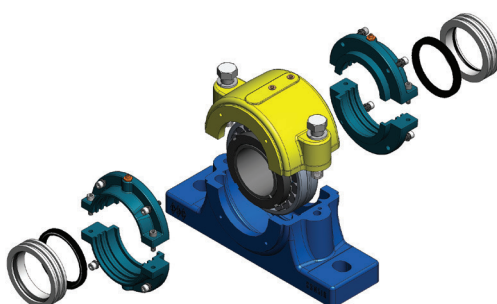


CBC Design Centre

CBC Design Centre is a dedicated information website providing our customers with ready access to key products and operational data associated with the design of bearings, wire rope sheaves and power transmission products.

Included within the systems is information for Wire Rope Sheaves to Australian Standard AS1418-1:2002, Bearing and housing assemblies, NTN bearing units, MAV shaft locking assemblies and Motovario gear reducers. The information package extends to slewing bearings, structural bearings, spherical roller bearings and split bearings.

This resource provides design and operational guidelines, selection and calculation tools, 2D drawing and 3D model downloads and applicable technical documents.

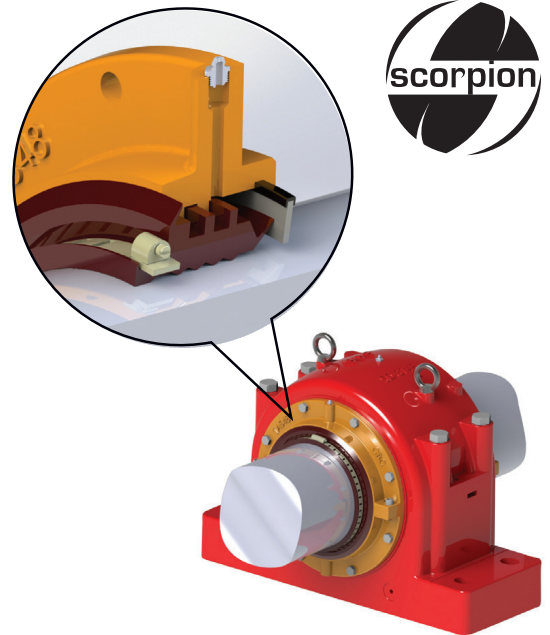


SHAFT SEALING INNOVATION - APPLICATION SPECIFIC SOLUTIONS

The Scorpion® Seal

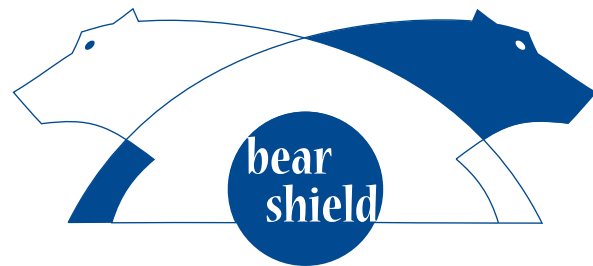
The optimum sealing solution for pulley bearing housings

- Superior sealing ability
- External seal lip limits labyrinth grease washout, dryout, and contaminant ingress
- Far shorter assembly time, seal cartridge supplied as pre-assembled unit, ensuring error free assembly
- V-Ring wear plate outside diameter rubber sealed to prevent bypass leakage
- No axial displacement of the labyrinth seal under grease purge pressure
- Internal design limits excessive grease pressure acting on the integral V-Ring seal during purging
- Can be installed on a worn shaft without compromising sealing capability or holding ability of rotating labyrinth
- Shaft torsional grip exceeding 10 times that of conventional Taconite seals
- Cannot induce metal to metal rubbing during service
- Enables up to 40~60% reduction in purging grease consumption compared to conventional open Taconite Sealing arrangements
- Chemical resistant and UV stabilised

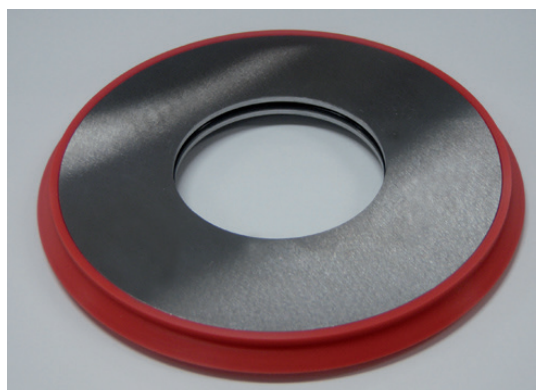


The Bear Shield®

Maximum bearing protection



- Maximum bearing protection for splash and fine particle dust ingress environments - external impact resistant cover plate combined with energised elastomeric sealing element and O-Ring sealing system
- Combination shield/seal
- Compact design ideal for applications with confined space
- A wide variety of material combinations are available including food grade standards and chemical/heat resistant applications
- Customisation to suit industry applications - everything from mining and steel to food and pharmaceutical
- Maintenance free (conditional depending on application)
- Purgeable design if required



BEARINGS





NTN Ball and Roller Bearings

Leading innovation, benchmark quality

NTN Corporation is a full program manufacturer with production range totalling some 95,000 product items and variations. These encompass miniature precision ball bearings of 0.5mm bore size, right through to spherical roller bearings of 1,800mm shaft size. Applications are as diverse as large airliner turbofan jet engines to CT diagnostic scanning machines.

NTN further enhance the capability of their ball and roller bearing range by offering the NTN 'LongLife' series of bearing, featuring unique heat treatment processes, new alloys and chemical modifications, to achieve longer service life under adverse operating conditions.

Since their foundation in 1918, NTN Corporation have grown to become a truly global organization, producing quality bearing and precision products in Japan, USA, Germany, France, Canada, China, Thailand, India and Taiwan.



NTN Spherical Roller Bearings

The high load capacity of spherical roller bearings and their easy adaptability to a variety of applications has seen this type of bearing become commonplace in Australian industry. NTN has the capabilities to produce up to 2,200mm outside diameter and bearings weighing up to 4,280kg for applications such as grinding mills and wind turbines.



NTN Needle Roller Bearings

NTN are the largest producer of needle roller bearings in Japan. NTN's product range includes needles themselves, machined outer race type, cam and roller followers, roller rockers and high capacity needle roller bearings for mining and construction machinery.



NTN Tapered Roller Bearings

NTN's broad production based range of tapered roller bearings combined with optimum performance designs provide longer operating life due to their improved fatigue strength, wear and peeling resistance characteristics especially when the lubricant is contaminated. For heavy load and bi-rotational applications "back to back" and "face to face" arrangements are both available.



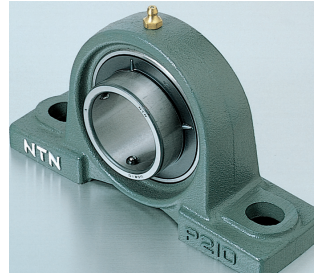
NTN Precision Bearings

NTN offer a range of high speed angular contact, ball & cylindrical roller bearings for high and super high speed operation. These readily available bearings are designed to reduce temperature rise and maintain rigidity even under severe acceleration conditions up to 2,100,000 dn in 3 seconds.



NTN Adapter and Withdrawal Sleeves

Precision mounting components to complement NTN bearing quality and reliability.



NTN Bearing Units.

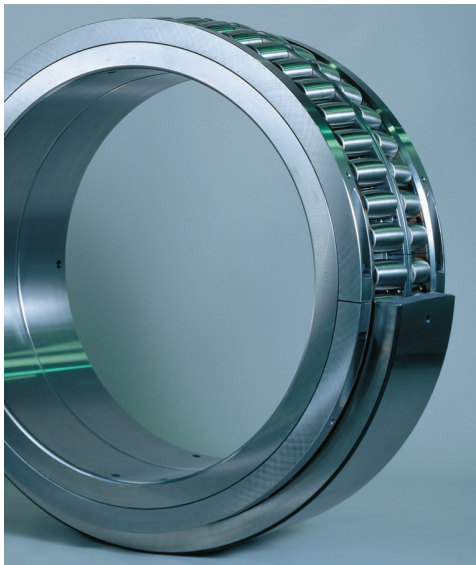
NTN offer a wide range of ball bearing units with unmatched performance features, including triple seal design for severe contamination conditions, stainless steel units for corrosive environments, and high durability bearings for agricultural machinery.

Specification for this product, including downloadable 2D drawings and 3D models, are available from the CBC Design Centre. Register online at cbcdesigncentre.com.au.



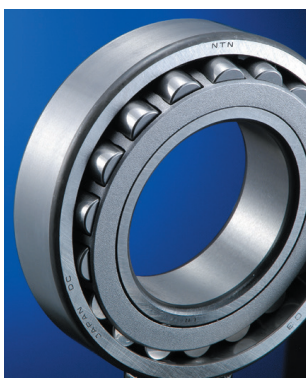
NTN Constant Velocity Joints (CVJ) for Industry

NTN leads the world in CVJ design innovation, and this extends to a multitude of industrial applications in steel and aluminium mills, paper machines and mining equipment. Sizes reach up to 380mm diameter shaft with a capacity exceeding 470kNm.



NTN Split Roller Bearings

NTN have the capability to produce split roller bearing configurations to suit almost all customer application requirements. Single and double row split cylindrical roller bearings range up to 950mm outside diameter. The largest split spherical roller bearing measures 1,900mm outside diameter and weighs 6,600kg.



Ultage Spherical Roller Bearing

The new NTN Ultage Spherical Roller Bearing range has been designed for extremely severe applications, such as heavy industries like iron and steel, paper mills and quarries. They support high loads, severe misalignment, contaminated environments, shocks and vibrations. These conditions demand exceptional mechanical qualities that NTN deliver through increased load capacity and higher speeds ratings, resulting in longer service life.



NTN-BOWER



NTN-Bower

The Bower Roller Bearing Company was formed in 1907. Shortly after the new company started, the automobile was no longer a novelty but a reality. Their success in designing and manufacturing tapered and cylindrical roller bearing has since transformed NTN-Bower Corporation into one of North America's largest bearing manufacturers. Its modern facilities are considered to be among the best equipped and most efficient bearing manufacturing plants in the world. From there they supply such customers as Caterpillar Inc, Case-New Holland, John Deere and Ford.

Over the years important achievements in cylindrical and tapered roller bearing technology have been pioneered by NTN-Bower, coupled with manufacturing techniques that permit today's vehicles, industrial, mining and farm machinery to run longer, smoother and more reliably. The world's largest dump trucks, weighing 580 tons, run on NTN-Bower tapered roller bearings.

The origins of NTN-BCA stem from the "Bearing Company of America", established in 1910. Today, NTN-BCA are a specialist, flexible manufacturing company, producing niche bearing products such as angular contact ball bearings, forklift mast guide bearings and automotive products including hub bearings, hydra-clutch bearings, self tensioning idler pulleys and rocker arm bearings.



NTN-SNR

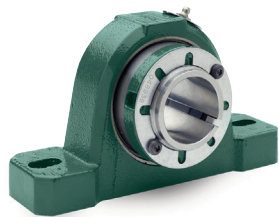
SNR Roulements, France's foremost bearing producer, has been concentrating on the design, development and manufacture of bearings for nearly a century. The NTN-SNR Alliance was born only a few years ago, with a strong desire to work together in the continuing development of engineering boundaries. The broad product range of NTN-SNR reinforces PT. CBC Indonesia's bearing coverage.

NTN-SNR's expertise covers applications in automotive, aerospace, industry and transport solutions. It is the only bearing supplier approved to supply all bearings on the TGV high speed trains in France. Partnering with Airbus and Boeing are examples of cutting edge technology programs.

NTN-SNR supply eight out of the top ten selling vehicles in Europe with their wheel hub units with integral ASB technology (Active Sensor Bearing). The engineers at NTN-SNR are world leaders in their fields and received a Nobel Prize for physics in 2007.

With manufacturing plants in France, Italy, Germany, Romania, Brazil, USA, and China, NTN-SNR is a worldwide and innovative company meeting industry challenges to take bearings further, faster and higher.





Dodge ISN Spherical Plummer Blocks

Patented ISN "Push/Pull" adapter mounting system provides quick, easy mounting and removal and eliminates need for feeler gauges. The ISN adapter sleeve system improves concentricity and reduces vibration.

The patented triple lip contact seals of tapered design maintain full contact when misaligned, and are designed for wet or dirty applications. The nitrile material composition resists heat and chemical breakdown.

Labyrinth non-contact seals are available for high speed and high temperature applications

The steel cage provides precision roller guidance and the outer ring riding two-piece guide ring minimizes heat generation.

Expansion and non-expansion units are field convertible.

Grip Tight Ball Bearings

With its pull/push adapter system, fully concentric 360° inner ring and completely interchangeable housing design, the new Dodge Grip Tight Adapter ball bearing is the easy-on/easy-off solution for damage-free shafting, reduced vibration and greater cost/inventory savings.

The Grip Tight Adapter is shaft-ready out of the box and offered in a variety of housing styles for normal and medium duty operations. It accommodates commercial grade and some undersized shafting to lower costs, and all Grip Tight Adapter assemblies fit into a standard Dodge ball bearing housing. This bearing has been specifically engineered to run at higher speeds and operate cooler for longer grease life. In test comparisons, the Grip Tight Adapter bearing proved it could suppress fretting corrosion and scarring to shafts and journals, saving time and labour/maintenance costs.



FRICION HAS **MET ITS MATCH.**

Stronger. By Design.

Our full range of bearings and housed units is hard at work in countless industries around the world. Designed for excellence, Timken's high-performance portfolio helps your equipment run better - and boosts your profitability. Our commitment to your success is our driving force - and it grows stronger by the day. Let us help you overcome any challenge standing in the way.



Tapered Roller Bearings

Single-, double- and four-row configurations, along with integrated assemblies to manage both radial and thrust loads in the most unforgiving conditions.

- Increase power density with a smaller, lighter bearing
- Rated among the highest in the industry for long life and low cost of ownership
- Industry's broadest range of inch and metric sizes

Spherical Roller Bearings

Manage the challenge of high radial loads with innovations that help extend bearing life and boost reliability.

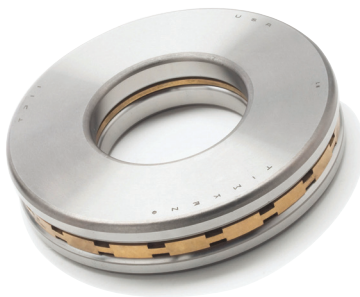
- Run at consistently lower temperatures than same-size competitive bearings
- Multiple cage designs – including a wide range of both steel and brass options
- Optimized internal geometries deliver highest load ratings in the industry



Timken® Cylindrical Roller Bearings

Comprehensive line of single-, double- and multi-row versions helps extend equipment life and lower maintenance costs.

- EMA high-performance series offers premium brass land-riding cages that reduce operating temperatures
- ADAPT™ line combines cylindrical and spherical roller bearing designs into one easy-to assemble, high-capacity configuration - ideal for applications with combined misalignment and axial displacement.



Thrust Bearings

Ideal for when axial loads meet high speeds, heavy loads or other challenging conditions.

- Provide optimum performance in both standard and custom designs
- Meet virtually any application need with cylindrical, spherical, tapered and ball types



Ball Bearings

Engineered to perform in a wide range of applications, from electric motors to agricultural implements to food processing equipment.

- Radial varieties tolerate relatively high-speed operation under various load conditions
- Angular contact designs include contact angles that support both radial and axial loads



Precision MV Series Ball Bearings

Effective control of machine tool spindles and other demanding applications, with precision up to 1 million dN.

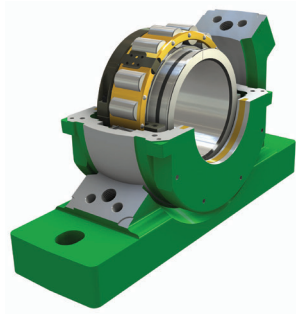
- Low vibration and heat generation for smooth operation and low noise
- Tolerances and uniformity exceed industry standards for superior dimensional and running accuracy



Precision Tapered Roller Bearings

Superior accuracy and control with rigorous manufacturing processes that helps deliver reliable performance – every time.

- Tighter manufacturing specification resulting in greater rotational accuracy
- Reduced tolerances on bore and outside diameter improve performance
- High load-carrying capacity helps enhance fatigue life



SNQ and SAFQ - the next generation

Reduce downtime even more! Get an angle on better performance with an evolved Revolver split cylindrical roller bearing housed unit design.

An innovative design uses an angled cast iron support to allow mounting in locations with low clearance between the base and centre of the shaft.

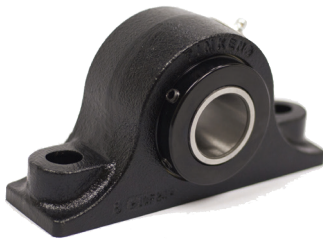
The new design eliminates the need to raise the shaft to allow clearance for the support base yet maintains standard bearing and housing construction requirements.



SNT/SAF Plummer (Pillow) Block Housed Units

Customizable design, interchangeable components and reliable spherical roller bearings provide heavy-duty performance.

- Premium performance with lower operating temperatures and increased load-carrying capacity for longer bearing life
- Easy convert from fixed to float configurations in the field
- Easy-to-remove cap for inspections, replacement and maintenance



Type E Tapered Roller Bearing Housed Units

A new standard in performance with the highest dynamic load ratings in the industry.

- Double-lip seal - offered standard - provides industry-leading protection against contamination
- Optimized internal geometries help improve bearing life and performance
- Rugged, cast-iron housing and electrostatic coating enhance corrosion resistance



Ball Bearing Housed Units

Easy installation, multi-seal design and flexible options help support a wide range of demanding applications and conditions.

- Provide advanced protection against contaminants in a robust, compact unit
- Withstand static misalignment of +/- 3 degrees
- Effective grease retention and reduced debris and moisture ingress help improve performance



Coatings and Engineered Surfaces

Innovative selection of hard coatings and topographical modifications for individual or combined use help boost the performance of precision components in difficult applications.

- Helps enhance performance and reliability in equipment with marginal lubrication or in high-debris environments
- Supports increased system durability and reduced warranty costs



The Tribological Solution Provider for Industrial Progress, Regardless of Shape or Material

GGB helps create a world of motion with minimal frictional loss through plain bearing and surface engineering technologies. With R&D, testing and production facilities in the United States, Germany, France, Brazil, Slovakia, and China, GGB partners with customers worldwide on customized tribological design solutions that are efficient and environmentally sustainable. GGB's engineers bring their expertise and passion for tribology to a wide range of industries, including automotive, aerospace, and industrial manufacturing. To learn more about tribology for surface engineering from GGB, visit www.ggbearings.com.



Schaeffler Group Industrial Bearings

Schaeffler Group Industrial its brands INA and FAG is a leading worldwide supplier of rolling bearings, spherical plain bearings, linear products and specific bearing accessories, supported by a comprehensive range of maintenance products and services, ensuring PT. CBC Indonesia customers secure coverage of applications from all industrial market sectors.



X-Life

Schaeffler X-Life bearings encompass improved kinematics, optimised surfaces and higher performance materials that reduce friction and operating temperatures, reduce demands on lubricant and resist fatigue damage - significantly increasing the basic dynamic load rating and, under the same operating conditions, the basic rating life.

FAG Spherical Roller Bearings

Many sizes of FAG spherical roller bearings are supplied in X-life design. These have no central rib on the inner ring, so longer barrel rollers can be fitted. Improved kinematics, optimised surfaces and even higher performance materials mean that the bearings show a significant increase in the basic dynamic load rating and, under the same operating conditions, in the basic rating life.

Where vibratory stresses have to be accommodated, special spherical roller bearings in the 223..- E1 series with controlled dimensional tolerances and an increased radial clearance are used. These bearings are suffixed T41A. Moreover, bearings sizes 22317-E1-T41D through 22322-E1-T41D come with a thin-layer chromium plated bore as standard, to prevent fretting corrosion damage to shafts.

Split Spherical Roller Bearings

FAG Split Spherical Roller bearings are principally used where the replacement of conventional spherical roller bearings would require the removal of gears or couplings, the dismantling of drives or the dismantling of shaft power trains; thus reducing the downtime of machinery and plant. Split spherical roller bearings have a cylindrical bore. The inner ring, outer ring and cage with the roller set are split in half and the split bearing rings held together by set screws.

FAG split spherical roller bearings can be easily retrofitted into standard SNG, SSN, SD & CSD series housing, eliminating the need to replace existing housings when converting to a split roller bearing.



Cylindrical Roller Bearings

FAG Cylindrical Roller Bearings with cages have high radial load carrying capacity and high rigidity. TB rollers significantly increase the bearing operating life under axial load and increases the efficiency of non-locating bearings by improving the lubrication condition in the contact between rollers and ribs. The MPAX cage is highly durable under shock loads and vibrations and is especially well suited for applications involving high loads.

INA Full Complement Cylindrical Roller Bearings are available in single and double row bearings and have full complement rolling element sets guided by ribs on the bearing rings. Since they have the maximum possible number of rollers, full complement bearings have extremely high load carrying capacity and high rigidity. They are available as non-locating, semi-locating and locating bearings. Many sizes are supplied in X-life quality.



INA LSL cylindrical roller bearings with a flat brass cage and ZSL cylindrical roller bearings with spacers have a very high radial load carrying capacity and can withstand high shock loads and vibrations. Due to low frictional torque and low levels of heat generation, these bearings feature a high limiting speed.

Cylindrical Roller Bearings

FAG Tapered Roller bearings are characterised by high radial and axial load carrying capacity with a large usable speed range. They are efficient at supporting forces and ensure a precise and rigid shaft guidance system. In X-life quality, they offer increased performance due to lower friction, improved lubrication conditions, optimised geometry, surfaces and materials. The result of these improvements is an increase in basic life rating of up to 70% under the same operating conditions.



Deep Groove Ball Bearings: Generation C

Deep groove ball bearings are versatile, self-retaining bearings with solid outer rings, inner rings and ball and cage assemblies. Simple design, durable in operation and easy to maintain, available in open and sealed variants.



Angular contact ball bearings

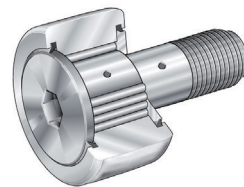
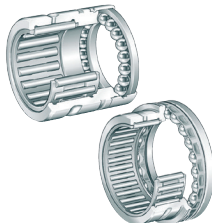
Single row angular contact ball bearings can support radial and unilateral axial loads. Double row angular contact ball bearings are similar in design and support high radial load and axial loads in both directions.

Single row angular contact ball bearings in pairs in an O or A arrangement but give a narrower design than double row. They differ in the size of their contact angle and the design of the bearing rings.

SCHAEFFLER



FAG



Drawn Cup Needle Roller Bearings

Drawn cup needle roller bearings with open ends or with closed end are available in open and sealed versions. Due to the thin-walled outer, drawn cup needle roller bearings have an extremely low radial section height and do not require housing bore to be hardened. They have very high load carrying capacity, are suitable for high speeds and can be easily fitted.

Machined Needle Roller Bearings

Needle roller bearings are single or double row units comprising machined outer rings with or without ribs, needle roller and cage assemblies and removable inner rings. The bearings are available in open and sealed versions.

Axial Needle & Cylindrical Roller Bearings and Washers

Axial needle & cylindrical roller bearings are available as complete units or separate roller and cage assemblies and washers (which act as raceways). They have very low axial section height, and can carry very high axial forces in one direction.

INA Plain Bearings

Schaeffler Group Industrial has created a thin-walled new metal-polymer composite bearing to replace the Permaglide® metal-polymer composite plain bearings in standard dimensions.

The new metal-polymer composite bearings:

- Are a cost-effective alternative for applications with minimum available space and a comparatively high sliding speed as well as minimum friction.
- Are available as bushes, flanged bushes, thrust washers and strips.

Linear Rolling Bearings

Linear rolling bearings are available as monorail guidance systems, track roller guidance systems, shaft guidance systems with linear ball bearings, flat cage guidance systems, guidance systems with linear recirculating roller or ball bearing units and a driven units (actuators and tables).

Linear systems using plan bearing are also available for applications where these offer advantages over rolling bearings.

Ball Monorail Guidance Systems

The most common type of INA monorail guidance systems, these systems are compact with high rigidity and load carrying capacity. They are supplied as either complete units, or separate carriages and rails. These guidance systems can support loads from all directions, apart from the direction of motion, and moments about all axes.

Roller Monorail Guidance Systems

Linear recirculating roller bearing and guideway assemblies RUE are, due to the use of cylindrical rollers, the INA monorail guidance systems with the highest load carrying capacity and rigidity.

Track Roller Guidance Systems

Track roller guidance systems are linear guidance systems that can be compiled according to a modular concept for a wide variety of applications. Due to their lightweight construction, they are highly suitable for use in handling systems. They are particularly characterised by quiet running, high traverse speeds.

Shaft Guidance Systems

Shaft guidance systems or ball-based or plain linear guidance systems for various areas of use and applications. Linear ball bearings are available as a light range, compact range and heavy range. Mating tracks can be solid shafts, hollow shafts or supported shaft and rail units.

Combined Needle Roller Bearings

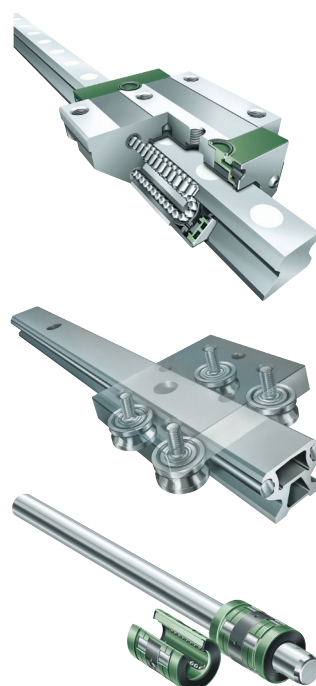
Combined needle roller bearings are units comprising radial needle roller bearings with a ball or roller bearing component capable of supporting axial loads.

Needle Roller and Cage Assemblies

Needle roller and cage assemblies are single or double row units comprising cages and needle rollers. They are used where shaft and housing bore can be hardened. They have very high load carrying capacity, extremely small radial section height, are suitable for high speeds and can be easily fitted.

Track Rollers (Yoke and Stud type)

Track rollers also known as cam followers are complete units comprising thick walled outer ring, roller set (caged or full complement) with or with an inner ring in the yoke type or with a machined stud in the stud type. They are designed to act as rollers, generally either travelling along a flat track or following a cam profile. They can support high radial forces.



RBC Mining Bearings



Bearings for Your:

**Wheel Loader • Haul Truck • Excavator
Drag Line • Shovel • Dozer**



Smoother. Faster. Longer.
Because That's How We Roll.

www.rbcbearings.com

ThyssenKrupp Rothe Erde



ThyssenKrupp Rothe Erde Slewing Bearings and Turntables

ThyssenKrupp Rothe Erde GMBH came into being with a singular objective – to supply first class product. As a consequence, the German company that more than 70 years ago developed a ball bearing turntable for agricultural vehicles and truck trailers has become the world's largest and fittest manufacturer of large diameter anti-friction slewing bearings.

ThyssenKrupp Rothe Erde slewing bearings prove every day to be important structural and connection elements used in mechanical engineering. Of course, market leadership in such a field is earned by the consistent fulfilment of exacting criteria. Acknowledgement of ThyssenKrupp Rothe Erde's uncompromising standards comes from accreditation by all leading classification and acceptance agencies such as TÜV, LRS, DNV and BV.

CBC Indonesia's sole agency agreement with ThyssenKrupp RotheErde, formed in 1996, included Indonesia as sales territory in 2010. As testimony to their support, ThyssenKrupp RotheErde commercial and technical complement CBC's team of trained sales engineers with periodic visits, coordinating customer demands with unique technical enhancements.

The partnership has become pivotal to many major ventures, including major mining machines, OEMs, Indonesia's largest mining companies, offshore technology and major highway transport componentry distributors.

ThyssenKrupp Rothe Erde Slewing Bearings

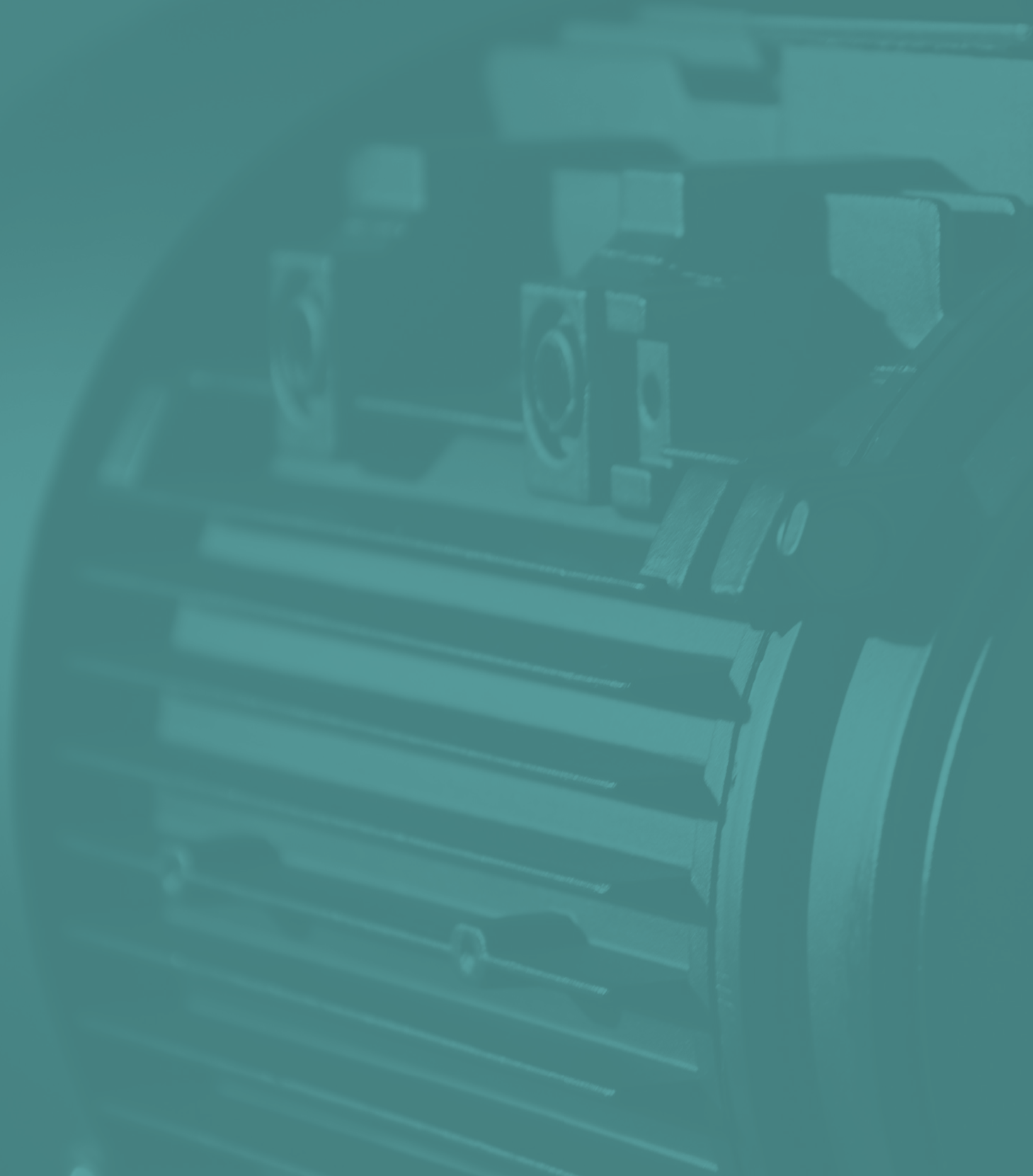


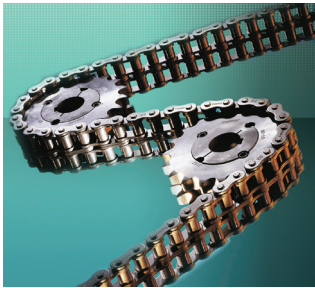
ThyssenKrupp Rothe Erde Turntables for vehicle trailers and trailer couplings



POWER TRANSMISSION

Heavy Equipment & Industrial





Fenner Standard Chain

A cost effective solution for reliability in everyday applications - easy to fit and replace, robust and long lasting.

- Shot peening of roller and side plates gives increased fatigue resistance
- Ball swaged side plate holes improve finish and combat fatigue failure
- Deep waisted side plates increase effective cross section lowering fatigue
- Case hardened pins extend wear life
- Solid rollers evenly distribute load and increase wear life
- Seam orientated bushes ensure that seams are positioned away from critical bearing areas preloaded to bed-in all component parts
- Comprehensive range of BS and ANSI chains available
- Stainless steel product available



Fenner Sprockets and Platewheels

Fenner sprockets are available with either Taper Lock® or pilot bored fixings and are precision manufactured from fine grade cast iron. Sprockets are available in simplex, duplex and triplex forms for sizes 05B to 20B.

- Manufactured to exacting specifications
- Fully machined 0.45% carbon steel (C45) or high grade, close grain grey iron (GG25)
- Sprocket profiles matched to ISO R606 chain standards for a rolling action which significantly reduces sprocket tooth wear
- Sprockets are blackened to reduce corrosion
- Short-reach bushes on selected sizes - compact hubs
- Taper Lock® mounting for quick and simple installation
- Simplex, duplex and triplex platewheels from stock



Fenner V Belts

Built using advanced technology, Fenner® Power Plus achieves economic performance by use of low elongation polyester cords and abrasion resistant impregnated jacket fabric.

- 'PB' (Precision Build) technology
- Accuracy and stability of length
- 'One Shot' tensioning - no matching necessary
- Meets highest industry standards for static conductivity and nonignition properties
- Heat and oil resistant
- ISO & RMA sections



Fenner Friction and Synchronous Pulleys

Fenner friction and synchronous pulleys are manufactured from high grade iron (GG25), tolerate shock loading and achieve rim speeds of up to 40m/s. Available with pilot bore fixings or using the Taper Lock® shaft fixing system for ultimate versatility.

- Friction pulleys incorporate dual duty design grooves (ISO 4183) for both V and wedge belts
- Synchronous pulleys available in both classical Timing and HTD profiles
- Statically balanced to exceed grade G 6.3 (ISO 1940)
- Blackened to reduce corrosion
- Consistent and high grade of accuracy
- Taper Lock® mounting for quick and simple installation
- Special designs and sizes available



Fenner Taper Lock Bushes

Machined to exacting tolerances in cast iron and steel, the Fenner Taper Lock® four hole bush is the most successful shaft fixing in the market place today with a full range of metric and imperial sizes.

- Ease of installation and removal
- Equivalent to a shrink-on fit on uniform load applications, eliminating the cost of a key
- Standard range fits up to 125mm/5" shafts
- Special 4-hole feature for balanced assemblies
- Complete short reach range available, for compact lightweight assemblies
- High grade, close grain iron (GG25) material
- Spheroidal Graphite (S.G.) iron construction on some sizes to give increase maximum bores



Fenaflex™ Tyre Couplings

Fenaflex™ Tyre Couplings are highly elastic, lubrication-free couplings that tolerate large amounts of misalignment in all planes as well as offering simple installation and inspection without disrupting the drive. The Fenaflex™ coupling has excellent shock absorbing properties while reducing vibration and torsional oscillations.

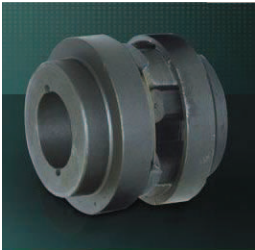
- Large misalignment capability - 4° angular, up to 6mm parallel and 8mm axial
- Internal load carrying cords are wound in both directions, so there is no problem on reversing drives
- Tyres are available in standard and FRAS (Fire Resistant Anti Static) construction
- Simple visual inspection to aid maintenance
- Taper Lock® and pilot bore flanges
- Lubrication free
- Pump spacer and flywheel fixing variants available



Fenner Jaw Couplings

Fenner Jaw couplings offer a low cost flexible solution for most applications, absorbing incidental misalignment, shock loads and small amplitude vibrations.

- Ease of alignment
- Fail-safe shaft connection
- Range of element materials available including nitrile, urethane and Hytrel
- Pump spacer variant available
- Quick-fit wrap around element available
- Design powers up to 42.2kW available at 1440rpm



Fenner HRC Couplings

Permitting quick and easy installation by means of Taper Lock® bushes, and offering quick alignment, the semi-elastic general purpose HRC coupling is ideal for use with electric motors.

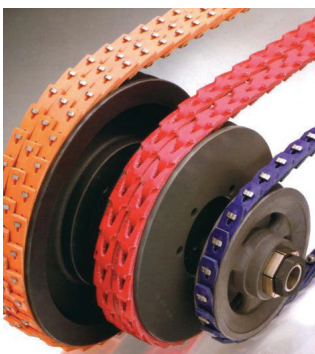
- Offers the simplest, most straightforward fitting available
- Ease of alignment and fitting using straight edge and machined outside diameters
- Fail-safe design due to interacting dog design
- Accommodates incidental misalignment
- Exceptional performance at low cost
- Power ratings are matched to standard motor sizes
- Standard and FRAS elements available
- Flywheel fixing variant available
- Pilot bore design also available



Fenner Rigid Couplings

Taper Lock® rigid couplings provide a convenient method of rigidly connecting the ends of shafts. Taper Lock® bushes permit easier and quicker fixing to the shafts with the firmness of a shrunk-on-fit.

- Taper Lock® fixing as standard
- Peripheral speeds of up to 33m/s available
- 8 sizes in the range
- Vertical assemblies possible in FF design



Fenner Drives®

Nu-T-Link V-Belts

NuTLink and SuperTLink Detachable V-Belts are made from a polyester/polyurethane compound, ensuring long belt life in even the most severe conditions.

- Highly resistant to extremes of temperature (-40° to +100°C)
- Highly resistant to abrasive materials
- Highly resistant to water, steam, oil and many chemicals
- Link construction enables belts to be fitted easily and quickly, even on drives with limited access - belts can be joined around shafts without dismantling the drive
- Can be made to length on site by adding or removing links
- Minimal stretch means minimum maintenance
- Reduced vibration and belt noise



PowerTwist PLUS Link Belting

The state of the art solution for emergency replacement and fitment into inaccessible locations.

- Made to any length in seconds
- Available in standard and double sections
- Highly resistant to heat, water, oil, chemicals etc
- Use with Fenner® ISO standard Taper Lock™ pulleys, optionally with RMA pulleys
- Easy to install, rivet-less construction, no tools necessary
- Standard or optional soft back, for conveying applications



Martin Taper Bore Vee and Wedge Belt Pulleys

Meet the toughest demands of the industry

- SPZ, SPA, SPB and SPC range
- Standard construction in single and multi groove to 1,250mm PCD
- Special pulleys to order



Martin Taper Bushes

Full range available in 4-hole design

- Metric and Imperial bore
- Sizes 1008 to 5050
- Larger sizes on request



Martin Flex Couplings

Designed to fit standard taper bushes or pilot bore, these highly resilient elastomer tyre couplings offer considerable misalignment capacity

- Torque ratings to 15,000Nm
- Power ratings from fractional to in excess of 900kW at 1,440rpm



Martin Weld-on Hubs

Convenient means of fitting 'hub to shaft.'

Range to suit taper bushes in available sizes



Martin HRC and JAW Couplings

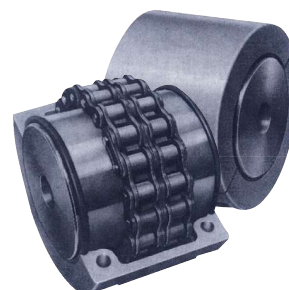
Economical general purpose utility

HRC Couplings:

- Torque ratings to 3,150Nm
- Power ratings from fractional to 726kW

JAW Couplings:

- Torque ratings to 280Nm
- Range of hub and element variants
- Range of standard length spacers



Martin Roller Chain Couplings

These low cost roller chain couplings are supplied complete with covers to ensure maximum service life

- Torque ratings in excess of torque normally transmitted by shafting - within coupling bore range
- Stock range will accommodate shaft sizes from 10mm to 100mm
- Larger sizes on request



Martin Taper and Pilot Bore Sprockets and Platewheels

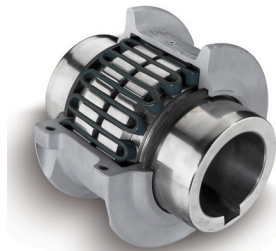
- Wide range of sprockets in stock
- Suit BS and ANSI chains
- Standard range available from stock
- Special sprockets supplied to order



Martin Taper Bore and Through Bore Synchronous Drive Pulleys

Available in lightweight aluminium and cast iron construction

Suit XL, L, Classical timing, HTD, GT® and metric pitch



FALK Steelflex® Grid Coupling

General purpose couplings requiring no periodic maintenance when lubricated with FALK supplied Long Term Grease (LTG) at installation.

- Torque ratings to 932,000Nm
- 5 year warranty



FALK Wrapflex® Elastomer Couplings

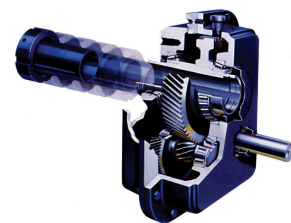
- Non-lubricated, simple to install
- Maximum operational flexibility
- Effectively dampen shock loads
- Easily accommodate misalignment
- Available in 3 types and 9 sizes
- Torque ratings to 15,800Nm



FALK Lifalign® Gear Couplings

The low-cost, longer lasting answer to both small and large capacity coupling requirements.

- Triple-crowned for maximum capacity
- Larger bores and higher power ratings
- 20 types and 28 sizes
- Torque ratings to 8,190,000Nm



FALK Quadrive® Helical Shaft-Mounted Drives

"Easiest on, easiest off... guaranteed"

TA Taper bushing design ensures ease of drive removal and prevents damage to both drive and/or driven equipment.

- Torque ratings to 36,547Nm
- Power ratings to 224kW
- 3 year heavy duty warranty



Falk Tru-Hold® Backstops

For virtually any applications where materials need to be moved up steep grades.

- Single, tandem or multiple units
- Torque ratings from 4,068Nm to 1,012,847Nm
- Over-running speeds from 1 to 2,800rpm



Rex® Thomas® Disc Couplings

A practical alternative to lubricated and elastomer couplings.

- No lubrication
- No wearing parts
- No backlash - torsionally rigid
- Comprehensive range of types and sizes
- Torque ratings to 320,920Nm



Rex® Viva™

Elastomeric Couplings

The new Rex Viva coupling is a unique general purpose coupling ideal for use in industrial applications.

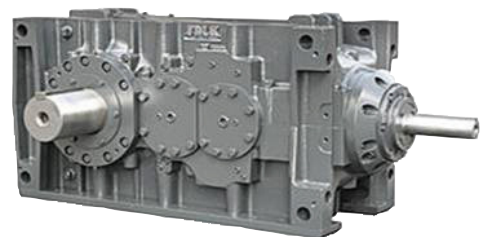
- No lubrication
- No wearing parts
- Polyurethane membrane
- Torsionally flexible
- Adjustable to meet ISO, DIN and ANSI shaft spacing Specification to 300mm BSE
- Torque ratings to 6,270Nm
- Taper bush hub to shaft fitting or straight bore available



FALK Orange Peel Guards

The practical protective coupling guard.

- Meets OSHA, ASME and ANSI job-site safety requirements
- "Trim and Fit" to suit your coupling profile
- Polyethylene and metal types
- Available in 6 types - MCG, CCG, CFCG, SCG, VCG and LSG
- Low initial cost, low lifetime cost
- 3 year heavy duty warranty



FALK V-Class™

When uptime matters trust the Falk V-Class™

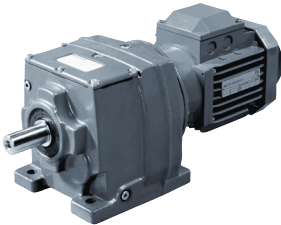
- Power range 11 - 7457 Kwan
- Torque range up to 341,000 Nm
- Ratio ranges Parallel shaft - Double reduction 5.0 - 28.0
- Triple reduction 28.0 - 160.0
- Right angle - Double reduction 6.3 - 12.5
- Triple reduction 12.5 - 124.0
- Available with hollow, taper bush or solid output shaft.



with you at every turn

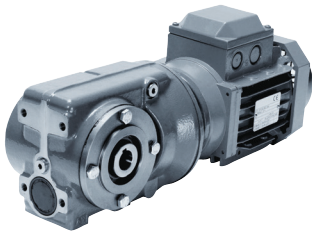
Radicon Geared Motors

CBC's Radicon gearbox range provides a robust versatile range of helical worm, shaft mounted, helical bevel and inline geared motors. Radicon geared motors can be fitted with a backstop module and the geared motor reducers with a backstop and fan.



Radicon In-Line Geared Motors

- 12 sizes
- Input Power up to 90Kw (121Hp)
- Output Torque up to 11,000 Nm (97,500 lb.in)
- Gear Ratios 8:1 for single reduction 70:1 for double reduction, 250:1 triple reduction and 16,200:1 for combined units



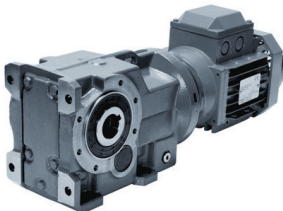
Radicon Helical Worm Geared Motor

- 8 sizes
- Input Power up to 45Kw (60Hp)
- Output Torque up to 10,000 Nm (88,500 lb.in)
- Gear Ratios 250:1 for a double reduction and 60,000:1 in combined units



Radicon Shaft Mounted Geared Motor

- 11 sizes
- Input Power up to 110 Kw (147 Hp)
- Output Torque up to 16,500 Nm (146,000 lb.in)
- Gear Ratios are available 100:1 for double reduction and 5,600:1 in combined units



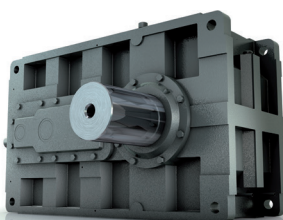
Radicon Helical/Bevel Geared Motor

- 9 sizes
- Input Power up to 90Kw (121 Hp)
- Output Torque up to 12,300 Nm (109,000 lb.in)
- Gear Ratios 160:1 in three stage, 10,000:1 in five stages and 36,000:1 in six stages



Radicon Series A Worm Reducer

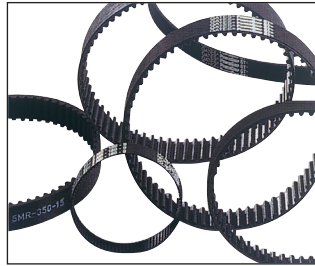
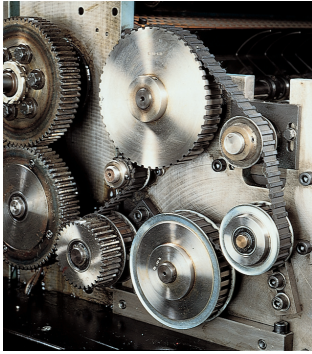
- 12 sizes
- Single and double reduction
- Output torque up to 104,000 Nm
- Ratios from 5:1 to 70:1 in single reduction and 4,900:1 in double reduction
- Solid & hollow output shaft available to 190 mm
- Larger & special units available upon request



Heavy Duty Gear Reducers

Heavy duty gear reducers with split gear case, incorporating three stage high integrity sealing designed for easy maintenance.

- Power ratings range up to 1,500kw
- Torque range up to 162,00Nm.
- Available with gear ratios 6.3:1 in two stages, 18:1 to 80:1 in three stages, 71:1 to 315:1 in four stages and up to 70,000:1 in combined stages.



Gates Synchronous Drive Belts

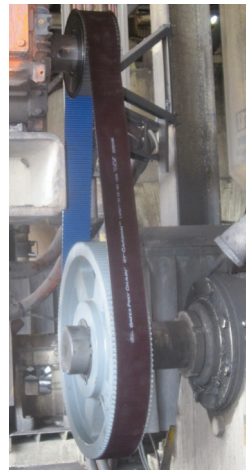
Available in the following types:

- ISO 5296 - MXL, XL, L, H, XH and XXH
- PowerGrip® HTD® - 3M, 5M, 8M, 14M and 20M
- PowerGrip® HTD® - 2MGT, 3MGT, 5MGT, 8MGT and 14MGT
- Twin Power® and Long Length belts also available
- Poly Chain® GT® Carbon™



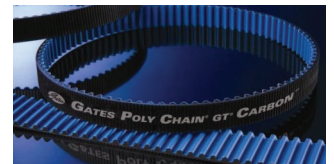
Gates Poly Chain® GT® Sprockets

- Precise design produces positive, press fit to shaft
- Smaller, narrower sprockets save shaft space, keep the load closer to bearing and extend life of reducer
- Keep overhung load below manufacturers recommendation
- Precision manufactured and static balanced
- Bored to suit a taper bush or in pilot bore construction



Gates Poly Chain® GT® Carbon™ Belts

- Maintenance free drive
- Outlasts roller chain 3-to-1
- Accommodates the use of backside idlers
- No lubrication required
- Stainless steel sprockets and taper-locks available for washdown applications



Gates Industrial V-Belt Drives

Excellent performance/cost ratios, across the range.

These premium range V-belts are the ideal choice for most power transmission applications.

Gates Predator™ Belts

Predator™ belts are the most robust V-belts ever designed.

Developed for the toughest applications and environments, Predator™ V-belts prey on maintenance and devour downtime.

The best V-belt solution to belt drive problems available today.

Predator™ Singles available in:-

- Classical section AP, BP, CP
- RMA narrow section 5VP, 8VP
- ISO narrow section SPB-P and SPC-P

Predator™ Powerbands available in:-

- Classical section BP and CP
- RMA narrow section 3VP, 5VP and 8VP
- ISO narrow section SPB-P and SPC-P



Gates Quad-Power® III

Gates New Generation Raw Edge V-belts.

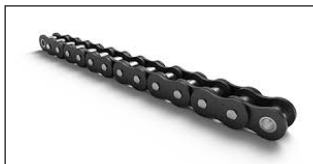
Quad-Power® III is the third generation of Gates' notched narrow section V-belts. Quad-Power® III features a new rubber compound and cordline construction which improves both temperature capabilities, with an increased temperature range (-40°C to +110°C) and offers a 15% increase of power capacity over Quad-Power® II. Resulting in narrower drives with improved efficiency.

These new materials and advanced-design features have led to a new generation of Quad-Power® III V-belt drives that outperform all similarly sized belt drives in a wide range of applications, yielding cost advantages for users and greater design freedom for engineers.



For over a century, exnord has been the trusted industry leader in industrial chain manufacturing. Our team of highly-trained chain engineers ensure your chain is made to exact specifications, quality tested, and held to the highest standards in the industry. The results of the Rexnord dedication to excellence speak for themselves. Our industrial chain stands up to any application and any environment, offering years of reliable performance.

Roller Chain



Leaf Chain



Oilfield Roller Chain



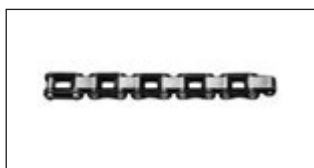
Engineered Steel Chain



Welded Chain



Block Roller Chain



Cast Chain



Drop Forged Chain



RENOLD

Superior Chain Technology

Renold is an international group delivering high precision engineered and power transmission products to customers worldwide.

Renolds market leading products can be seen in diverse applications from cement making to chocolate manufacturing, subway trains to power stations, escalators to quarries; in fact, anywhere something needs to be lifted, moved, rotated or conveyed.

PT.CBC Indonesia is the distributor for Renold MiningChain in Indonesia. We supply and stock a wide range of chains and sprockets for Indonesia's growing market.



ROSTA



Rosta Tensioner Devices Chain Tensioning

The unique ROSTA multi-purpose rubber suspension elements are designed to provide ultimate versatility - to push, pull or tension.

- Considerably extend the service life of your chain drives
- Combine functions of spring, damper and bearing...in one unit
- Can be used for angles or oscillation of up to +/- 30°

Belt Tensioning

ROSTA tensioners can assist in maintaining a constant tension as the belt or chain stretches, helping in the prevention of premature failures to belts and chain drives.



Dodge Torque-Arm II Shaft Mounted Gear Reducers

- A range of gear reducers designed for greater flexibility in drive design
- Unparalleled torque ratings resulting from extended gear centres, wider gear faces and optimised tooth geometry
- 12 sizes available
- Power ratings up to 434kW
- Available in ratios 05, 09:1, 15 and 40:1.



Motorised Torque-Arm II Shaft Mounted Gear Reducers

- Shaft mounted motorised gear reducers offering a wide range of output speeds
- Mounts directly on the driven shaft and utilises an adjustable torque arm that attaches from the gear reducer case to the support structure
- IEC standard frame motors attach to the gear reducer by means of a cast iron adaptor and flexible coupling
- 6 sizes available
- Power ratings up to 75kw
- Output speeds range from 18 to 166 rpm.



IEC AP MX Series Electric Motors

- Three phase and single phase
- 2,4,6 & 8 pole
- High starting torque, lower starting current
- Protection class IP55 ambient 40C; SF 1.0
- Insulation class (F) Temp rise limited to class B
- Available in aluminium housing up to frame 200, cast iron up to frame 280
- Optional integral or removable feet Mounting B3, B14, B5 and B34/5
- Complies with MEPS 2 efficiency class B 2006



ACS55 Component Variable Speed Drives

- Power range: 0.18kW to 2.2kW
- Mains connection voltage: 1-phase 200 to 240 V
- Mains connection frequency: 48 to 63 Hz
- Motor connection voltage 3-phase
- Motor connection frequency: 0 to 250 Hz
- Applications: conveyors, material handling, pumps, gate control and pumps



ACS150 Component Drives

- Power range: 0.37kW to 4kW
- Mains connection voltage:
 - 1-phase 200 to 240 V 0.37Kw to 2.2kW
 - 3-phase 200 to 240 V 0.37KW to 2.2KW
 - 3-phase 380 to 480 V 0.37kW to 4kW
- Mains connection frequency: 48 to 63 Hz
- Motor connection voltage: 3-phase
- Motor connection frequency: 0 to 500 Hz
- Applications: mixers, fans, heat pumps, conveyors

ACS310 Standard Drives

- Power range: 0.37kw to 22kW
- Mains connection voltage:
 - 3-phase 200 to 240 V 0.37kW to 11kW
 - 3-phase 380 to 480kw 0.37 to 22kW
- Mains connection frequency: 48 to 63 Hz
- Motor connection voltage: 3 phase
- Motor connection frequency: 0 to 500 Hz
- Applications: booster pumps, irrigation pumps, supply and return fans and submersible pumps

MAV Shaft-Hub Connections

The economical and safe alternative to splined, keyed and shrink connection

Traditional methods of shaft-hub connection (e.g. keyway and splined locking systems) have many disadvantages, in particular under overload and frequent torque reversing conditions.

Keyless shaft-hub locking devices meet both the advantages of forced fit systems and simplified installation and removal. Keyless shaft-hub systems are based on the wedge principle with axial load of the screws generating a high radial force through tapers locking the parts by friction.

Shaft-Hub Connections come in self-centring, non-self-centring and self-locking types to suit shaft sizes from 14mm to 1000mm.



MAV Standard Series 1061

- Shaft-hub locking device medium capacity
- Single taper design, self-centring, self-locking
- Fixed hub position during tightening
- Tolerances: Shaft h8; hub bore H8
- Shaft and hub bore surface finish $R_a < 3.2 \mu\text{m}$
- To suit shaft sizes 14mm to 400mm



MAV Standard Series 2005

- Medium capacity
- Not self-centring, not self-locking (self releasing)
- Fixed axial hub position during tightening
- Two thrust rings with double taper design
- Tolerances: h7-h11; hub bore tolerance H7-H11
- Shaft and hub bore surface finish $R_a < 3.2 \mu\text{m}$
- To suit shaft sizes 18mm to 1000mm



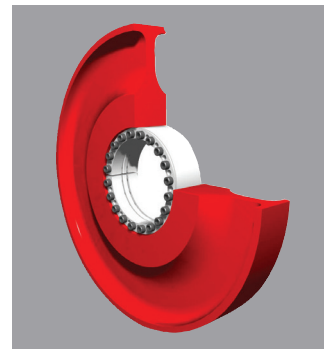
MAV Standard Series 1008

- High capacity
- Self-centring, self-locking
- Two thrust rings with single taper design
- Tolerances: h7-h11; hub bore tolerance H7-H11
- Shaft and hub bore surface finish $R_a < 3.2 \mu\text{m}$
- To suit shaft sizes 70mm to 600mm



MAV Standard Series 4061

- High capacity
- Self-centering, self locking
- Two thrust rings with single taper design
- Tolerances: h8; hub bore H8
- Shaft and hub bore surface finish $R_a < 3.2 \mu\text{m}$
- To suit shaft sizes 70mm to 600mm





Twiflex Caliper Disc Brakes

For industrial and mining applications.

Twiflex cater for all combinations of brakes actuation. Direct acting brakes may be specified with pneumatic, hydraulic or mechanical application. Spring applied (fail-safe) calipers are also available - released by pneumatic, hydraulic, mechanical or electric operation.



Braking forces for a single caliper range from 290N for one of the smallest lever brakes, to over 730,000N provided by the latest modular holding brake design, developed especially for grinding mills.



Features include:

- Self-adjusting pad wear compensation
- Sintered pads for high speed/high temperature applications
- Standard, marine, mining and other special levels of protection
- Brake status monitoring (on/off, pad wear, pad replacement)

Twiflex also offer a comprehensive range of electro-hydraulic power packs.



Wichita Pneumatic Clutches and Brakes

Providing the high speed acceleration and deceleration essential in modern process equipment.

- Slip torque ratings range from 72Nm to 1,204,000Nm
- Bore capacities from pilot bore to 430mm
- Comprehensive range of types available



Driveshaft Parts

PT.CBC is the Indonesian market leader in assembling and servicing driveshafts. Our branch is fully equipped to overhaul or assemble new driveshafts to suit all major brands in industrial applications including steel mills, paper mills and railways.

Driveshaft Services

PT.CBC's workshop is fully equipped with purpose built machinery to cater for all servicing to all driveshafts. Our balancer incorporates the latest technology ensuring the perfect international standard balance for every shaft in industrial applications. As part of our quality service PT.CBC also offer a selection of popular driveshafts for select industries, including the mining sector, ready off the shelf. With this service you can be sure of a fast turn around, increasing your uptime and getting you moving again.

Industrial Balancing

The balancer has the capacity for industrial balancing allowing accurate balancing of fans, rotors, impeller, conveyor pulleys and other industrial rigid shafts.

- Schenck balancer with the capacity to balance up to 3 tonnes
- 5 meters in length with a swing over the bed of 800mm
- Ability to balance up to 3 metres in diameter.
- Precision balancing for smooth high speed applications.

Fans

Fan servicing includes fan balancing, blade replacement and rebuilds.



With decades of experience in developing customized solutions for the most demanding mining applications around the world, Bonfiglioli can offer its customers a wide, complete, well-adapted range of solutions. From crushing to slurry processes to earth moving applications, our team of expert designs and creates integrated solutions that take on the harsh, dusty environments typical of mining applications. Our final drive, gearbox, gearmotor, motion and control solutions are renowned on the market. Today, our range of products is one of the broadest available in the world, with torque from 13 Nm to 3,000,000 Nm.

Right-angle Gearmotors and Gear Units

Planetary Gearmotors & Units
300M Series



HDO Series



3/A Series



Parallel Shaft Gearmotors and Geared Units
HDP Series



3/H Series



3/V Series



POWER TRANSMISSION

Automotive & Trucking





Gates Light Automotive

Micro-V® AT™ Belts

The Gates Micro-V® AT™ (Advanced Technology) is a complete range of belts designed with the drive demands of modern engines in mind. Using advanced manufacturing technology and premium EPDM* construction, Gates Micro-V® AT™ belts meet or exceed OEM specification and last 50%-60% longer than standard belts.

(*Ethylene Propylene Diene Monomer m-class rubber)

Belt Wear Gauge

Gates offer a unique tool designed to help inspect micro-V® belts for wear. Modern EPDM belts (installed by many OEM manufacturers) typically do not show obvious signs of wear such as cracking. The gradual wear experienced by these belts can be effectively monitored using this tool.

Timing Belts

Gates is the largest global manufacturer of OE timing belts. This means Gates is able to cover the aftermarket with timing belts that perform exactly like the OE.

Gates timing belts are manufactured using the same high grade materials and processes as the OE to ensure superior heat and contamination resistance. Further, Gates Timing Belts provide the most extensive coverage in the industry.

DriveAlign® Automatic Tensioners and Idler pulleys

The benefits of Gates DriveAlign® tensioners:

- **Patented asymmetric damping mechanism** - This is specifically designed to increase belt and tensioner life by reducing tensioner motion, vibration and noise.
- **Patented round spring** - Gates use chrome-silicone springs for less flex fatigue than flat spring designs. This promotes longer wear life and lower noise.
- **Unique Labyrinth sealing** - This prevents contamination of internal parts for maximum durability and service life.
- **Precision bearings** - Premium bearings are used across all Gates tensioners to minimise friction and reduce bearing wear and noise.

Curved Coolant Hose

The Gates curved coolant hose range includes radiator and heater hoses to suit a full range of automotive applications. Gates curved coolant hose are specially engineered in size, shape and material technology to ensure long service life. Designed and engineered to resist electro chemical degradation which is the leading cause of coolant hose failure.

Gates Heavy Duty Automotive (Off-Highway)



EFG6K Spiral Wire Hose - SAE 100R15

Meets Flame Resistance Acceptance Designation "MSHA 2G"



MXT™ MEGASYS® Wire Braid Hose - SAE 100R16

Meets Flame Resistance Acceptance Designation "MSHA 2G"
Meets MDG 41 FRAS Requirements



Mining Hose

Meets Flame Resistance Acceptance Designation "MSHA 2G"
Meets Specification Requirement of BCS 174



EFG5K Spiral Wire Hose - SAE 100R13

Meets Flame Resistance Acceptance Designation "MSHA 2G"



4XH Spiral Wire Hose - EN 856 4SH ISO 3862

Meets Flame Resistance Acceptance Designation "MSHA IC-4/17"
Also available in XTF cover



CPS Coal Power Spiral Hose - SAE 100R13

Meets Flame Resistance Acceptance Designation "MSHA 2G"
Meets Specification Requirement of BCS 174



EFG4K Spiral Wire Hose - SAE 100R12

Meets Flame Resistance Acceptance Designation "MSHA 2G"



4XP Spiral Wire Hose - EN 856 4SP ISO 3862

Meets Flame Resistance Acceptance Designation "MSHA IC-4/17"
Also available in XTF cover



G1 Wire Braid Hose - EN 853 1SN

Meets Flame Resistance Acceptance Designation "MSHA 2G"



Gates Heavy Duty Automotive (Truck & Bus)

DriveAlign® Heavy Duty Automatic Belt Tensioners

The longest lasting belt tensioners in the industry. Engineered to exceed demanding OEM requirements. In laboratory tests, under extreme peak-to-peak vibration and contamination tests, DriveAlign® heavy-duty tensioners lasted up to three times longer than competitive aftermarket tensioners.

- Labyrinth Seal - prevents contamination of internal parts for maximum durability and service life.
- Machined Steel Pulley - reduces surface wear while shielding internal bearing from outside contaminants.
- Double Row Bearings - twin rows of bearings carry more load and last up to three times longer than two individual bearings.
- Optimised Components - engineered for maximum strength and durability.
- Patented Design - provides superior belt alignment and tension for improved drive efficiency and life.
- Round Spring Wire - includes chrome-silicone torsion spring for less flex-fatigue than flat-wire designs.
- Patented Damping Mechanism - provides maximum stability, reducing vibration and increasing the life of belt, tensioner and other accessory drive components.

DriveAlign® Heavy Duty Idler Pulleys

- Longest lasting pulleys built to endure the rigors of today's heavy duty equipment.
- Robust and high quality pulley materials to withstand contaminants.
- Loaded with superior bearing to outperform OE pulleys.
- Built with corrosive resistant coating to prevent rust and increase durability.

FleetRunner™ V and Micro-V® Belts

- Designed for the toughest applications, FleetRunner™ construction provides superior flexibility, stability, load capacity and unsurpassed belt life.
- Reduces fleet maintenance costs.
- Composed of proprietary blend of elastomers along with Gates patented EPDM formulation with unique green overcord enables FleetRunner™ to withstand the demands of new engines. This formulation allows FleetRunner™ belts to retain their flexibility where extreme temperature causes competitor belts to harden, crack and fail.
- Testing shows FleetRunner™ Micro-V® belts will last at least 160,000kms - that's 26 return trips from Melbourne to Perth
- FleetRunner™ V-belts will last at least 400,000kms - that's 58 return trips from Melbourne to Perth. Available in 12.7mm top width with round notch pattern.

Heavy Duty Silicone Coolant hoses

- 4-ply extra long lasting hose constructed with silicone rubber in industry standard blue colour.
- Ideal for extremely high temperature service in radiator, heater and other coolant transfer hose applications.
- Excellent for extreme ambient and radiant temperature conditions.
- Resists weathering ozone, heat and coolant deterioration.
- Available in straight, 45° & 90° elbow sections.
- Available in two recommended operating temperature ranges:
 - -53.9°C to +176.6°C (-65°F to +350°F) – straight and elbows.
 - -53.9°C to +260°C (-65°F to +500°F) – only straight known as severe service hose.

Green Stripe® Truck and Bus Series V-Belt

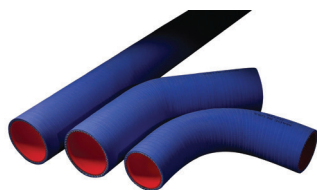
Specifically designed for heavy duty truck, bus, and off-road equipment applications. Absorbs normal shock loads without damage to belt.

- Special tensile cords give high stretch resistance.
- Special notch design resists cracking while providing tensile member support during operation.
- Deep notch pattern allows greater flexibility over small diameter pulleys and helps keep the belt cool.
- Oil and heat resistant construction throughout.
- Meets SAE J636b and SAE J637 specifications.

Green Stripe XL® V-Belt

Replacement belt for the most demanding engine drives. Due to thermal forces, this variable notched belt tightens on the drive as it gets hot. This results in improved belt performance by reducing tension decay and noise.

- Fiber-loaded rubber stock puts more flexibility along the length of belt, yet gives the belt greater lateral stability in the pulley
- Thermally active tensile cords for maintenance-free performance when properly installed and tensioned.
- Form ground to ensure precise top width and sidewall dimensional control for proper fit in pulley as well as a smoother, quieter running belt.
- Meets or exceeds SAE J636c specifications.





Friction Marketing Company (FMC) Brakes for O Highway Mining Trucks and Equipment

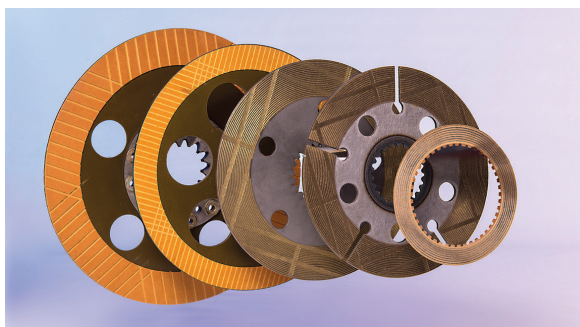
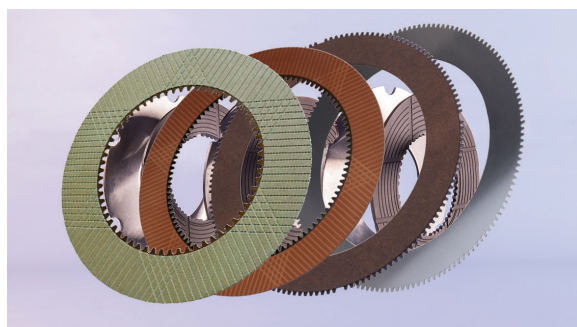
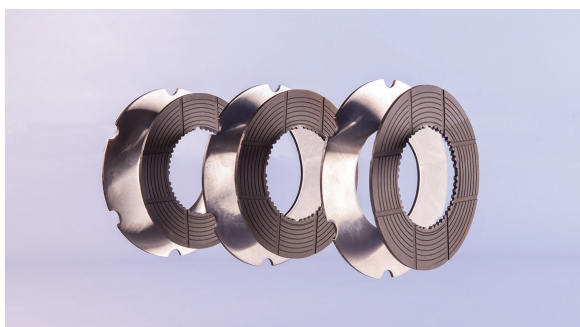
Mining trucks and off-highway vehicles demand reliable control and stopping power. For over 25 years FCM has been designing and manufacturing wet brake and trasmission products for nearly every major original equipment manufacturer around the world.

FMC offer a vast range of parts from its UK factory, developed through many years of research and development, generated from our expertise and dedication, our understanding of business solutions and precision engineering.

Our strategy is to continually strive to understand the changing needs of our markets by researching, developing and ultimately introducing new friction materials to meet the ever-growing demand from our customers. This includes constant dynamometer testing of new friction qualities, investments in the latest technology and working with clients in developing bespoke vehicle and machinery friction solutions.

Our team of expert staff employ 'state of the art' engineering and testing facilities to ensure our quality, from raw materials through all manufacturing processes to final inspection and testing, are maintained and ready for distribution at the right time.

PT. CBC Indonesia is the sole distributor for FMC products in Indonesia. We stock a wide range of FMC products to supply the Indonesian market.





Driveshaft Parts

PT. CBC is the Indonesian market leader in assembling and servicing driveshafts. Our branch is fully equipped to overhaul or assemble new driveshafts to suit many 4WD, trucking and mining applications.

Driveshaft Services

PT. CBC's workshop is fully equipped with purpose built machinery to cater for all servicing to all driveshafts. Our balancer incorporates the latest technology ensuring the perfect international standard balance for every shaft in automotive applications. As part of our quality service PT.CBC also offer a selection of popular driveshafts for select industries, including the mining sector, ready off the shelf, including :

- Mechanics "C" type driveshafts to suit Caterpillar, Komatsu, Elphinstone, Wagner etc.
- Spicer type PTO and automotive driveshafts
- OEM type shafts to suit Scania, Volvo, Mercedes Benz, Isuzu, Toyota
- Universal joints and constant velocity joints
- Agricultural PTO driveshafts
- Aquadrive marine couplings & thrust units
- Centre Bearings
- Precision joints

With this service you can be sure of a fast turn around, increasing your uptime and getting you moving again.



Industrial Balancing

The balancer has the capacity for industrial balancing allowing accurate balancing of fans, rotors, impeller, conveyor pulleys and other industrial rigid shafts.

- Schenck balancer with the capacity to balance up to 3 tonnes
- 5 metres in length with a swing over the bed of 800mm
- Ability to balance up to 3 metres in diameter.
- Precision balancing for smooth high speed applications.



SEALING TECHNOLOGY

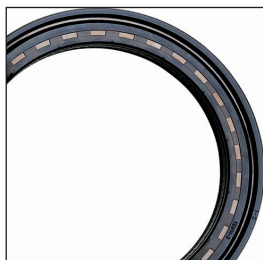


National® Oil Seals

National Oil Seals

Sealing and shaft repair solutions

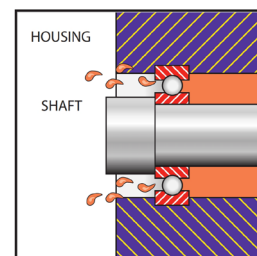
PT. CBC Indonesia now stocks a complete range of premium quality National® Oil Seals, Redi-Sleeves™ and Truck Wheel End Components™



"Gold" 38 Series

The most technologically advanced seal in the market

- Proprietary PTFE compound endures extreme temperatures, compatible with mixed lubricants and has the lowest friction co-efficient of all seal materials
- Patented, lay-down bi-directional sealing lip provides a greater sealing surface especially during wheel end movement
- Quadruple barrier contamination system, provides the ultimate in dirt exclusion



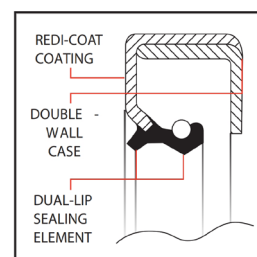
A seal keeps contaminants out and lubricants in to protect and extend bearing life



"Red" 37 Series

The most dependable oil contact seal in the market

- Dependable, abrasion resistant nitrile with spring-loaded main lip for positive sealing with reduced shaft interference
- Unitized construction provides greater structural integrity, easier installation and main lip protection
- Unique rubber I.D. and O.D. prevents bore contamination and shaft leakage, plus patented SURE-LOCK® ribs for superior retention of the seal on the spindle



Typical Zero Duplication seal design



National® Seal Design

Performance Features:

- Spring-loaded, dual-lip sealing element. Uses two sealing lips, one spring-loaded tightly against the shaft to retain lubricants, the other functioning as a contamination excluder.
- Double-wall case. Minimises deformation to the case during installation and forms a secure, stable base for optimum sealing element performance.
- Exclusive Redi-Coat® coating. Seals minor bore defects to help ensure a tight, leak-proof seal.
- Optional fluoroelastomer sealing element (available in selected part numbers in addition to standard nitrile seals). Provides excellent high-temperature capabilities, good compatibility with a wide range of fluid, very long life.



National® Redi-Sleeves™

Repair Damaged Shafts... or Protect New Ones

National Redi-Sleeves are precision stainless steel wear sleeves, designed to be pressed onto a shaft to provide an excellent sealing surface.

For grooved or worn shafts, Redi-Sleeves are a fast, inexpensive repair option. The Redi-Sleeve is simply pressed onto a shaft where indications of seal wear (such as tracks or grooves) have developed; the shaft now has a smooth, ideal sealing surface.

For new shafts, Redi-Sleeves provide superior sealing and ease of future repairs; simply pop off the worn sleeve and press on a new one, when needed.

National Redi-Sleeves are easy to install, featuring a removable flange and an installation tool. National Redi-Sleeves offer numerous shaft maintenance advantages:

- Strong, durable stainless steel construction provides a corrosion-free sealing surface that surpasses most original shaft specifications
- Ultra-thin construction (0.1"/0.25mm wall thickness) allows original seal size to be used with minimal additional lip loading
- Redi-Sleeve surface is the best-possible sealing surface, ground to a 10-20 microinch Ra (0.25 - 0.50 Micrometer Ra) Finish without lead
- Available for shafts from 0.5" (12.7mm) to 8" (203mm) in diameter

National® Shaft Repair Kits

Save Time and Costly Shaft Replacements

Save time and costly shaft replacements by using National Shaft Repair Kits. Our kits include the industry-tested, technician-approved seal in addition to a National Redi-Sleeve.

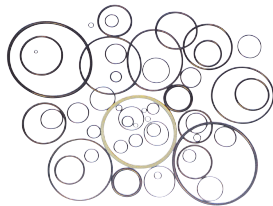
Depend on National Shaft Repair Kits as a reliable, cost-effective alternative to replacing or repairing the shaft.

NOK

NACTEC



CORTECO®



SiL SEAL INNOVATIONS

NOK Freudenberg

Advanced technology, superior performance sealing products

The world's largest manufacturer of oil seals and hydraulic/pneumatic seals for the automotive industry.

Range includes: synthetic rubber oil seals, small cross section seals, o-rings, packing, magnetic fluid seals, mechanical seals for industrial and general purpose, dry gas seals, lip seals, marine seals, dynamic and static seals, etc.

NOK Oil Seals

High performance sealing devices for machinery and equipment covering the broad spectrum of automotive and general industries.

NOK O-Rings

Special purpose seals built with the finest synthetic rubber. Critical applications include aircraft, automotive and underwater photographic equipment.

Garlock

SEALING TECHNOLOGIES®

an EnPro Industries company

Garlock Klozure®

Sealing products that operate efficiently, ensure safety and protect the environment

Garlock Klozure® seals increase productivity through reduced downtime, longer life cycles and easier installation and maintenance. A leading manufacturer of radial lip seals and bearing protection devices, Garlock Klozure® services a wide range of industrial sectors, including chemical processing, hydrocarbon processing, pulp and paper, power generation, primary metals, mining, aerospace and food processing, etc.



At the heart of every Garlock Klozure® oil seal you will find the Mill-Right® family of oil seals. Each of the new Mill-Right® elastomers has been specially engineered to provide the highest abrasion resistance, lowest wear and exceptional chemical and temperature resistance. The engineered Mill-Right® materials and seal designs together create the most advanced sealing solutions available in the heavy industrial market. With every Garlock Klozure® you can depend on longer bearing life, increased productivity and less maintenance.



Hydraulic and Pneumatic Seals

Seal Innovations offer PT.CBC Indonesia access to Australia's largest range of hydraulic and pneumatic seals for all your standard and specialised sealing solutions. The extensive range covers applications such as excavators, diggers, cranes, loaders, jacks and pneumatic cylinders and hydraulic cylinders.

Seal Innovations Machined and Pneumatic Sealing Solutions

Machined hydraulic and pneumatic sealing solutions that offer the best profile/material combination for every application

Tailor-made, high performance sealing solutions and components based on new technology and modern sealing materials. Seals from standard profiles to special profiles and up to 600mm in diameter are available on short notice. If required for installation purposes, seals can be supplied in cut or glued format.

Product range includes piston seals, hydraulic/pneumatic seals (ptfe piston seals, rod seals, wiper seals), rotary seals, static seals, etc.

The production facility and manufacturing processes at Seal Innovations meet the high quality standards demanded within the food processing industries and HACCP Australia.

The production of nontoxic products typically requires sealing systems made from nontoxic materials. Seal Innovations accesses modern high performance elastomeric materials that meet international food grade standards and provide our customers maximum performance for equipment utilisation.

Seal Innovations' engineers are working daily with maintenance and engineering managers of leading food and beverage producers. Our products are currently used in bottling plants, canning lines, filling machines with precise dosing requirements, kneading machines and homogenisers.





KOK

OEM quality automotive oil seals and precision rubber parts

KOK was started in 1963 and since then has become a world leader in the production of rubber and engineered plastic automobile and industrial parts for both OEM and aftermarket.

KOK product range includes:

automotive seal kits, mechanical seals, valve stem seals, rubber boots (bellows) for CV joints, steering racks, hydraulic seals, radial lip seals for automotive transmissions, circlips and clamps.

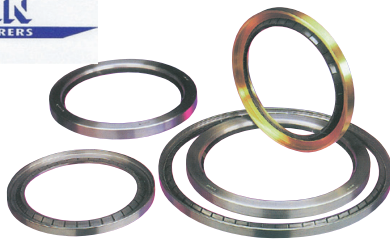


Stemco

A higher standard of performance

Stemco Truck Range includes:

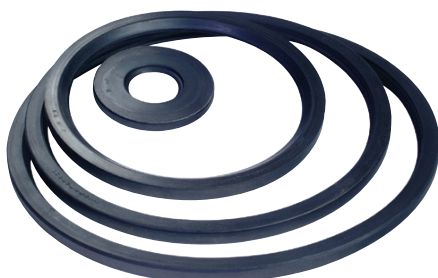
- Guardian HP semi-united hub seal
- Stemco Discover, Voyager and Guardian seals
- Stemco moisture ejector
- Truckmaster air filtration system
- Stemco hub-odometer, Pro-torq nuts, hub caps and plugs



Autospin

Improved sealing performance and bearing protection

From Autospin, a comprehensive range of metal-cased shaft seals in nitrile, silicone, viton, PTFE and leather. Autospin's unique "Safeguard" design provides maximum bearing protection and superior sealing performance.



JM Clipper

Seal virtually any media in any given application

The JM Clipper design features an integrally moulded rubber fibre outer case and an elastomeric seal lip. The unique nonmetallic construction will not rust or corrode and forms a gasket-type seal between the equipment housing and the seal outside diameter (OD). With a wide range of profiles and material options, Clipper seals are available for shaft diameters from 0.250" (6.35mm) to over 65" (1651mm).

Clipper Split Seals are known worldwide for being the easiest split seal to install because they do not require a coverplate to keep them in the housing. The robust, composite OD provides the best retention of any split seal on the market. Replacing failed seals in the field with Clipper Split Seals saves on downtime and lost production expenses.

Pump and Valve Gland Packing

Service	Pilotpack Range
General Purpose	7099 (PTFE) and 8113 (Graphite)
Aggressive Chemicals	3410 and 3480
Broad pH	3410 and 3480
High Abrasion	5020, 5035 and 5417
High Temperature – Valve	4000
High Temperature – Pump	4001
High Speed	3480
Food Grade	7099, 3410, 5417
Steam	8022, 4000 and 4001
Oxygen Safe	3408
Die-Formed Rings	All of above

High Performance Gasket Materials

Service	Pilotpack Range
General Purpose	General Sevice 178
Steam	Pilot 34, Graftec and Econograph
Acid	Pilot Acid
Agressive Chemicals	Pilotflon
Plastic/Glass Lined Flanges	Sealcom 500
Food Grade	Pilotflon 550 and 570
off-the-roll PTFE	Flangeseal (adhesive backed)
High Temperature	Pilot-Threm 201
Oil Jointing	Pilot 166
Metal Gaskets	Spiral Wound and Heat Exchanger

Thermal Protection Textiles

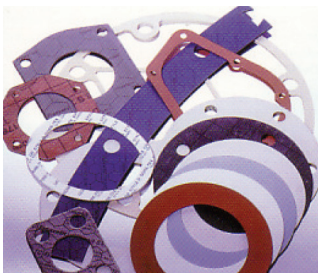
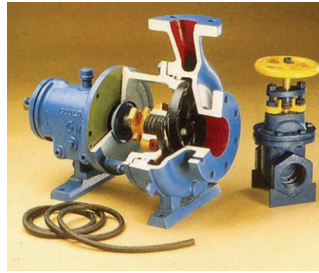
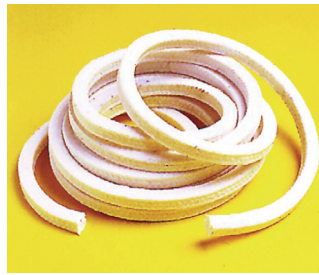
Welding Blankets and Screens
Glass Braids, Webbing and Ropes
High Temperature Door and Lid Seals
Thermal Protection Sleaving
High Temperature Blankets and Boards
Valve and Component Covers

Rubber Materials And Components

Rubber Sheetting and Gaskets
Extrusion and Moulding
Machined Components

Flexible Piping Solutions

Flanged Rubber Bellows
Flexible Metal Hose
Metal Bellows
Fabric Expansion Joints
Metal Expansion Joints



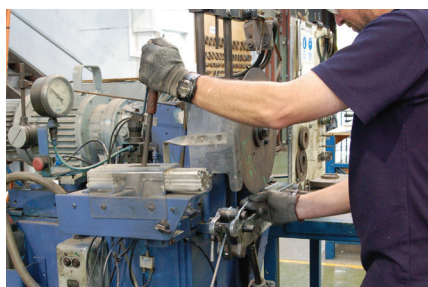
Flexitallic®

The Flexitallic Group is the international market leader in the manufacture and supply of high quality, high value industrial static sealing products, delivering industrial gaskets on a global scale. Developer of the spiral wound gasket in 1912 in the US, Flexitallic has built on this legacy of innovation with revolutionary product materials such as Thermiculite®, Sigma®, Flange Rescue Range and the Change Gasket.



THE FLEXITALLIC RANGE

Our extensive and varied product offering includes Spiral Wound Gaskets, RTJ Gaskets, Flexpro Kammprofiles, sheet materials and dynamic and static packings. Australian manufacturing complemented with a large stock profile of standard product lines, Seal Innovations can offer a complete solution for your static sealing requirements.



Bearing Isolators

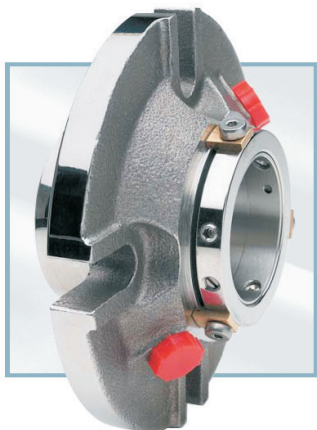
Equipment protection and downtime reduction

Torturous path labyrinth seal for two way sealing, zero lubricant leakage and total exclusion of contaminants. This is achieved by using non-contact labyrinth sealing technology. Bearing isolators can be used on shaft sizes from 0.5" to 10.0" and handle shaft speeds of 25m/s, far beyond speed limits of radial lip seals.

Bearing isolators are available in a variety of materials including proprietary graphite-filled PTFE which is suited to caustic environments, has low coefficient of friction, offers low wear and is compatible with over 160 chemicals. A mineral filled PTFE version is also available for use in the food industry. Bronze for medium to relative high speeds and stainless steel for corrosion resistance.

Applications include: bearings, gearboxes, turbines, electric motors in heavy wash down areas, chemical /caustic environments, dirty/abrasive environments, paper/pulp, petrochemical, mining, steel making, food, beverage, cooling towers and more.

How much will it cost you not to install a Bearing Isolator?



Mechanical Seals, Mixer Seals, Pumps and Seal Support Systems

Offering a full design, supply and refurbishment service

Seal Innovations is amongst the leaders in providing a full range of Mechanical Seals, including cartridge, component, slurry seals, bellows, split seals, single and double seals for an extensive range of pumps, mixers and mechanical equipment. From standard seals through to highly specialised designs.

Our mechanical seals are available in a wide range of face materials such as carbon, silicone carbide, tungsten carbide and alumina ceramic. We also offer a choice of elastomers from nitrile to viton.

Mechanical Seal Support and Water Management Systems

Water is a valuable resource and we offer a range of Water Management System to support mechanical seals in most applications from light duty to harsh environments, ensuring sealing security and high efficiency.

Industries which benefit from our solutions include paper/pulp, mining, petrochemical, power generation, steel making, food, beverage and more.

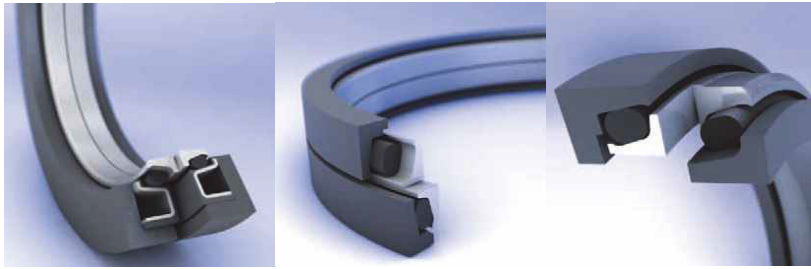


GOETZE®

Mechanical Face Seals for extremely harsh environment

For decades, GOTZE® mechanical face seals have been utilized with outstanding success in transmissions, pumps, axles, and drive mechanics. The special GOTZE® cast iron materials have provided extraordinary wear-resistant solutions for a variety of demanding applications, such as construction machinery, agricultural equipment, mining machinery, drive mechanics for tracked vehicles and other applications.

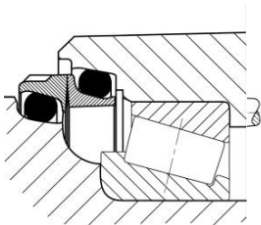
Continued technological advances in GOETZE® sealing solutions guarantee our customers long term durability, service-life and maximum productivity for their equipment.



Applications

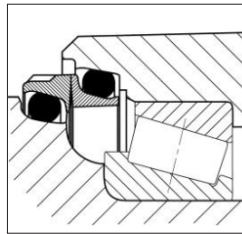
Seal for conveyor for abrasive media

Lubrication chamber sealed with adial lip seal; back surface facing lubricant to prevent pressure build-up in the sealing space.

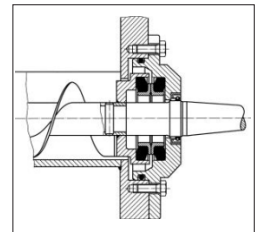


Seal for wheel bearing axle

The inner tapered ring enables the housing contour to be machined directly on the shaft.

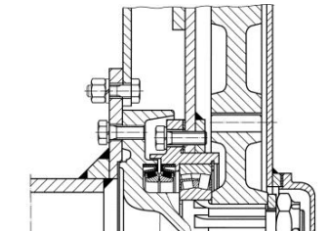


Seal for screw conveyor for abrasi materials

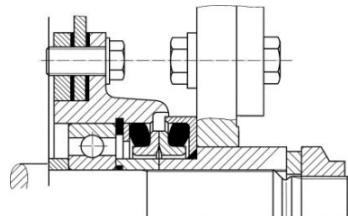


Seal for transmission housing

Designed with Adapter Rings type 76.91 for installation in cylindrical housing bores.

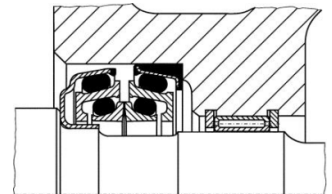


Seal for cutting shaft of crop harvester

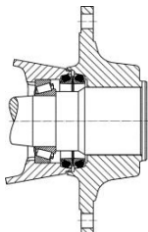


Seal for steering drive axle

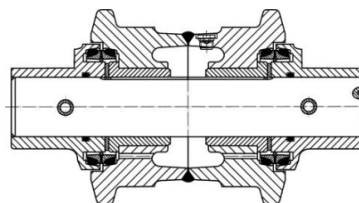
Steering movements cause an axial displacement of the floating axle of about 5 mm. This movement is compensated by the double configuration of the seal



Seal for rigid axle of tractor



Seal for track roller of excavator



LUBRICATION SYSTEMS





Alemlube Lubrication Equipment

Alemlube is a progressive, innovative and customer-focused, 100% Australian owned company. Our success is driven by our core business of supplying and servicing greasing equipment, drum pumps, flow meters, spill containment and waste oil equipment, air-operated diaphragm pumps and hose reels. Alemlube offers installation and commissioning services for automotive, transport and minesite workshops, vehicle hoists and wheel service equipment and also designs, supplies and installs automatic lubrication systems. Key products in the Alemlube range include:



670AN3 450g 18V Cordless Grease Gun

- Grease pressure of up to 8,000psi (552bar)
- Delivery rates of up to 170 g/min
- Second battery included
- One hour fast charge
- Remaining charge and fault indicator
- Lithium-ion battery for extended use
- Up to 24 x 450g cartridges per charge
- Ergonomic and light weight at just 3.5kg
- The key to efficient plant and machinery greasing



424170 20kg Air Operated Grease Kit

- Integral filter protects pump from foreign particle contamination
- Delivery rates of up to 0.9 kg/min
- 55:1 ratio air motor develops grease pressures up to 7,950psi (548bar)
- Will handle high density, tacky greases up to NLGI2
- Cast alloy dual cylinder air motor won't dent or distort prematurely
- Easily adjustable bung adaptor enables the kit to be used on a variety of drum sizes and types
- Single toggle air motor operation ensures a long service life
- Heavy duty 3 jaw coupler ensures a tight and precise grease nipple connect
- Ergonomic grease control valve is easy and comfortable to operate, convenient carry handle assists in kit portability and helps address OH&S issues, and operator friendly
- Manufactured in Spain



L40040PA Diesel Fuel Storage & Dispensing Kit

- 400L storage tank capacity
- Heavy duty, robust polyethylene tank
- Recessed pump improves overall tank strength
- Built in nozzle holster
- Lockable lid aids diesel fuel security and protects dispensing kit components
- 4-point security locking system
- Fully assembled dispensing kit ready for use
- Internal baffles aid tank stability
- 12V diesel fuel pump capable of flow rates of up to 50 L/min
- 4 metres of antistatic fuel delivery hose
- 2 metre battery cables with clamps
- Automatic fuel nozzle
- Metering option available
- Dimensions: 1165mm (W) x 1165mm (D) x 566mm (H)



454695C IBC Oil Storage and Transfer Kit

- Includes 1,000L IBC container, 3:1 ratio pump, dual pedestal hose reel with 10m of hose, a top mounting bracket and electronic oil meter
- Refillable, reuseable, mobile and fully transportable
- 3:1 ratio pump facilitates flow rates of up to 18L/min
- Dual pedestal hose reel provides a long service life
- Electronic oil meter powered by quickly and easily replaceable AAA batteries



NDP-25BAH 1" Air Operated Diaphragm Pump

- Maximum flow rates of 160L/min
- 1" BSP (f) inlet and outlet ports
- Aluminium body and hytrel diaphragms
- Maximum delivery per cycle of 600mL
- Weight of just 13kg
- Mounting hole layout of 170mm x 222mm
- Overall pump dimensions of 287mm (w) x 382mm (h) x 210mm (d)
- Suitable for the transfer of diesel fuel, gear oil, engine oil, waste oil, brake fluid, antifreeze and waste water
- Poly and stainless steel models also available



SA400N Air Hose Reel

- Hybrid polymer hose
- Impact resistant UV stabilised covers for maximum durability
- Automatic and positive latching mechanism
- Can be mounted on the wall, floor or ceiling
- 3/8" BSPT inlet/outlet
- High flow swivel and fluid path
- Detachable steel mounting bracket enables 180° hose reel rotation
- 15m x 12mm ID hose & 0.9m lead in hose



Beka One Single Point Lubricator

- Revolutionary refillable and disposable design which slashes consumable costs
- Refillable with your own grease with no ongoing costs of refill cartridges or batteries
- Refill up to 6 times before replacement
- 120gm capacity
- 10 bar maximum pressure
- Electromechanical design gives precise and reliable lubrication for bearings, housings, bushes and pins



BekaMax - 20 Automatic Grease Lubrication System

- Complete kit to service 20 grease points automatically
- Includes a BekaMax 24V DC pump station with onboard timer and 4kg grease reservoir, 70m of grease filled hose, reusable hose ends, compression fittings and adaptors, nuts and bolts, cable ties and protective hose wrapping
- System suitable for use with NLGI2 greases
- Working life of fixed plant and mobile equipment is extended significantly
- Please note, assistance will be required to design a system to suit your specific application
- Increases plant and machine profitability by minimizing service downtime
- Reduces maintenance costs due to manual under or over greasing
- Manufactured in Germany



perma CLASSIC

A metal bodied, gas type single point lubricator which is water and dust proof. The clear end-cone of the lubricator is flexible, making the perma CLASSIC extremely robust such that it can sustain impacts and knocks without breaking. Ideally suited to small to medium sized pumps and conveyor pulley bearings.



perma FUTURA

A clear bodied, gas type single point lubricator which is water proof and dust proof. The lubricator body has an integrated support flange to protect against breakage and impact damage. Ideally suited to small to medium sized pumps and conveyor pulley bearings where lubricator piston level inspections are planned.



perma FLEX

Comes fully assembled and ready-to-use. Simply turn the dial to the desired discharge period and the system is activated.. The dial activation system is simple to use and allows a single product to be used where multiple products might otherwise be required. The dial system also allows the time setting to be adjusted during operation if necessary. perma FLEX is IP68 rated meaning that it is dust tight and water proof.

perma STAR VARIO (Generation 2)

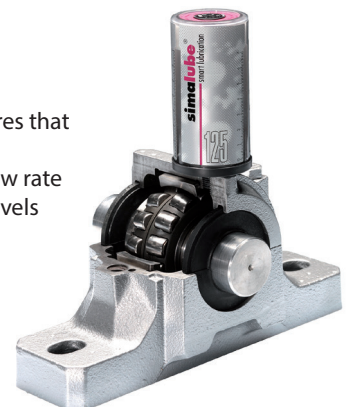
A battery powered mechanical type single point lubricator which is ideally suited to the lubrication of equipment where remote mounting of lubricators is preferred such that inspections and servicing can be carried out while equipment is operating. Ideally suited to conveyor pulley bearings and seals, large slurry pump barrels, fan jack shaft bearings and medium to large electric motors. Generation 2 allows time settings in monthly increments from 1 to 12 months and has a digital display combined green and red LED's to indicate operational status.



Simalube Automatic Lubricators

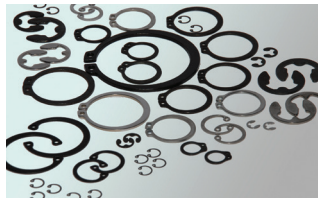
Swiss-made Simalube automatic lubricators offer many unique features that will benefit your operation. Here are a few of the major advantages:

- Fully adjustable clock allows increasing or decreasing the grease flow rate
- Transparent housing allows easy checking and marking of grease levels
- More pressure - patented gas-producing dry cells 5 Bar
- Patented gas producing dry cells are completely safe, harmless and approved for Zones 1, 2 and 3
- Wider temperature application range from -20°C to 55°C
- Wide range of accessories
- Wide range of sizes to suit any application - 15ml, 30ml, 60ml, 125ml and 250ml



ANCILLARY PRODUCTS





Circlips Australia

We realise that when it comes to fasteners, our customers need stock on demand. That's why we have the largest stock and range of circlips in Australia. This enables us to cater for all the requirements of the automotive and industrial sectors.

Circlips Australia supplies over 40 Million pieces (50 tonnes) of fasteners to Australian industry every year.

Disc Springs

Providing excellent load capacities, these springs are available in many diameters and thicknesses to provide varying load characteristics for bearing and bolt applications. Serrated washers also available.



Roll Pins

A versatile component used to replace rivets, split pins, taper pins, dowel pins, bolts, etc. Available in metric ASME and ISO8752 and inch sizes in plain and zinc plated up to 60mm diameter. Coiled pins, Compression Limiters and Dowel Bushes and many more are also available in a wide variety.

Spiral Rings and Wave Springs

Complementing the range of precision engineering fasteners, these high performance rings and springs have excellent properties and can be designed to suit all applications with no tooling required.



Design

Circlips Australia stays at the forefront of fastener technology and innovation and is constantly providing solutions to meet the specific performance needs of our customers.

With the backing of an array of design engineers from all over the world, we can find or have a fastener designed to suit every requirement.

Moulded Fasteners

We move with the changing requirements of our customers and offer a variety of plastic fasteners, panel retaining fasteners and brass inserts for wire, pipe and cable applications.



Point of Sale

Supplying an array of assortment packs to suit all types of industries, the "Handy Paks" are as the name suggests, a very convenient way to stock a small amount of various products to have on hand when needed. No time wasted running around town just to pick up a small part to complete a job, having an assortment nearby in the workshop saves time and money. Products currently available include grease, nipples, woodruff & parallel keys, copper washers, fibre washers, cotter pins, R-clips, chain links, roll pins, circlips and many more.

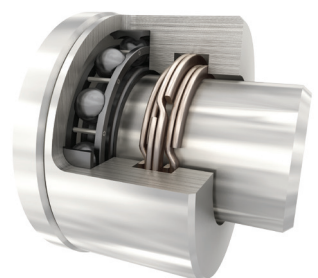


Service

Our staff are fast, efficient, technically minded and courteous. We offer a wide range of transport options and delivery, same day in Melbourne and next day Australia wide. If we do not have stock of a particular item, we can arrange delivery within a week, subject to factory availability.

Laminar Seal Rings

The Smalley Laminar Sealing Ring is a metallic labyrinth seal consisting of multiple rings in a groove. The metal ring's ability to withstand higher temperatures, more corrosive environments and other extreme conditions, make it an ideal choice as a primary seal or as a secondary seal where rugged applications are involved. Standard sizes and custom designs available with short lead times. Typical applications include mining tractor drive shaft, piston shaft seal, compressor drive shaft, pulley idler, gear box needle bearing, brake caliper, conveyor idle roller, high speed spindle.

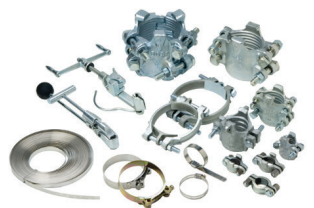
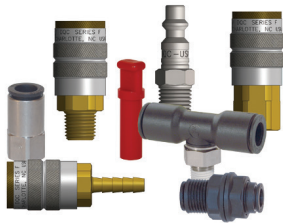


Internal & External Circlips, E-Clips & Roll Pins in Stainless Steel

304 is the most widely used stainless steel in the world, offering good ductility to suit a broad range of corrosive environments in low to high temperature applications. Available in a wide range of sizes, these quality products, made in Japan, are now in stock. Applications include food & beverage industry, marine components, hydro turbine, agriculture machinery, kitchen & laundry appliances, high temperature/furnaces, freezer equipment, petrochemical, drilling and gas, as well as mining.



The Right Connection®



Dixon Hose Couplings

Dixon is one of the largest suppliers of hose, valve, pipe and fitting packages to construction, industrial, mining and agricultural industries. With a vision to provide quality products, rapid delivery and superior customer service world-wide, Dixon represents excellent value to companies seeking a reliable single source supplier.

HOSE FITTINGS

- **Cam & Groove:** BSP standard, EZ Boss, flanged adaptors and couplers, reducing adaptors & couplers, gaskets, handle pin & ring.
- **Claw couplings:** Minsup® A Type, Minsup® Surelock, Air King.
- **Air Fittings:** Dix-Lock®, Dual Lock, quick disconnect (Nitro Compatible), quick disconnect (perfecting), brass hose fitting & ferrules.
- **Boss Fittings:** Boss® ground joint couplings, Boss® stems, air hammer couplings, Minsup® ground joint couplings.
- **Hose Fittings (other):** King® combination nipples, flanged hose tails, brass nut & tails, nylon & poly hose tails, hose joiners & menders, Y pieces, Bauer couplings.
- **Holedall® Swaged Coupling System:** Internally swaged hose tails & ferrules, externally swaged hose tails and ferrules, unrangle couplings, Flow Chief® sanitary couplings.
- **Hydraulic Fittings:** ISO hydraulic quick disconnects, 3000 Series, 5600 series, 7800 series, Terna® quick release self sealing couplings.
- **Clamps:** Boss® clamps, Minsup® claw clamps, double bolt, pinch-on, worm drives, T-bolt, Mikalor® super clamps, band style, spiral, pre-formed, Ultralock®.
- **Whipchecks:** Hose to hose, hose to tool, cable stockings.
- **Washdown:** Dinga, trigger spray guns, twist spray nozzles, spray nozzle adaptors.
- **Hose reels:** High flow washdown, heavy duty washdown.
- **Accessories:** Pressure gauges, lubricators, test pumps, diameter tape, hose room tools.

PIPE

- **Light Wall Pipe:** Galvanised grooved hydrant pipe UL listed ActiveFire® AFP1697, galvanised shouldered mine pipe.
- **Medium Wall Pipe:** Galvanised grooved hydrant ActiveFire® AFP1698 AS1074 AS2419 .1, painted grooved sprinkler ActiveFire® AFP2070 AS1074 AS4118.2.1
- **Pipe Centre Services:** Established to provide a wide variety of hydrant assemblies and specific piping requirements such as roll grooving, cutting and threading.

PIPE FITTINGS

- **Grooved:** Couplings, elbows, bends, blank ends, mechanical tees, hydrant tees, painted or galvanised finish, UL & FM approved.
- **Shouldered:** Couplings 2 bolt, quick release, interlock, elbows, bends, blank ends, mechanical tees, flanged adaptors.
- **Flanges:** Table flanges, blind, slip on.
- **Buttweld:** Concentric reducers, elbows, tees.
- **Threaded:** Gal mal, gal steel, brass, stainless steel, socket, nipples, tees, bushes, unions, elbows.
- **Auslock®:** Tees, rises, elbows, cross, flanged adaptors.
- **Accessories:** Thread tape, gasket lube, petro tape, plumbers hemp, plumbers soap.

VALVES

- **Ball Valves:** Minsup® econovalves, brass standard s/s lever, brass AGA approved, brass 3-way, mini valves, stainless steel 1, 2 & 3 piece, actuated, bibcocks, PVC compact.
- **Gate Valves:** Brass standard, bronze tested, grooved cast iron, flanged cast iron, OS & Y, shouldered cast iron, knife gate, sluice gate.
- **Butterfly Valves:** Lever operated, wafer, lugged, actuated, grooved, shouldered.
- **Check Valves:** Brass swing check, inline York® & Europa®, uni check, duo check, wafer, grooved swing check, foot valves, and safety shut off.
- **Backflow:** Double detector, single detector, reduced pressure zone.
- **Miscellaneous Valves:** Pressure reducing, water metres, relief valves, Y strainers, test & drain, solenoid and potter switches.

All our products are rigorously tested and evaluated at our facilities before they are used in the field. We offer a comprehensive product line which can address your concerns related to fuel equipment, Pressureless, couplers and other accessories. Our product line is ever expanding to address unique concerns. With an evolving market, we believe it essential to be flexible in our ability to create or modify products; we constantly introduce new and innovative products to the market to ensure a safer, more efficient workplace.

Fuel Nozzles

Perfect for users looking for a durable and for giving diesel fueling solution. 25 Gpm - 265 Gpm Flowrate



Fuel Receiver

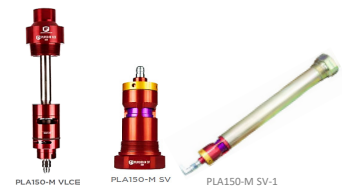
Our Patented Check Valve Receiver allows fuel to flow in only one direction. The check valve receiver comes with a protective cap and is compatible with all major manufacturers nozzles.



Pressureless

- The PLA150-M SV is the ideal inlet/shut-off valve for a Pressureless system. This system is capable of flow rates up to 211 gallons per minute.

- The PLA-M SV-1 is the replacement in a top fill tank configuration that will greatly reduce foam accumulating—a common problem with these kinds of tanks.



Couplers

The Matrix 300 series is a set of proprietary couplers designed to prevent cross-contamination of fluids. Matrix couplers work at a higher pressure and flow rate than standard couplers. Each of the 10 nozzles and receivers in the matrix line is color-coded and designed to physically interlock with only its matching color. Also available with 1" Threads.



Fuel Vents

The standard fuel vent is a critical part of a standard or pressurized fueling system. Unlike Pressureless systems the standard system needs tank pressure to shut the nozzle off when the tank is full—a good fuel vent is critical to this.



Permatex is a leading manufacturer of premium chemical products to the industrial and automotive maintenance repair, home and hardware markets.

Products include gasket makers, sealants, hand cleaners, threadlockers, adhesives, cleaners, repair kits and lubricants under globally recognized brand names such as Permatex®, the Right Stuff®, Fast Orange®, Spray Nine®, Versachem®, and Devcon®.

PT. CBC Indonesia is your reputable Permatex distributor in the Indonesian market.





Recoil® Insert Systems

Designed to Meet the Most Demanding Requirements

Recoil® inserts are the quick and easy method for repairing damaged threads or creating stronger threads in alloys and composite materials in original equipment manufacture. Recoil® offers a choice of repair kits to meet a wide range of repair options including the Trade Series Kit, Standard Repair Kits, Replacement Insert Packets, Smartsert and Tangless Inserts®, Manual and Power Installation Tools, Taps, Drills and Tang Removal Tools.

Applications include

- automotive engine repair,
- small component repair
- original equipment manufacture

Wire Thread Inserts

Recoil's range of thread repair kits and products and wire thread inserts enable you to produce strong new threads in weaker materials and carry out fast and efficient repair of damaged threads. Wire thread inserts and advanced thread installation tooling systems are designed to create strong threads in their production. The Recoil thread inserts and tooling systems further speed up the installation process and make it easier to manage.

Self-Locking Inserts

The Recoil screw-locking insert is designed to provide a screw-locking feature which will retain screws or bolts under the most severe vibration or varying temperature conditions. The insert locking configuration comprises a series of uniquely designed locking chords which, upon the engagement of a screw or bolt, deflect radially to permit the installation of the bolt. Upon bolt entry, these straight segments are flexed outwardly, creating pressure on the bolt so that contact area is maximized.

ENVIROPEEL



Enviropeel Thermoplastic Coating

Enviropeel is a sprayable thermoplastic barrier coating system which allows protection to be applied on site and to objects of any shape or size. Its corrosion-inhibiting properties and ease of application open up new possibilities for protection in many industries, especially where galvanic corrosion affects bolted systems, such as flanges and valves. The system also prevents the ingress of dust and other contaminants into rotating systems such as bearings and prevents the deterioration of stored components and equipment. Applications in Australia since 2005 have shown equipment lifetimes increased by 500% using Enviropeel.

A solid at normal temperatures, the Enviropeel material is melted in a computer-controlled heating and pumping tank to form a sprayable liquid. The material can be sprayed on to the substrate, forming a perfectly fitting 'second skin'. Inhibitors within the Enviropeel coat all surfaces inside the protected area, penetrating between surfaces and along bolt threads. Corrosion inhibitors continue to be released, providing continuous active protection against galvanic, pitting and atmospheric corrosion. It also prevents water, dust, and contaminant ingress and isolates vulnerable components from corrosive environments.

In addition to the standard unit, a 'Zone 2' model for use in hazardous areas, and a portable 'Slugger 170' for repairs and small applications are available.

Enviropeel is completely reusable, non-toxic and contains no volatile organic compounds (VOCs). When inspection or replacement is required, it can quickly be cut and peeled away to reveal the protected surface. The used Enviropeel can be returned to the unit for re-application.

The Enviropeel system can be used on stored components and equipment, conveyor bearings, bolted systems and structures of all kinds including valves and flanges, offshore and onshore installations, component in transit and for corrosion protection for parts and machinery.

LIGHTING



WORKLAMP

NORDICLIGHTS



NORDIC

Mining is a 24/7 business – from dawn to dusk and everything in between. Designing mining work lights is NORDIC LIGHTS® core business and our back yard. The long-term proof of NORDIC LIGHTS® success within the mining industry is based on the durability of the mining work lights and headlights.

Long-term collaboration with our partners in the mining industry and continuous strategic investments in our own R&D department, vibration testing lab, and the latest in simulation software gives us the power to design the perfect heavy-duty lighting solution for you.



HELLA

Worklights from HELLA provide you with optimum lighting conditions, even in the dark, allowing you to work faster, with greater precision and improved productivity. Optimum working light as produced by HELLA worklights help you to remain awake and alert for longer in the evenings, boosting concentration, and thereby raising the night worker's productivity

HELLA is established as a global OEM to all the leading international vehicle and agricultural machinery manufacturers, as we put emphasis on the highest quality in all areas.



ABL

Work lamps for mobile equipment such as heavy vehicles, light vehicles and machinery. Many of these fixtures can still be used for extreme conditions, however they are generally better suited for light to medium-duty applications. Lights in this category are often used on light and heavy mobile equipment and machinery in: mining, construction, utilities, municipals, road works, emergency vehicles, refuge trucks, lorry fleets, and even marine craft applications.

LED heavy-duty work lamps are often used for extreme conditions. This can be from extreme weather conditions, extreme topography, or extreme conditions generated from the vehicle or machine itself. Heavy-duty lamps need to sustain normal operation through extreme heat or cold; high-vibration and shock; or high dust or water from high-pressure wash down bays.



DCBRIGHT

DCbright is a Dutch design, developed to produce the brightest LED lamp in the world. This has been achieved in combination with the lowest energy consumption with which the impact on the environment is minimized. The LED lighting from DCBright is of absolute world class and delivers an unparalleled high efficient light output. The housing has been tested in the most demanding environments in the world. Including the mining of Australia.

LARGE AREA FLOOD LIGHTS



NORDIC (DC Series)

This majestic work light has no less than 60 LEDs and weighs 18 kg. The Gemini offers an impressive light output and is mostly used in the mining industry and on bucket-wheel excavators. However, with an output ranging from 13800 to 25000 lumens, it also sees use illuminating harbors, generally mounted on harbor masts.



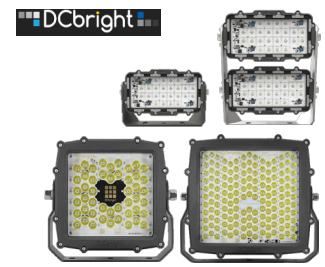
HELLA (AC & DC Series)

The 110/230 V AC & 48V DC RFCommSafe™ HypaLUME has been designed for applications where high output lighting in extreme environments is required. The lamp produces a net output of 28,000 lumens whilst only consuming 300W.

The LEDs have a colour temperature of 5700K to provide a near daylight work environment that is optimal for fatigue avoidance and high alertness. The LED driver electronics ensure light output remains stable over a wide range of voltage variations. The built-in soft start feature eliminates a high in-rush current at start up.

DCBRIGHT (AC & DC Series)

DCbright is a professional manufacturer of the world's brightest and most efficient LED lighting products for industrial, architectural, construction, mining and automotive applications. The industrial lamps, mining lamps, working lamps, off-road lights and mobile light towers produced and distributed by DCbright are lighting up mines, construction fields, harbors, stadiums and vehicles all over the world. DCbright currently has set up distribution networks in Europe, Australia and Asia, while the designing offices are located in Europe and Australia and the production base is located in China to provide the world's highest performance LED light solutions with the most competitive price.



YAHAM LIGHTING (AC & DC Series)

LED Flood Light is designed for outdoor and indoor lighting purpose, and helps to improve visibility, enhance safety, and cut down energy consumption. Innovations and leading technologies can always be found in every of the flood lights, and that's exactly what forms their unrivaled performance. Choose from Yaham portfolios, light better, save remarkably, and enjoy the great durability.



HIGH-BAY LIGHT

HELLA

The High Bay light from HELLA complements the range for heavy-duty applications. It is ideal for use in warehouses, workshops and production halls and has an operating voltage of 100 to 305 V AC. The high-quality aluminium housing and reflector are specially designed for high ceilings and, at 140 lumens per watt, the High Bay produces a high light output with low heat generation and low energy consumption. The very low energy consumption is environmentally friendly and reduces CO2 emissions compared to conventional metal-halide lamps.



YAHAM LIGHTING

LED high bay light including linear high bay, round high bay adopts new materials(graphene) and new technology(POB). The light efficacy is up to 160lm/W~190lm/W, which is ideal replacements for 250W~600W metal halide fixtures. Intelligent control can be supported to provide the energy-efficient solution for your factories, warehouses, hangars, etc.



STREET LIGHTS

YAHAM LIGHTING

High-quality Led street light wholesale from Yaham Lighting. There are three types in LED street light with new technology, isolated driver, integrated driver and solar system. All of them adopts Nichia LED chip and professional roads lighting optical lens with high efficiency(150lm/W) and uniform light. Various wattages from 10W to 240W, which suitable for 3-12M poles, and kinds of roads lighting, including the off-grid area.



WARNING LIGHT



HELLA

HELLA's range of Emergency Lighting and Signal Warning Lamps provide high levels of performance and reliability for environments that demand powerful warning lights to attract attention.



ECCO - BEACON

LED, Rotator, and Strobe Beacons for Trucks and Work Vehicles.

Give work vehicles a safety boost with a line of performance optimised beacons. Multiple mounting options are available for these durable warning lights, including magnetic bases for rooftops. From trucks to forklifts, ECCO beacons reliably alert work crews and pedestrians.

HEAD LIGHT



NORDIC

Our front lights / Head Light are ideal for heavy-duty vehicles and feature either LED technology, Halogen, or both. The combination headlights integrate headlight, indicator light and parking light into one unit, and are available with pedestal or rear mounting. Some also feature a dual-beam function. The Bumblebee headlight module is available in high and low beam versions, and is easily adapted to your custom vehicle design. We make both ECE- and SAE-approved versions of our front lights, perfect for trucks and other vehicles in industries such as agriculture and construction. Look no further for the very best front lights for your vehicle, both on and off the road.



HELLA

These developments mean simply more safety for drivers. HELLA's wide range of vehicle-specific and universal headlamps is designed to provide a comprehensive market coverage, setting lighting milestones for you.

TAIL LIGHT



HELLA

Communication on the road often occurs via light signals. Reliable lights by HELLA are essential for safety on the road.

The wide range of variants gives the vehicle an individual and unique appearance. The trend from bulb versions to LED rear lamps allows a wide range of design options such as 3D tunnel effect, light curtain, indirect reflectors, glowing body and much more. In addition, the energy-efficient LED rear lamps contribute to energy optimisation. Here is a selection of the latest rear lamps for the independent aftermarket.



LED AUTOLAMP

Our range of rear combination lamps are manufactured for small medium and large sized vehicles, truck and trailers. All product approved for Australian road standards and are supported by industry leading warranties.

PORTABLE LAMP

HELLA - SCANGRIP

SCANGRIP constantly push back the boundaries of LED lighting and battery technology, creating new cutting-edge work lights. We always reach for that extra brightness, that extra operation time, those little touches that make a real difference when you need the best work light you can get. We guarantee to provide you with only premium products for optimal performance.



LV AUTOMOTIVE

Portable Lamp is easy to used and carried, LV Automotive presented a quite power consumption Portable lamp with 2 Power Settings - Hi 800 Lumens & Low 320 Lumens, 3 Hour continious run time on Hi Power Setting, 240V Charger & 12V Charger Supplied.

HELLA

Totally reliable functionality of the light source is the key here. HELLA has the right technology for each case - and that is why we are introducing a powerful range of bulbs on the road:

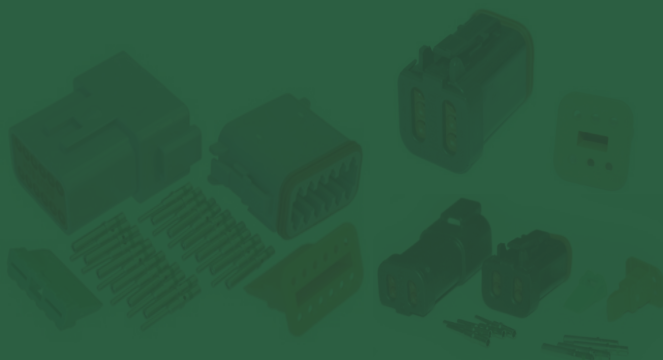
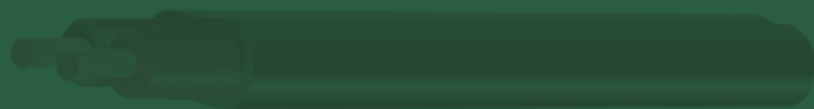
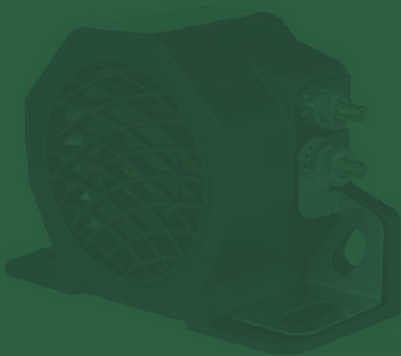
- Xenon: for more power
- Performance: for more light
- White Light: for greater aspiration
- Long Life: for longer life
- High Wattage: the little extra for professionals
- Standard: for more efficiency

All of our incandescent lamps, from standard to xenon, reliably deliver top performance every time. If you are looking for safety, you will always find exceptional tested quality for every vehicle at HELLA.

BULB GLOBES



AUTOELECTRICAL CONSUMABLE

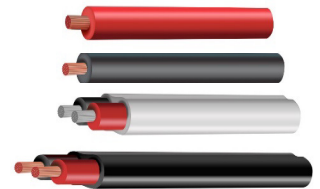


CABLE

Tycab - CABLE

Tycab Australia is the leading specialised manufacturer of the highest quality Oxygen Free, Plain and Tinned Copper electrical cable products. Tycab is proudly Australian owned and operated with over 30 years experience in the industry, and part of the Tyree Group of Companies. Tycab Australia electrical cable products are used across a broad range of industries, from Automotive, Irrigation, Building, Data & Instrumentation to Security, Marine, Welding, Speaker & Audio and Switchboards.

Tycab prides itself on being an innovative 'niche' manufacturer able to take on the challenge of developing products to satisfy various cable design requirements. Tycab's competitive advantage is its ability to produce the highest quality cable quickly with typically smaller minimum run sizes than other cable manufacturers or importers. Niche products and solutions are our speciality.



CONNECTOR

DEUTSCH DT Series Housings & Connectors

DEUTSCH DT connectors offer field proven reliability and rugged quality. The DT design strengths include optional flange mounting, multi-pin arrangements, and design flexibility.

DEUTSCH DT housings are available in 2, 3, 4, 6, 8, and 12 pin counts and use size 16 DEUTSCH contacts, each with 13-amp continuous capacity. The housings feature an integrated latch for mating.



DEUTSCH HD30

Deutsch HD30 Series connectors are constructed from a metal shell developed to meet the needs of the heavy duty equipment and transportation industries.

The HD30 features include quick connect-disconnect bayonet coupling, single hole bulkhead mounting, silicone seals, and a rear insertion/rear removal contact system.



DEUTSCH DRC CONNECTORS, PLUGS & SOCKET

The environmentally sealed DRC Series is a rectangular connector series that offers insert arrangements of 24, 40, 50, 60, 64, 70, 76, and 80 cavities and accept size 12, 16, and 20 contacts. Several mounting options are available including in-line, flange mount, and PCB mount.



CRIMP TERMINAL & ACCESSORIES

HELLA - CRIMP CONNECTOR

NON-INSULATED CRIMP CONNECTOR

are typically used in splash water-protected areas of a vehicle and serve primarily as detachable system elements for electrical and mechanical connections/branches of cables.





INSULATED CRIMP CONNECTORS WITH SHRINK-ON INSULATION (DURASEAL)

The insulated "Duraseal" crimp connectors have a shrinkable nylon cap with adhesive that can be used to make a waterproof connection between cable and contact.



INSULATED CRIMP CONNECTOR

Insulated crimp connectors are crimped using an appropriate tool at the coloured end in order to create a safe, rigid contact to the cable.



OEX insulated crimp terminals are double crimped which means that when installed correctly, the terminal also crimps over the insulation of the cable providing a better mechanical connection and greatly reduced risk of breakage.



BATTERY TERMINALS

Whether as a spare part or as an original equipment component – HELLA universal clamps provide the best service with their high level of hardness of material and their corrosion resistance. The range is strictly oriented towards the common standards in place for battery terminals.

WIRING ACCESSORIES



OEX - Heat shrink tubing is a type of extruded plastic tube that reduces in size when heated to a pre-determined shrink ratio to fit a specific application. A sleeve should be selected in a size larger than required to cover both the wire and components it is to be used with, before being shrunk to fit. Once fitted, the sleeve provides long lasting durability.



Corrugated & Convulated Split Tubing

is the perfect option for protecting wiring in high traffic areas, or in spaces where cabling is exposed to high temperatures or chemicals. Made from a tough and flexible copolymer polypropylene, this high quality cable conduit is UV treated and weather resistant to keep you cabling safe from the elements for the long term.

CIRCUIT PROTECTION

Hella-Fuses

FLAT CONNECTOR FUSES

Blade fuses (sometimes called bladed fuses or spade fuses) are the most common type found in modern cars and lorries.

STRIP AND SCREW FUSES

Strip fuses or leaf fuses primarily comprise a punched out locking plate strip. In addition to the open variant without jacket material, closed types with a plastic insulating body or ceramic housing are also common.

CARTRIDGE FUSES (PAL FUSES)

PAL fuses (up to max. 120 A) have a similar range of applications as the MAXI flat connector fuse, but unlike the latter they are mainly installed in Japanese vehicles.

INLINE FUSE HOLDER

The fuse holder acts as a connector between the cable and fuse link whenever setting up or converting an electrical system requires additional fuse protection against overloads (e.g. when integrating an additional consumer).

FUSE BOXES

If a single fuse holder is not sufficient to integrate an additional device into the electrical system or if several functions are to be added at the same time, it is a good idea to install a fuse box. The bundling of backup features at a central point creates an overview and, at the same time, ease of maintenance.



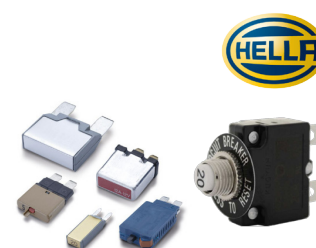
OEX-Fuses

OEX has earned a reputation among Australia and New Zealand's auto electrical and thermal specialists for high quality, reliable products at the right price. Protect wiring and electrical equipment with reliable fuses from OEX.



HELLA-CIRCUIT BREAKER

Circuit breakers, just like conventional fuses, provide protection from overloads and short circuits by interrupting the electrical circuit of the application. The advantage they have over a standard fuse is that they can carry out this action many times without having to be replaced every time they are tripped. An automatic or manual reset facility allows the automatic fuse to be reverted to its initial state – this saves both time and money.





Thermal and Magnetic Circuit Breakers

A circuit breaker is an electrical switch that is automatically operated and is designed to protect an electrical circuit from excess current or short-circuiting. A circuit breaker's main function is to interrupt current flow if a fault is detected. Ranging in size, our circuit breakers offer thermal protection and magnetic-hydraulic trip-free operation and can protect something as small as a household appliance or be a switchgear that protects high voltage circuits for an entire city.

RELAY



HELLA RELAY

The Hella quality relays have many uses and are always reliable -- this is what our longstanding original equipment experience and our great production expertise stand for. We produce more than 100 million relays in-house per year. Renowned automotive manufacturers have been relying on the trusted Hella quality for decades.

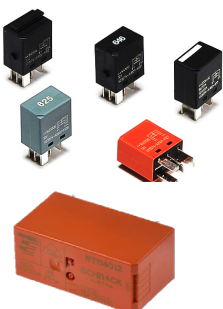


BOSCH



BOSCH RELAY

Reliably perform switching operations in a wide range of vehicles due to its compact design: The Bosch mini relay allows rated switching currents of up to 75 A and has a nominal voltage of either 12 or 24 volts.



TE CONNECTIVITY

At TE, we manufacture one of the broadest ranges of relay types, including automotive high-voltage relays, automotive high-current relays, latching (bi-stable) relays and non-latching (monostable) relays, plug-in relays, power relays, high-frequency relays, reed relays, timer relays, signal relays, protective relays, general purpose relays, and solid state relays, also known as SSRs.

The types of relays in our portfolio include switching solutions from our brands, including AGASTAT, Axicom, CII, DRI Relays (DRI), HARTMAN, KILOVAC, KISSLING, OEG, Potter and Brumfield, and SCHRACK.

SOLENOID



Cole Hersee Solenoid is an electromagnetic relay used in a direct current wiring system between a low current capacity switch and a high current load requirement.

SWITCH



Covering a range of applications and electrical systems, OEX switches have been the switch of choice for automotive electrical specialists since 1997. Not only is the range hard wearing, each type has been built to suit a range of common system applications, with switches varying in voltage and amperage, as well as mounting options. This includes blade, screw, stud and pre-wired units. Providing a range of options including normally closed (NC), normally open (NO), momentary (MOM) and change over (CO), OEX switches include missile covers, rubber boots, power window clusters, coloured illumination and locking brackets.



HELLA can supply you with switches for every function: on/off switches, pull switches for hazard warning systems and brake lights, light switches, alarm switches, power window switches, indicator switches, heat /starter switches, ignition switches, hazard warning switches, multi-function switches, disconnecting switches, foot and loading platform switches, pressure and plunger switches, air blower switches, switches for door contact - as toggle switches, rocker switches, with bulbs, screwed, clipped or with rotary action in black, silver, smooth or grained. Such a large selection for everything that can be switched on or off in a vehicle - and yet all our switches have one thing in common: HELLA quality.



For over forty years Cole Hersee has been manufacturing heavy duty battery master switches that have been installed as OE equipment by leading manufacturers of heavy duty vehicles. Battery master switches shut down a vehicle's electrical system by cutting off current from the battery. They are designed to help prevent tampering, theft, battery drain and electrical fires.

WARNING DEVICES



Signal horns are an essential accessory required by law, and are also an important safety feature. A wide range of designs and signal effects are available, depending on their intended use and requirement profile. A particularly penetrating and attention-grabbing sound is required for truck horns to give other road users a highly effective warning in hazardous situations. HELLA offers a broad spectrum of signal horns, every one of which has a different sound.



Back-up Alarms

Since 1972, ECCO has been producing the world's most reliable and durable back-up alarms. These audible warning devices are invaluable on the job and are proven to save lives, reduce injuries and minimise property loss. Back-up alarms feature rugged water resistant housing and multiple mounting options to accommodate any truck or work vehicle in the fleet. Referred to in Australia as everything from back-up alarms and reverse alarms to squarkers, ECCO's alarms are available in a variety of sizes and compliant specifications. Furthermore ECCO back-up alarms are easy to install, work without fail and are backed by out no-hassle warranty.

SAFETY CAMERA DEVICES



Commercial-grade vehicle camera systems help drivers see areas around the vehicle that may normally be obscured (i.e. blind spot). These safety systems are suitable for a wide-range of vehicle and machinery applications including: mobile equipment and machinery in the mining and construction industries, truck fleets in the transport industry, and material handling equipment in ports and warehouses.

ECCO EC7000-QK Gemineye

Features & Benefits :

- Quad view, split screen
- CMOS 11 LED infrared camera
- Four camera expandable



Backeye 360° Select Camera Monitor System

Backeye 360° is an intelligent camera monitor system designed to assist low-speed manoeuvring by providing the driver with a complete surround view of the vehicle in real time.

Brigade offers a choice of 360° technologies, both of which work with four ultra wide-angle cameras that each covers one full side of the vehicle with a viewing angle of over 180°. High-mounted on the front, rear and sides, the calibrated cameras capture all of the surrounding area including the blind spots of the vehicle or machine.

LOTO BOX



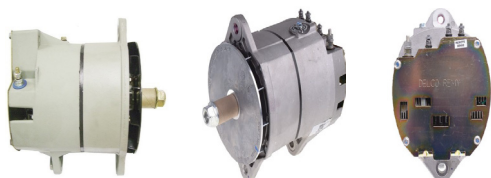
The Lockout/Tagout (LO/TO) standard establishes minimum performance requirements for the control of hazardous energy sources such as electrical, mechanical, hydraulic, pneumatic, chemical, and thermal.

LOTO (Lock Out Tag Out) Box is a protection for heavy equipment vehicle at the unit have a problem with machine or something.



ALTERNATOR, STARTER MOTOR & HVAC

ALTERNATOR



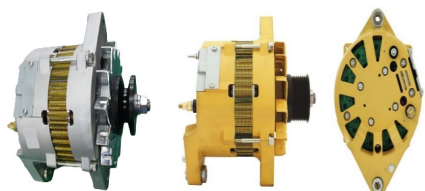
Delco Remy alternator technology is second to none. The enhanced efficiency ratings of our high output alternators provide fleets measurable fuel savings. Our high output alternators feature a durable brushless design. Brushless alternators have fewer moving parts which results in less wear. What you end up with is long life and the warranty to back it.

Delco Remy alternators mean premium quality, increased efficiency, and measurable fuel savings for the commercial and off-road vehicle industry worldwide. Superior Performance for OE and Aftermarket Applications

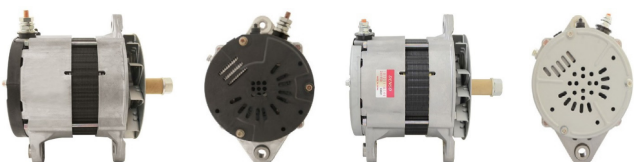
- Complete portfolio: From 70 to 450 Amp (12 and 24V).
- Efficient: Units are lighter weight and feature our proprietary stator design that uses less engine horsepower and translates to substantial fuel savings.
- Durable: Units are available with brushless design - fewer moving parts means less wear and longer life
- Outstanding performance: Units are available with Remote Sense technology - which can reduce battery charge time by 50%.



Prestolite Electric Incorporated, a leading global manufacturer of alternators, starters and new-energy solutions marketed under the Leece-Neville® Heavy Duty Systems and Prestolite® brands, was acquired in 2016 by Zhongshan Broad-Ocean Motor Co., Ltd. (Broad-Ocean), one of the world's largest manufacturers of specialty rotary electrics. The Prestolite and Leece-Neville product line includes high-output alternators for agriculture, concrete, construction, forestry, mining, and on- and off-highway equipment and trucks; municipal, school and city buses; motor coaches, and other uses.



Products of high quality and stable mechanism are available and they can fulfill diversified needs of customers. Maintenance-free brushless types have a long-life due to the small number of friction parts used while alternators with brushes are easy to be repaired with a built-in dust-preventive mechanism. To cope with demand of higher quality, lower cost and variety of product needs, Nikko's carries out a thorough quality control throughout the production process.



DENSO alternators are light weight, high efficiency, and durable under the most grueling conditions making them the natural choice in many of the world's top production cars. They meet or exceed all manufacturer standards, mount properly with minimum installation issues, and provide years of reliable service. The DENSO difference:

- Premium cores and precise OE assembly benchmarks
- Designed to meet the grueling heat and electrical requirements
- Perfect mounting with no belt/pulley alignment issues
- Service professionals prefer DENSO's alternators for a trouble free solution
- OE-quality fit, appearance and durability
- Full compatibility with sensitive electronic systems
- Compact and lightweight design

MAHLE



MAHLE Electric Drives alternators act as generators in passenger cars, commercial vehicles, construction and agricultural machinery of many large manufacturers. The service life and scope of the electrical system is increasing in practically every brand. At the same time, the space in the engine compartment is being reduced. Therefore, MAHLE Electric Drives has developed extremely robust, powerful, and compact products. With a wide range of products, the right variant is available for every application—and for special cases, our experienced engineers are happy to work as development partners. Our customers can rely on them as well as on our ISO 9001-certified processes and products.

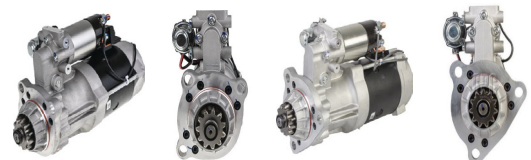
STARTER MOTOR



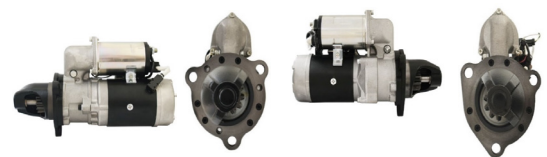
Designed to start heavy duty and off-road vehicles in all conditions and environments, Delco Remy starters are engineered to perfection. Available proprietary features also protect the starter from system problems including over cranking, low battery capacity, voltage spikes, high-starting circuit resistance, or operator misuse.

OEM's count on Delco Remy to deliver premium quality and innovative solutions for the latest vehicle designs. In the aftermarket, dealers, warehouse distributors and fleets around the world trust our starters to deliver superior cranking power and durability.

- Complete coverage: A full portfolio for all truck classes, buses, off-highway vehicles and locomotives.
- Reliable: Units available with Integrated Over Crank Protection (IOCP), a built-in circuit breaker that protects the starter from thermal damage.
- Electrical soft-start: Consistently and accurately engages the pinion with the ring gear providing increased reliability.
- Durable: Units available with patented Internal Magnetic Switch Solenoid (IMSS) that reduces corrosion and vibration issues while extending life.



The Prestolite and Leece-Neville product line includes high-output gear reduction starter motors for agriculture, concrete, construction, forestry, mining, and on- and off-highway equipment and trucks; municipal, school and city buses; motor coaches, and other uses.



Nikko satisfies the original-equipment requirements of leading industries, such as those of motor vehicles, construction and industrial vehicles, with its products. In addition to the above items, these include electric products. We are constantly pursuing advanced technology and higher product quality, together with a better servicing system for our customers, to meet all their needs.



The original **DENSO** gear-reduction starter is an industry benchmark, so rugged and powerful that it is often adapted for racing use. Our starters are subjected to a rigorous test and replacement routine that produces the lowest return rates in the aftermarket. DENSO starters are designed to provide maximum cranking torque under all environmental conditions. The DENSO difference:

- High-voltage tested armature and field coils to ensure reliable performance
- Premium copper terminals to ensure a clean source of electrical current
- All-new bearings, brushes, and seals
- Maximum cranking torque under all conditions
- Class leaders in size and weight
- Environmentally designed to start in cold and hot weather conditions



MAHLE

Starter motors from **MAHLE Electric Drives** are perfect for petrol and diesel engines in passenger cars, commercial vehicles, construction and agricultural machinery, ships, and stationary generators. Little wonder, as we have developed them for well-known global engine manufacturers. We meet their increasing requirements with ever more efficient, smaller, and lighter reduction gear starter motors that replace our previous direct ones. Thanks to our ISO 9001-certified processes, our customers can rely on MAHLE Electric Drives products for any application—even under the toughest conditions.

HVAC



 **SANDEN**

Sanden originally developed its first electric compressor in the mid-1990's for use on many pure electric driven vehicles. The original electric compressor design featured a semi-hermetic scroll compressor that was capable of cooling and acting as a heat pump. The original design is no longer available and has been phased out due to the lack of acceptance of most pure electric vehicles. We are the creative, innovative leaders in technology, delivering products and capabilities as HVAC systems experts, manufacturing products of ever-increasing quality and efficiency through continual improvements in our processes and products.



 **DENSO**

At **DENSO**, we bring together everything we know as an air conditioning systems manufacturer to bring you the highest quality line of factory-new compressors available. DENSO compressors are manufactured and tested to the strictest OE standards for unparalleled performance because we know drivers and their passengers expect a comfortable cabin environment on every journey, whatever the weather.

Replacement Parts for HVAC

When it comes to affordable, high quality aftermarket compressors, nothing keeps its cool like **OEX**. A sought after alternative to OE components in leading commercial and passenger vehicles, OEX is the cool change of uncompromised value.





Receiver Drier Quick Connect

OEX-AC driers are designed to store and dry AC Refrigerant. Inside the drier a desiccant absorbs the moisture from the Refrigerant.



Adaptor

Converts standard R12 1/4 inch flare to R134a 1/2 inch Acme thread

Red Dot has seen and done all that the mobile HVAC market has to offer, placing us at the forefront of innovation to set the mobile HVAC industry standard.



Rotary (Variabel) Thermostat Pull for cold variable temp.

- Mounting hole spacing 2 15/16"
- Capillary Length: 30"
- Temp. Range: 34°- 54°F
- Clutch Cycle Range: 5°F



Fixed Thermostat

- Mounting hole spacing: 2 1/4"
- Capillary Length: 24"
- Type: Fixed (side mount)
- Temp. Range: 31°- 39°F
- Clutch Cycle Range: 8°F

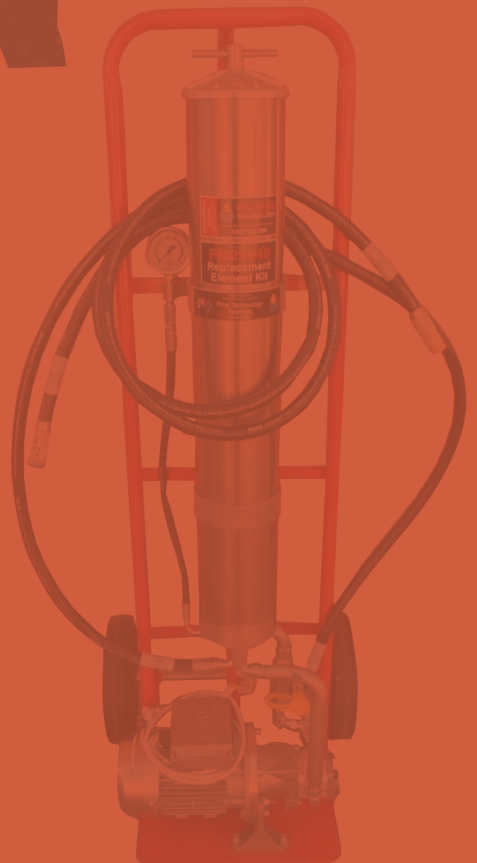
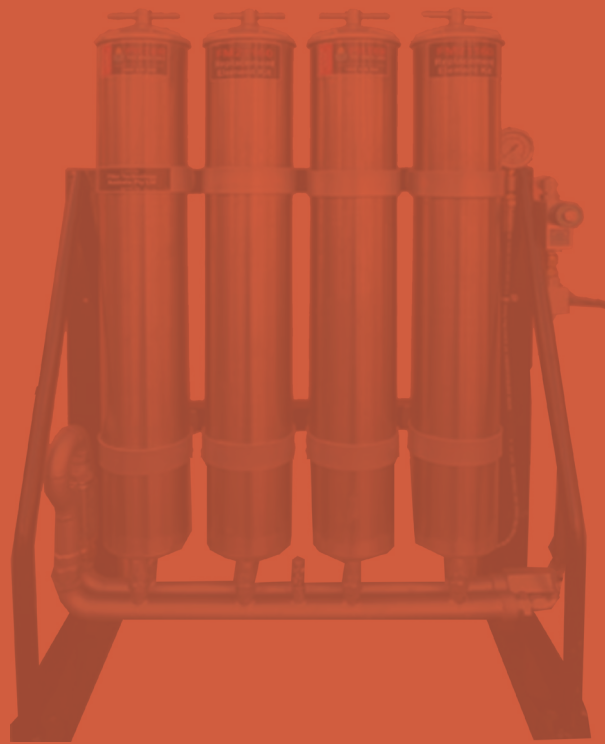
Blower

SPAL serve a wide range of automotive industry sector by supplying the world leading OEMs, high quality HVAC, engine (oil and water) cooling equipment and mobile refrigeration.



 **SPAL**
AUTOMOTIVE

FILTRATION TECHNOLOGY



Filter Technology Australia produces a range of filtration products.

Filtering contaminants from fuel, industrial oils cooking oil and a range of solvents and other liquids. Filters can be fitted to vehicles, installed as fixed installations or supplied as mobile units. Our Filtration Systems are designed and configured to suit the application and needs of the end user.

FTA products deliver high performance, with low physical space requirements. Improvements in filtration through the introduction of FTA products have seen particulate reductions of up to 90% in fuel systems and up to 70% in oil systems in one pass. This represents a massive improvement in cleanliness with corresponding improvements in equipment performance.

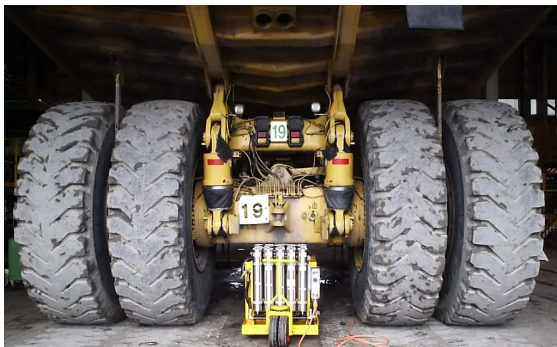
Filter Technology products have been rigorously tested in many industries, on many different types of vehicles and equipment. Our customers are consistently impressed with the performance of Filter Technology Australia's products and high level of service, which includes professional advice on which system will best suit your requirements and ongoing support both on and off site.

Sectors include:

- Mining
- Quarrying and Construction
- Transport
- Industry and Manufacturing
- Agricultural
- Marine
- Hospitality
- OEM Specific Applications



QMS Certification Services



Heavy Duty Mobile Filtration Buggy

FTA Buggies are typically used for small hydraulic reservoirs on gearboxes, final drives, blow and injection moulder or wherever hydraulic oils are used. Their kidney loop system and quick release couplings allow easy movement between machines in industrial sites allowing machinery to be filtered while the machine is still in service. They can also be used to filter new oil from the drum into the machine.

Ultra Light Weight Mobile Filtration Buggy

FTA Buggies are typically used for small hydraulic reservoirs on gearboxes, final drives, blow and injection moulder or wherever hydraulic oils are used. Their kidney loop system and quick release couplings allow easy movement between machines in industrial sites allowing machinery to be filtered while the machine is still in service. They can also be used to filter new oil from the drum into the machine.



Fixed Hydraulic Filtration Unit

Designed to suit large hydraulic systems on face shovels and excavators

Filter Element

Industrial Filter Element



Products include:

Engine fuel filters, Engine oil filters, Industrial fuel & oil filters, Bulk filtration systems, Fixed filtration systems, Mobile filtration systems, Breathers, Cooking oil filters, Custom designed and built task specific items, FTA's CARETAKER range of Oil Dispensing Benches, FTA's CARETAKER range of Drum Dispensing Units, Lightweight Backpack Filtration, General manufacturing of hydrocarbon dispensing

FLEET AUTOMATION SYSTEM





RCT is the world's trusted technology partner, offering an array of truly interoperable machine solutions to revolutionise the mining and industrial sectors, reducing operational costs and improving bottom-line profit. We advance businesses by integrating our state-of-the-art Automation, Information, Data and Protection systems designed for any machine make or model.

FATIGUE WARNING KITS

The Muirhead® Fatigue Warning Kit is combating one of the major safety concerns for operators controlling large mining equipment. It assists with managing mining operators' fatigue levels by alerting the operator if their levels are high. This unique product has been designed to manage the operator's level of awareness by requesting a response to alerts generated.



LUBRICATION CONTROLLER

The Muirhead® Lubrication Controllers are suitable for all mobile equipment. The system has been designed to be user friendly with inbuilt diagnostics.

The lubrication controller is designed for flexibility and is used to automate the grease injection system on a machine. The programmable lubrication (lube) controller is capable of operating in many different modes to suit multiple lubrication systems available on the market. It incorporates overload protection, lubrication counters, automatic lubrication pause when using an optional pressure switch and full diagnostics.



ENGINE PROTECTION SYSTEMS LIGHT DUTY (EPS)

The Muirhead® Light Vehicle Engine Warning systems offer engine protection for your light commercial, off road mobile equipment by monitoring engine oil pressure, coolant temperature and coolant levels.



IDLE TIMERS

The Muirhead® Idle Timers are designed to moderate extreme operating temperatures before final shutdown occurs on mobile equipment. The idle timers regulate temperature in the engine and turbo components by idling the engine for a set time period before final shutdown occurs. The idle timers are a cost effective means of protecting diesel engines and turbo components from excessive wear due to immediate shutdown without an idle period.



INCLINE SHUTDOWN SYSTEMS

When operating on inclines, operators need to know when they are approaching a dangerous incline angle that could cause a machine roll over. The Muirhead® Incline Shutdown Controller has been designed to warn the operator when they are approaching dangerous inclines. An audible alert will notify the operator that he will need to reduce his operating incline if he continues to operate. If operation continues at the incline the machine will shut down. The delay is adjustable and the controller has an override function to allow restart when shut down has occurred. The override switch should only be operated to restart the machine and move it to a safe incline angle.



SPEED LIMITERS

The Muirhead® Speed Limiter is designed to maintain control of a vehicle's maximum speed by interfacing into the throttle system. The Muirhead® Speed Limiter range has systems suitable for Fly by wire, Cable throttle and even CAN controlled throttle systems.

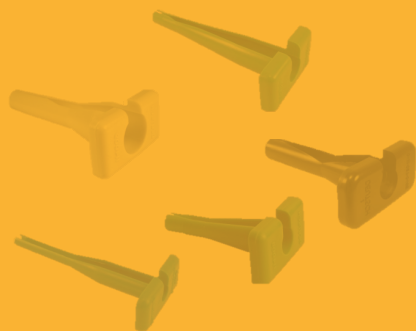


AUXILLIARY FIRE CONTROLLERS

The Muirhead® Fire Status Panel is designed and built to the latest Australian Standards AS5062. The panel will monitor the status of the fire bottle from two pressure switch inputs. The low pressure input warns the operator when the bottle pressure is below the desired KPa level. The shutdown pressure switch will trigger when the bottle has been discharged. It also has a key switch for override and pushbutton for extended shutdown when activated.



TOOLS AND EQUIPMENTS





Deutsch Tools

TE Connectivity offers several types of tools to assist with hand and production wire crimping. The tools are specific to the solid contacts or the stamped & formed contacts. To ensure a proper crimp and achieve the highest performance specifications, DEUTSCH contacts must be crimped with DEUTSCH tooling. Proper parts, procedures, and tooling must be used.



Hella - Crimping Tools

Hella Crimping Tools Designed for crimping all popular insulated terminals. Features adjustable ratchet mechanism and spring release to ensure the perfect crimp every time and Spring return hand grips. Cuts cable. Strips insulation from cable measuring 2.5-6mm in diameter (0.75 - 6mm²). Cuts bolts with metric threads M2.6, M3, M3.5, M4, M5.



OEX-Crimping Tools

The crimping tools from OEX designed for crimping insulated terminal, a heavy-duty ratchet tool with long handles for better leverage when crimping. Suitable for red, blue, and yellow insulated terminals.



Fluke Digital Multimeters

The Fluke Digital Multimeters produce with high quality. The Fluke Digital Multimeter give an accurate measurements, consistent, reliable performance, attention to safety, and the strongest warranty available. Fluke Digital Multimeter is tested to the extreme test like a drop test, shock test, humidity test and guaranteed.

The Fluke Digital Clamp Meter

The Fluke clamp meters are designed for noise-free, reliable readings. With advanced performance, the current clamp line is designed to be simple-to-use, grab and go tools, perfect for tight, compact spaces or getting readings from panels that are out of reach or getting around extra-large conductors.



Durst - Battery Load Charger

Durst Industries (Aust.) Pty Ltd is well known in the industry for producing high quality, high-tech diagnostic, electrical testing and charging equipment. Durst supply Australia-wide and exports to over 20 countries. Durst has a long history of providing equipment designed for performance, durability and economy, as evidenced by the current product range, one of a product is Battery Load Tester with high performance and accurate.



Projecta - Battery Load Tester

Projecta name is built on a heritage which began in 1989 and today Projecta is recognised as Australasia's market leader in high quality battery maintenance and battery power products. Battery Load Tester from projecta is a simple, fast and accurate test of battery condition and capacity.



Projecta - Battery Post & Terminal Cleaner

- Removes corrosion to ensure clean terminal connection
- Suits all size posts and terminals
- Dual function
- Stainless brushes



Weller - Soldering Technology

Weller as a global market leader in manual soldering technology, Weller supply everything that you need to achieve success at your workbench. For soldering, desoldering, extracting and filtering, and for reliable handling. Highly productive complete solutions – engineered in Germany.



Bosch Professional Power Tools - from professionals for professionals. The professional blue power tools from Bosch are engineered for excellence. The professional blue power tools from Bosch for trade and industry meet the highest standards in speed, precision and robustness to provide great work results.





CPS Products, Inc. serves multiple industries with application-built, industry-specific innovations and advancements in technologies and products. The CPS product development team consists of engineers across all fields: electrical, mechanical, software and chemical.



CPS Pro-Set vacuum pumps are offered in a variety of single and dual stage models with numerous voltage, horsepower and free air displacement (CFM) options, while contained in either standard size or compact size housings to suit your work environment. All Pro-Set vacuum pumps boast the same high quality, high value features engineered into all of our products, providing years of reliable performance while servicing air conditioning and refrigeration equipment.



Mastercool[®]
"World Class Quality"



Mastercool - Crimping Tool

Mastercool's patented "Hydra - Krimp" makes crimping barbed and beaded fittings as easy as 1 - 2 - 3! The lightweight hand-held hydraulic press is very portable and ideal for shop and field applications. The kit comes with a complete set of dies covering hose sizes #6, #8, #10, #12 and reduced barrier #6, #8, #10 and #12. The dies snap quickly into the press fixture requiring no pins or screws. (patent# 6,324,884) Kit comes in a custom molded case.



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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www.motionindonesia.com