radicon

with you at every turn



Product Brochure

Revised Group Brochure perma and mitsi.indd 1 04/03/2015 14:25:04



SERVICE AND REPAIR

Radicon service engineers are ready and waiting 24 hours a day, 365 days a year, to provide the following services anytime, anywhere in the world.

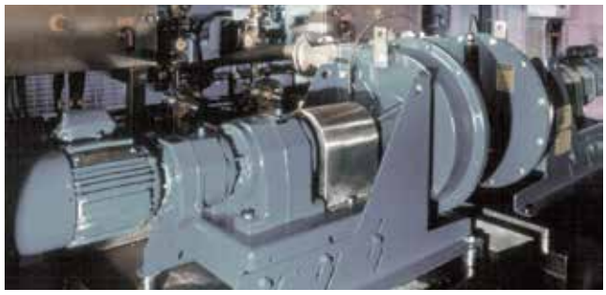
- On-Site Services
- Repairs, Overhauls & Upgrades
- Drop in Replacement Gearboxes
- Asset Management

Our dedicated service and repair engineers have the necessary expertise and experience to provide simple repair services through to complex overhaul projects in any industry on any brand of gearbox.

By working in partnership with you the customer our aim is to not only repair but to identify the root cause of your production problems, and work on upgrading and improving your process eliminating downtime and lowering your costs.

24/7 Call Out: 07808 093 048













SERIES M IN LINE HELICAL GEARED MOTORS AND REDUCERS

Proven design geared motors with dry connection between motor and gearbox for easy removal of the motor.

Unit Sizes:
01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 13, 14 and 16
Input Power:
Up to 160 kW *
Output Torque:
Up to 20,000 Nm
Gear Ratios:
3.6:1 to 58:1 in two stage, up to 16200:1 in combined form
Motor Sizes:
IEC Frames from 63 to 315

SERIES K RIGHT ANGLE HELICAL BEVEL HELICAL GEARED MOTORS AND REDUCERS

Key dimensions throughout the range are interchangeable with many manufacturers allowing easy installation into existing applications.

Unit Sizes:
03, 04, 05, 06, 07, 08, 09, 10, 12, 15 and 16
Input Power:
Up to 160 kW *
Output Torque:
Up to 33,000 Nm
Gear Ratios:
8.0:1 to 160:1 in three stage, up to 35000:1 in combined form
Motor Sizes:
IEC Frames from 63 to 315

SERIES C RIGHT ANGLE HELICAL WORM GEARED MOTORS AND REDUCERS

Available with Drywell System for maximum protection against oil contamination on vertical shaft mixing and aerating applications.

Unit Sizes:
03, 04, 05, 06, 07, 08, 09, and 10
Input Power:
Up to 45 kW *
Output Torque:
Up to 10,000 Nm
Gear Ratios:
8.0:1 to 250:1 in two stage, up to 60000:1 in combined form
Motor Sizes:
IEC Frames from 63 to 225

SERIES F PARALLEL SHAFT MOUNT HELICAL GEARED MOTORS AND REDUCERS

Available with market leader KIBO tapered bushing system to allow trouble free removal of hollow shaft and gearboxes.

Unit Sizes:
02, 03, 04, 05, 06, 07, 08, 09, 10, 11 and 12
Input Power:
Up to 110 kW *
Output Torque:
Up to 16,500 Nm
Gear Ratios:
5.0:1 to 100:1 in 2 stage, up to 5600:1 in combined form
Hollow shaft:
25 mm to 100 mm
Motor Sizes:
IEC Frames from 63 to 225

* Now available with compact motor option up to 7.5 kW, 4 pole execution.

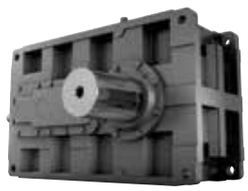
THROUGH LIFE COSTS

Whether you use drive and linear motion systems in your plant production line, or are a machine builder wishing to offer your customer the most reliable machine possible, we recognise the importance of minimising through-life cost.

A combination of rugged reliability, providing maximum life span and user friendly design, enabling easy maintenance, ensures that the products we offer are easy to live with, giving you peace of mind and allowing you to focus on the important areas of your day to day business.













SERIES G HELICAL PARALLEL SHAFT AND BEVEL HELICAL RIGHT ANGLE DRIVE GEAR UNITS

Incorporating 3 stage high integrity sealing, split gear case design for easy maintenance.

Unit Sizes:
14, 15, 16, 17, 18, 19, 21, 22

Input Power:
Up to 1,500 kW
Output Torque:
Up to 162,000 Nm
Gear Ratios:
6.3:1 to 315:1 in multistage, up to 70,000:1 in combined form
Output Shaft:
Up to 240mm diameter
Motor Sizes:
IEC Frames from 200 to 315

SERIES J HELICAL SHAFT MOUNT SPEED REDUCERS

Available with unique KIBO® tapered bushing system to allow trouble free removal of hollow shaft gearboxes.

Unit Sizes:
11/12, 21/22, 31/32, 51/52, 71/72, 100, 110, 125, 140, 160, 190
Input Power:
Up to 618 kW
Output Torque:
Up to 57,800 Nm
Gear Ratios:
5:1 to 20:1
Hollow shaft:
35 to 190mm
Motor Sizes:
IEC Frames B3 from 90 to 200

SERIES A WORM GEARBOXES

The Series A range of units can be mounted in the worm under, worm over and output shaft vertical mounting positions and provide a choice of shaft arrangements.

Unit Sizes:
410, 510, 610, 730, 860, 1002, 1252, 1602, 2002, 10, 12, 14*

Input Power:
Up to 718 kW
Output Torque:
Up to 104,000 Nm
Gear Ratios:
from 5:1 to 70:1 single reduction and 4,900:1 in double reduction format
Output Shaft:
190mm

*Larger and special units available upon request.

SERIES BD SCREWJACKS

Supplied as individual products or engineered into complete linear motion packages, suitable for numerous applications including linear motion, positioning, pressing and load adjustment.

Unit Sizes:
27, 40, 58, 66, 86, 100, 125, 200

Load Capacity:
1 Kg to 100 tonnes
Linear Speed:
up to 5m/min
Materials:
Cast iron bodies and carbon steel screws are standard.

Stainless steel construction available as special order.

CUSTOMISED & SYSTEM SOLUTIONS

We recognise that a standard off the shelf product is not always the best solution for our customers needs. The design principles which we incorporate into our product range enable a high degree of product flexibility, enabling many alternative solutions to be offered.

Our experienced sales and engineering teams are able to provide both complete drive and linear motion system packages as well as a full customisation service, providing a specific product modification to meet your exact needs.













ROLOID GEAR PUMPS

Suitable for pumping a wide variety of liquids which have a lubricating property, in applications such as Engines, Compressors, Gearboxes, Rolling Mills, Machine Tools, Process Plant, Pumping Sets and Turbines. HST version specifically designed for screw compressor applications.

Unit Sizes:
9, 7, 6, 5, 4, 3, 2.5, 2, 1.5
Flow Rate:
up to 2,500 litres/min

SERIES X COUPLINGS

A comprehensive range of shaft couplings, incorporating gear type, pin and bush type, Nylicon and mechanical torque limiting type, allowing both parallel offset and angular misalignment, virtually maintenance free, offering excellent durability and machinery protection.

Unit Sizes:
Accommodating shaft size up to 540mm dia.
Load Capacity:
Up to 1,100,000 Nm

** Not available Atex certified

SERIES E - INDUSTRIAL REDUCER

The latest range of industrial reducer, giving optimum weight to torque ratio's providing the most cost effective solution on the market.

Available as version N, foot mounted and version S multi-mount case.

Unit Sizes:
11,13,14,15,16,17,18,19,20,21, 22,23,24,25,26
Input Power:
Up to 4,825 kW
Output Torque:
Up to 130,000 Nm
Gear Ratios:
1.25:1 to 550:1 in multi-stage
Output Shaft:
Up to 220mm diameter

PLANETARY

The Series P range of planetary gear units are designed to meet the requirements of the most demanding applications in the medium and heavy duty sectors of the power transmission market.

Available in 10 sizes, this modular design allows for quick assembly to the customers chosen configurations. Available in line and right angle with a choice of foot mounted or flange mounted case designs.

Unit Sizes:
01,02,03,05,08,12,16,25,40,65
Input Power:
Up to 90 kW
Output Torque:
Up to 65,000 Nm
Gear Ratios:
3.6:1 to 2,500:1 in multi-stage
Output Options:
Available as solid keyed, solid splined, hollow splined and shrink disc
Motor Sizes:
IEC Frames up to 280

APPLICATION EXPERTISE AT YOUR SERVICE

An unrivalled depth of customer application expertise stretching back over 150 years enables us to provide the optimum solution for your drive requirements. Our team of Application Engineers are available to review your needs, understand your problems and recommend the best possible drive or linear system solution to maximise the operation of your equipment and minimise the through life cost.

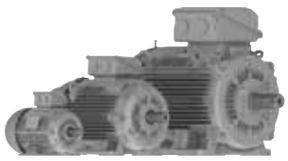
Atex - All our products can be supplied Atex certified on normal lead times **





PARTNER BRANDS









MITSUBISHI

MITSUBISHI ELECTRIC
Changes for the Better

As a preferred supply partner with Mitsubishi, Radicon now supply variable speed drives, PLC's, HMI's and servo motors to complete the power transmission package.

Radicon now offer end to end solutions to ensure your process runs efficiently.

Servo Motors:
Output: 0.5 to 55 kW
Speeds: 1,000 to 3,000 rpm

Variable speed drives:
0.12kW – 500 kW

WEG ELECTRIC MOTORS

As a preferred supply partner with WEG, Radicon now supply electric motors to complete the power transmission package. The range covers standard IEC motors from stock to medium and high voltage bespoke engineered motors.

WEG's specialism in custom built medium and high voltage motors for drop in replacements are an ideal fit for the custom and drop in replacement range of gearboxes Radicon supply.

Unit Frame Sizes:
63 – 355*

Unit Powers:
0.12kW – 500 kW

Speeds:
2 Pole - 3,000 rpm
4 pole - 1,500 rpm
6 pole - 1,000 rpm
8 pole - 750 rpm

*Medium/High voltage available on request.

CONDITION MONITORING

PCMSENG

In conjunction with Radicon Service & Repair Partner PCMS, a full range of condition monitoring services are now available to complement the product range.

Services include:

Gearbox health inspections
Remote data analysis
Oil analysis
Vibration analysis & balancing
Alignment checks
Infrared thermography
Ultrasonic testing
Stress wave analysis
Preventative maintenance packages

PERMA

perma®

We can now offer the full range of single and multipoint lubrication systems.

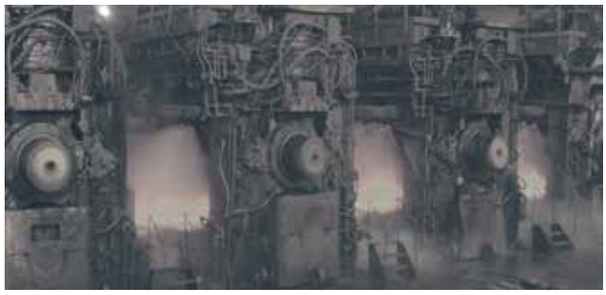
Automatic lubrication systems from Perma reduce bearing wear by providing a continuous supply of fresh lubricant. This prevents over-lubrication, lubricant starvation and contamination.

Typical applications:

Conveyors
Fans
Pumps
Motors

Unit sizes:
Available in various sizes and configurations to meet the requirements of the application. Each installation can provide permanent lubrication for up to 24 months





DROP IN REPLACEMENTS

Radicon now has the capability to design, engineer and supply special gearboxes to replace any brand of gearbox whether current or obsolete with the minimum amount of modification and production downtime.

Radicon is able to offer drop in gearboxes for any brand of gearbox either current or obsolete, including, but not limited to the following brands:

David Brown
Falk
Hansen
SEW
Siemens Flender
Renold
Santasalo
TGW

ENTRY ROLL GEARBOX



Radicon recently supplied a drop in replacement to a major UK End User for the manufacture of steel. The requirement was for an existing gearbox to be replaced without any modifications to the surrounding mounting base and equipment.

Single helical gearbox with a ratio of 1/1
A single extension solid input shaft and double output shafts
Transmits 17kW at a speed of 263 RPM

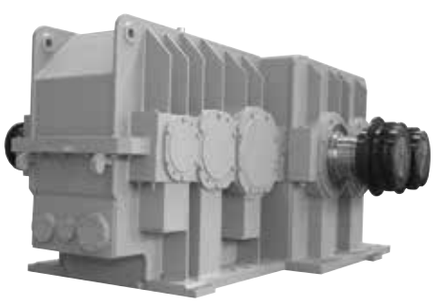
To ensure suitability to withstand the duty the gearbox offers a service factor of 8.24 for strength in accordance with AGMA 2001-B88 selection criteria.

CUSTOM MANUFACTURED GEARBOXES

Radicon offer a high quality range of custom engineered gearboxes into a wide range of industries and applications. Major investment in the business coupled with our design, engineering experience and industry expertise ensures our custom engineered gearboxes reach the highest standards of quality, reliability and durability.

Radicon's dedicated team of application engineers work in partnership with each customer to ensure our products are the optimal solution for each individual customer, while still delivering high quality and reliable products that the Radicon business is renowned for.

INDUSTRIES & PRODUCT RANGE



Power Generation
- Cooling Tower Drives
- Coal Pulveriser Drives
- Air Preheater Drives

Cement
- Mill Drives
- Retrofit Replacements

Steel
- Coiler/Uncoiler & Pay-Off Reel Gearboxes
- Rolling Mill Drives
- Speed Changing Gearboxes

Material Handling
- Ladle Crane Hoist Gearboxes
- Travel & Cross Travel Drives
- Heavy Duty Conveyor Drives

Rubber & Plastics
- Banbury Mixer Drives
- Calendar Drives

Sugar
- Planetary Gearboxes
- Sugar Mill Drives
- Dual Tandem Mill Gearboxes

Revised Group Brochure perma and mitsi.indd 7 04/03/2015 14:27:12

Radicon believes in engineering quality relationships with our customers that strengthen what we can achieve together. Our business and the people within our business are committed to building long lasting partnerships that are as reliable as our products and as smooth as our service.

Radicon and sister company Benzlers are now part of Elecon Engineering, Asia's largest and fastest growing gear manufacturer. This partnership means that we can offer our customers an enhanced range of standard and bespoke engineering solutions including drop in replacements, all supplied with the product quality and engineering expertise demanded from and delivered by the Radicon business.

Radicon - with you at every turn

Benzlers

Denmark +45 36 34 03 00
Finland +358 9 340 1716
Germany +49 800350 4000
Italy +39 02 824 3511
Sweden +46 42 186800
The Netherlands +31 77 324 59 00
www.benzlers.com

Radicon

Thailand +66 3845 9044
United Kingdom +44 1484 465 800
USA +1 847 593 9910
www.radicon.com