



MARINE | INDUSTRIAL | OFF-HIGHWAY

INDUSTRIAL PRODUCT OVERVIEW

Comprehensive driveline
portfolio and bespoke
service capabilities

EXPERTS IN INDUSTRIAL TRANSMISSIONS AND DRIVELINE SYSTEMS

Since MIT was established in 1974, we've grown to become a centre of excellence in driveline systems. We provide customers with full product lifecycle support from system design, supply and commissioning to maintenance, repair, spares and overhaul or replacement.

From our bases in southern and northern England, we have comprehensive coverage across the UK and Ireland, along with established global mobile support services. We have invested in a highly trained and dedicated technical engineering team and a significant inventory of new and

refurbished transmissions, driveline systems and spare parts from world class brands.

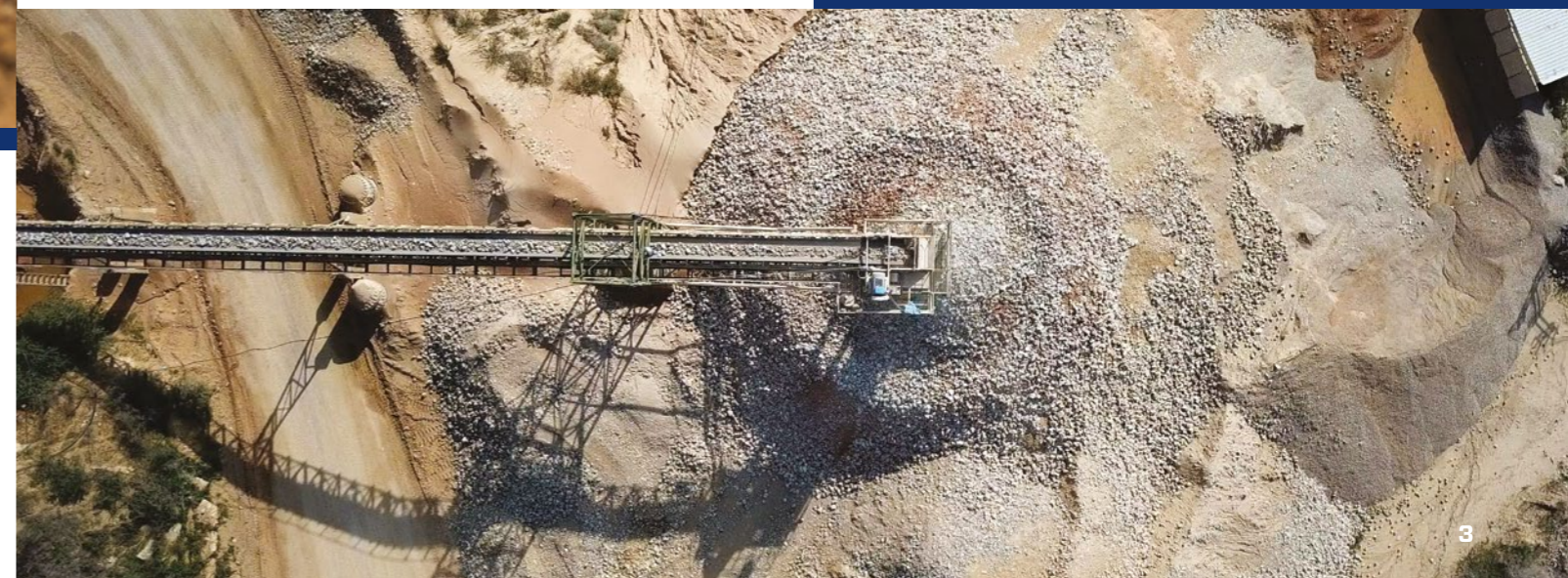
Our strategy is to support our customers' multiple applications with custom designed driveline systems and ensure whole life care.



WHEN HEAVY DUTY POWER CALLS FOR HEAVY DUTY COMPONENTS

From the simplest clutch installation to the more complicated hybrid driveline solution, we have a vast portfolio of driveline components and spare parts for heavy duty machinery, including:

- Fluid Couplings
- Pump Drives
- Hydraulically Actuated Wet Clutches And PTOs
- Mechanically Actuated Clutches And PTOs
- Hydraulic And Pneumatic Actuated Dry Clutches and PTOs
- Pneumatically Actuated Clutches
- Torque Converters
- Industrial Hybrid/Electric Drive System
- Electric Machine
- Anti-Vibration Solutions
- Couplings
- Brakes
- Composite Parts and Bearings.



POWERING YOUR BUSINESS

We are the power behind the machinery that drives your business forward. Our portfolio supports a wide array of industries.



QUARRY AND MINING



CRUSHING AND SCREENING



MATERIAL HANDLING



MANUFACTURING



OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION RECYCLING



WATER TREATMENTS

MORE THAN JUST COMPONENT PARTS

Full design, supply, service and repair capabilities



WHY COME TO MIT?

- 24/7 Emergency response
- Repair and diagnostics
- Fully toolled mobile service engineers
- Immediate response times
- Genuine OEM spares, available on next day delivery
- Diagnostics, repair and overhauls
- Retrofit solutions
- Machinery refurb
- Installation and commissioning
- 12 months warranty as standard
- Survey and condition reporting
- Vibration analysis
- Service exchange program
- Routine maintenance contracts
- Close manufacturer relationships

ENHANCED DRIVELINE SYSTEMS BUILT TO YOUR SPECIFICATION

We have a specialised in-house design and applications team who provide a flexible and bespoke solution to your requirements. We offer a fully consultative service, from identifying and supplying simple modifications and designing retrofit solutions to fully customised system engineering.

KEEPING YOUR MACHINERY OPERATIONAL

Service, diagnostics, repair and emergency breakdown cover with 24/7 support!

We support the entire lifecycle of your static heavy-duty machinery and understand the need to keep them operational.

We can provide service, repair, diagnostics, installation, and commissioning to all equipment models within the conveyor and shaft drive array with an expertly trained service team. What's more, we have the skillset to offer industry-leading engineering capabilities to provide reconditioned units and complete redesign and retrofit solutions.

Our service engineers are equipped to support our customers on-site or at our northern or southern service centres, ensuring our customers can remain operational. All our repairs, maintenance and overhauls are carried out using genuine OEM components to ensure the extended lifecycle of your machinery.

MIT has you covered whether you need emergency breakdown assistance, a reliable service provision, a third party installation and commission service or a complete system overhaul!

24/7 SUPPORT

We're here to help, 24 hours a day, 7 days a week.

NEXT DAY DELIVERY ON STOCKED SPARE PARTS

We stock a vast array of spare parts, available for next day delivery where possible. No order is too big or small. We work with you to provide you with what you need, from the smallest O-ring to the supply of a full spare parts kit, individually tailored to your application and specification.

Whatever your type of machinery, if your spare part is required for stock, routine maintenance or emergency breakdown repair, we're the Driveline Experts to call.

- Seal Kits
- O-rings
- Gaskets
- Clutch Plates
- Bearing Kits
- Transmission/Torque Spares
- Gas Turbines
- Converter Spares
- Transmission Oils
- PTO Spares
- Fluid Coupling Spares.



WORLD CLASS BRANDS



For the last century, **Twin Disc** have been designing, engineering and manufacturing robust industrial products for heavy-duty applications to deliver results in the most extreme conditions. Leading the way in powershift transmission technology, their mission is to make machines and vehicles more productive, more durable, more operator friendly and more cost-effective.



Established in 1973, **Technodrive** design, develop, assemble and test power transmissions for industrial applications operating at varying power outputs. Joining forces with the industrial heavy-weight Twin Disc in 1999, Technodrive operate as part of the Twin Disc group of companies.



Innovative to the core, **Transfluid** have been developing and manufacturing transmissions and components since 1957, satisfying a fast-changing market's needs for industrial applications. With talent and flair at the heart of the company, Transfluid are at the forefront of standard diesel transmission technology, whilst looking to the future with their electric/hybrid driveline solutions.



Founded in 1979, **Rubber Design** have grown to become an international leading specialist in solutions for noise, shock and anti-vibration problems for a wide range of industrial applications. With on site design, engineering, testing and production facilities, Rubber Design offer a wide range of services from the latest standard products to bespoke tailor-made solutions.



Since 1920, **Quincy** have been designing and manufacturing reciprocating and rotary screw air compressors, engineered for optimum efficiency and maximum productivity. Suitable for a wide range of industrial applications, their cost-effective innovative solutions have set quality standards, raising the bar for dependability, durability and efficiency.



Reich Couplings, a leader in power transmission engineering, has been manufacturing an extensive range of couplings since 1946 with a D2C (design to customer) ethos, which offers industrial applications bespoke solutions to meet their individual coupling needs.

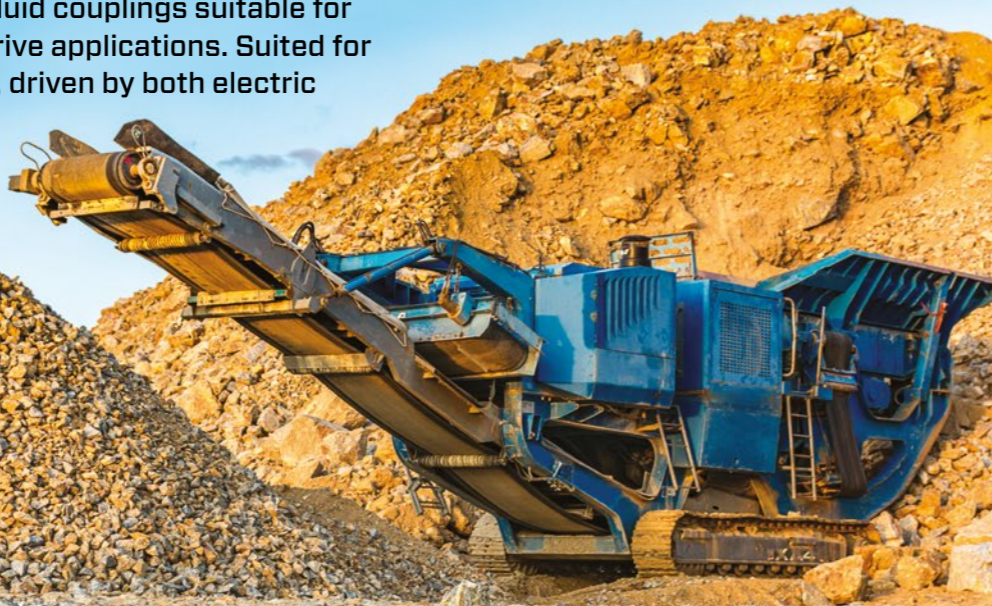


Since introducing the world to AC drives back in 1968, **Danfoss Drives** has continued to lead the charge when bringing variable speed control to electric motors. Drawing on decades of passion and experience within a wide range of industries so they can deliver drives that work with any motor or system.

YOUR COMPLETE DRIVELINE SOLUTIONS PROVIDER

FLUID COUPLINGS VARIABLE FILL

We offer a selection of variable fill fluid couplings suitable for start-up drive and variable speed drive applications. Suited for medium and high power machinery, driven by both electric motors and internal combustion engines, with powers ranging up to 4000kW as start-up drives and 4500kW as variable speed drives.



QUARRY AND MINING



CRUSHING AND SCREENING



MATERIAL HANDLING



MANUFACTURING



OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION



WATER TREATMENTS

KEY FEATURES

- Allows a disconnect of the prime mover from the load
- Motor start-up at no load
- Smooth start-up even possible under nominal motor current
- Avoids over exertion of engines during the acceleration of large masses
- Shock and overload protection
- Absorption of vibrations
- High radial load capacity (KPTE)
- No belt slip
- Remote control by electric valve
- Load positioning
- Inexpensive maintenance due to external mounting of main accessories, oil filter, feeding pump and control valve
- Longer life due to the elimination of friction linings
- Accurate variable speed performance
- Special hazardous area design available upon request.



TRANSFLUID
Industrial & marine

FLUID COUPLINGS CONSTANT FILL

We offer a selection of constant fill fluid couplings for medium to heavy-duty machinery, for both electric motors and internal combustion engines with power ranges operating up to 2500kW.



QUARRY AND MINING



CRUSHING AND SCREENING



MATERIAL HANDLING



MANUFACTURING



OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION

KEY FEATURES

- Starting stall torque below 50% of the electric motor nominal torque
- Starting torque limitation also below nominal torque
- Dynamically balanced
- Bearings are greased for life and protected by two double seals
- Viton rotating seals
- Couplings work with either oil or water
- Both brake disc or drum can be mounted upon request
- Suitable for driving machines with large power
- Prevents transmission of shock loads
- Improves load distribution on compounded drives
- Reduction of current absorptions during the starting phase
- Protection of the motor and the driven machine from jams and overloads
- Utilises asynchronous squirrel cage motors
- Higher duration and operation convenience of the whole drive train
- Torsional vibration absorption for internal combustion engines
- Load balancing in case of a double motor drive
- Cast iron and steel material with anti-corrosion treatment.
- Load balancing in case of a double motor drive
- Cast iron and steel material with anti-corrosion treatment.



TRANSFLUID
Industrial & marine

PUMP DRIVES

We supply pump drives in a wide variety of gear ratios, including speed increasing and speed reducing configuration for a range of industrial applications for machinery with a maximum power rating of 700kW. Available in free standing, engine mounted or direct coupled single pad or four pad models.



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WATER TREATMENTS



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RECYCLING MACHINERY AND POWER GENERATION RECYCLING

HYDRAULICALLY ACTUATED WET CLUTCHES AND PTOs

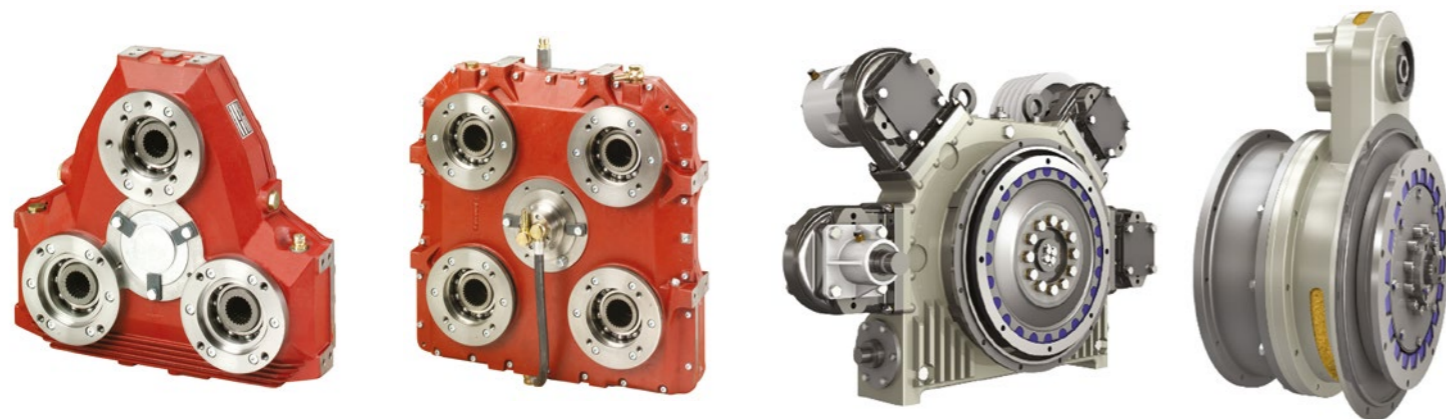
We offer a range of hydraulically actuated wet clutches and PTOs for a wide range of industrial applications and machinery with a maximum power rating of 1080kW, with an optional straddle bearing to select models.

KEY FEATURES

- Modular design options – flexible coupling, rubber block drive or clutch to match SAE flywheel dimensions
- Optional independent mounting
- SAE and DIN adaptor kits
- Cast iron housings and case hardened shafts
- Case hardened and ground spurs
- Ball bearings
- Output ratio opposite the direction of input ratio
- Gear ratios identical on all outputs
- Maximum input torque based on theoretically unlimited gear life and a minimum L10 bearing of life 10,000 hours.
- Units are self-contained with their own lubrication circuit
- High flexibility allowing up to 8 pump pads
- Torsional coupling for vibration dampening
- PTO kit for pulley and cardan shaft available.

KEY FEATURES

- Hydraulically actuated, suitable for in-line and side-load applications
- Advanced control system for smooth engagement
- Remote actuation via J1939 or switch input
- No pilot bearing
- High side-load capability
- Maximum power rating 923kW at 1800rpm
- Two towers with two pump pads, 298kW maximum capacity per tower, 410kW maximum capacity for both towers
- Available pump pads: SAE 'A', 'B', 'C', 'D' and E
- Optional straddle bearing
- Multiple available models.



TECHNO DRIVE
BY TWIN DISC

TRANSFLUID
industrial & marine



MECHANICALLY ACTUATED CLUTCHES AND PTOs

We offer a selection of heavy duty, reliable mechanical clutches and PTOs for a range of heavy duty basic actuation applications. They offer great design flexibility and ease of operation, with a maximum power rating of 1243kW.



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MATERIAL HANDLING



OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION

KEY FEATURES

- Suitable for:
 - industrial applications with internal combustion engines
 - machinery with a maximum power rating of 1243kW
- Standard flywheel housing dimensions from no.6 through to no. 00
- Clutch sizes range includes:
 - one plate 6.5" to 14"
 - two plate 11.5" to 18"
 - three plate 14" to 21"
- Optional sealed pilot ball or roller bearings
- Free standing models
- Engine mounted models
- Straddle bearing models.



HYDRAULIC AND PNEUMATIC ACTUATED DRY CLUTCHES AND PTOs

We offer a selection of hydraulic and pneumatic dry clutches and PTOs for a range of industrial applications, operating at a maximum power rating of 1460kW, with some models offering self-adjustment and remote engagement. Our units are both compact in design and engineered to withstand harsh environmental conditions.



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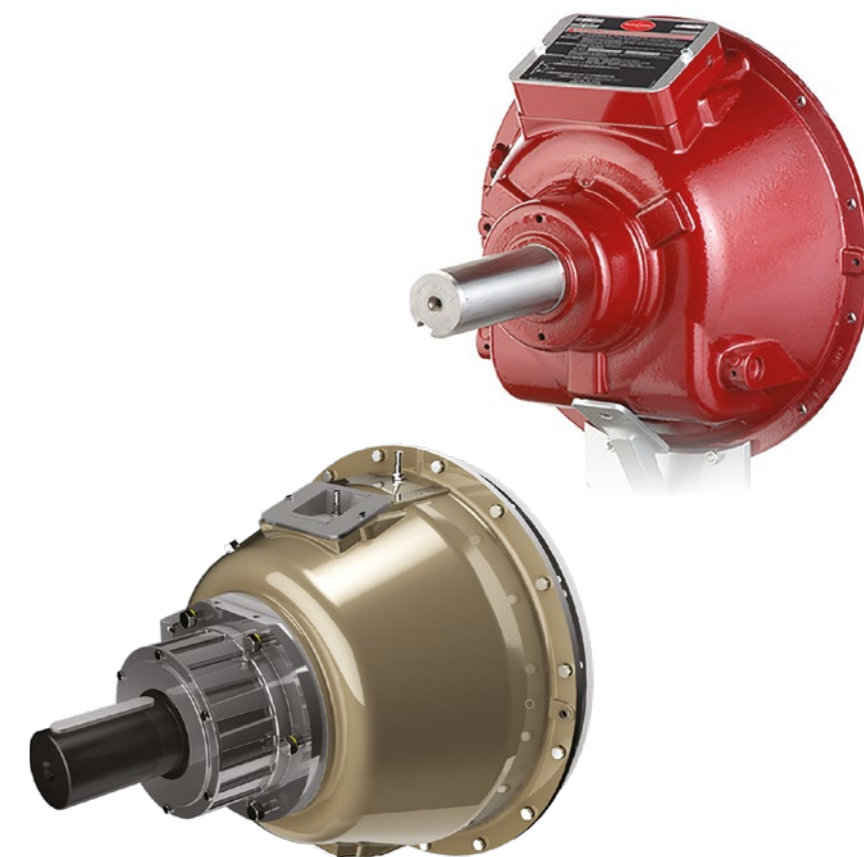
OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION

KEY FEATURES

- Easy installation and compact design
- Eliminates the engine flywheel pilot bearing on some models
- SAE standard interface
- Dust-proof for harsh environments
- Some models available with Kevlar friction discs for heavy duty and torsionally active applications
- Suitable for side-load and in-line applications
- Tapered roller main bearings
- Optional sintered iron and composite plates
- Standard ball bearing throw out collar
- Field conversion kits available
- Creates suitable application torque capacity.



PNEUMATICALLY ACTUATED CLUTCHES

Delivering the power your application requires, MIT offer a range of durable and reliable pneumatically actuated clutches for a wide range of heavy duty industrial applications. They come complete with a large array of standard sizes and components, along with compact design, allowing for easy installation. Suitable for machinery with a maximum power rating of up to 3788kW on select models.



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MATERIAL HANDLING



OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION RECYCLING



WATER TREATMENTS

KEY FEATURES

- Mechanical or pneumatic actuation
- Compact external dimensions allowing for ease of installation
- Enlarged bore capacities on hubs allow for shafts with large diameters
- Compact design allows for two or three plate clutches to be used in the enveloper where a single clutch would typically mount
- Discs options available include:
 - cast iron
 - Kevlar fiction discs
 - sintered iron
 - composite plates.



TRANSFLUID
industrial & marine

TORQUE CONVERTERS

We offer torque converters for industrial applications to aid engines with operating in the most efficient speed range, producing rated horsepower, regardless of load demand. By transmitting torque through fluid mass in motion, this removes mechanical connections and reduces or eliminates the need for shifting, clutching and declutching.



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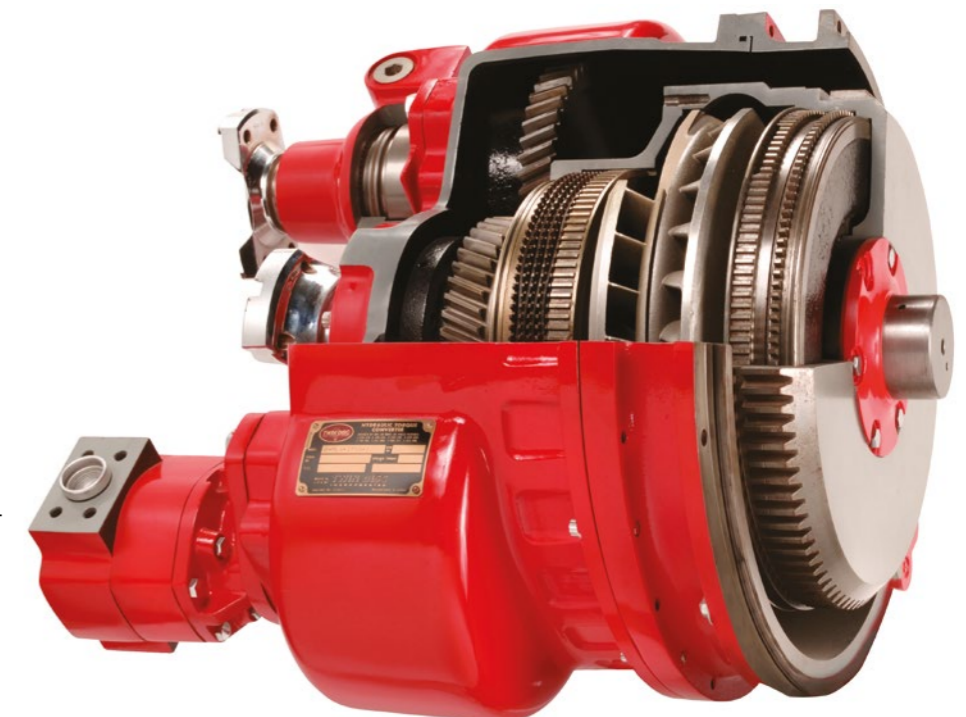
MATERIAL HANDLING



OIL AND GAS

KEY FEATURES

- Sumpless single-stage converters with PTO drives
- Single-stage rotating housing
- Single-stage torque converter renewal parts kits
- Stationary housing for industrial single-stage converters
- Type four hydraulic torque converters
- Three-stage hydraulic torque converters
- Model F units
- Model CF units
- Model CO and FO units
- Input and output combinations – 3 stage converters.



INDUSTRIAL HYBRID/ ELECTRIC DRIVE SYSTEM

The industrial market now has a viable hybrid solution for industrial heavy vehicles, thanks to MIT. The Transfluid HM Electric/Hybrid operates in three modes:

- **Electric Propulsion** – drives at zero emissions, in low vibration and silence
- **Engine Propulsion** – uses the electric machine as a generator to recharge batteries
- **Booster** – allows the electric motor during acceleration to assist the engine, providing extra torque to the driveline.



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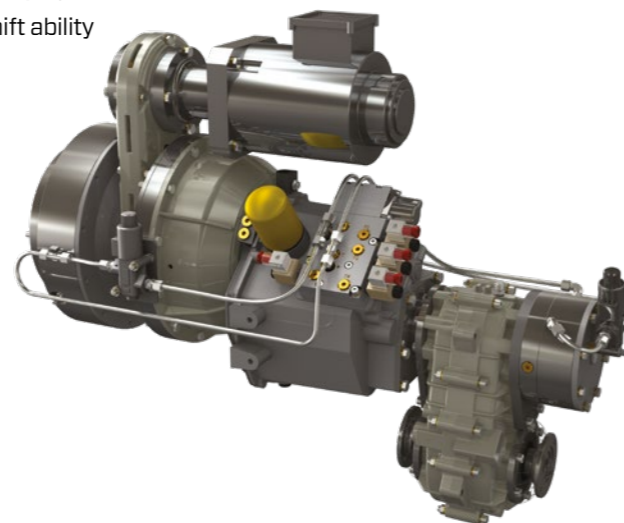


MATERIAL
HANDLING

The unit can be easily installed for both new designs and retro fits without significantly changing the design to typical driveline layouts. The electric machine can be mounted in multiple positions in order to best fit the engine compartment

KEY FEATURES

- Input side is a hydraulic or pneumatic controlled clutch
- When disengaged the engine is disconnected allowing the vehicle to be operated by the electric motor
- During engine operation, the clutch is engaged and the electric motor becomes a generator
- Booster mode is engaged when operating the engine and electric motor, increasing total power available
- Split power drive with SAE B PTO
- SAE standard dry clutch, operated by solenoid valve, to connect and disconnect internal combustion engine
- Clutch actuation solenoid valve
- 3-speed forward, 1-speed reverse Powershift Transmission
- Drop box for 2 or 4 wheel drive, available with wide variety of ratios
- Spring loaded wet discs parking brake, operated by solenoid valve
- Drop box installation with 6 different inclination angle positions
- Electric selector control unit with integrated soft shift ability
- Electric machine can operate as electric motor or electric generator
- Reduced NOx and CO2 emissions and typically a 15-30% fuel reduction
- Reduces wear and engine maintenance.



ELECTRIC MACHINE

Our innovative Electric Machine replaces a standard design engine, allowing the user to operate fully on electric power. Suitable for a wide range of industrial applications, it provides both high efficiency and simplicity within a limited weight and size.



QUARRY AND
MINING



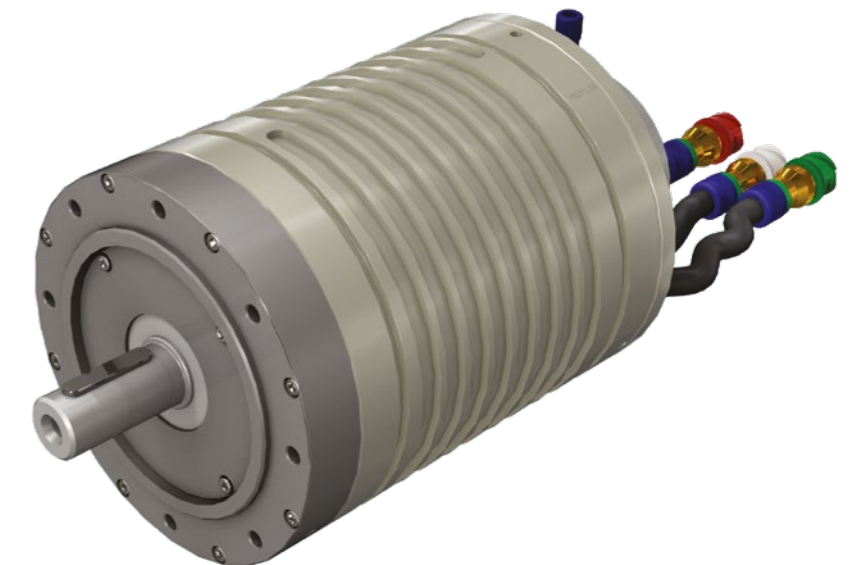
CRUSHING AND
SCREENING



MATERIAL
HANDLING

KEY FEATURES

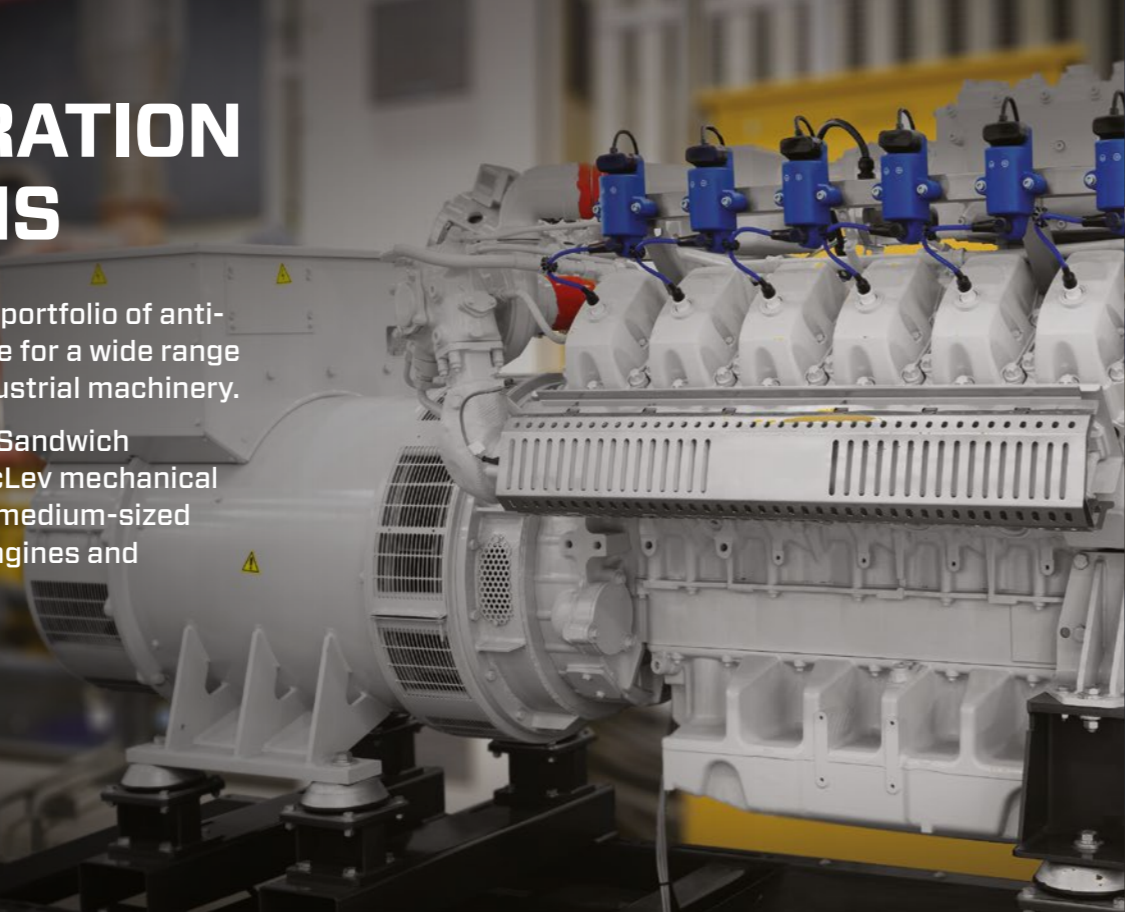
- Limited weight and size allows for easy of installation
- Motor Controller allows the machine to work as both a motor and generator
- Cost-effective alternative to diesel power
- Can be used as a retrofit solution
- Reduces operational cost
- Reduced environmental and noise pollution
- Excellent for low speed manoeuvring
- KTY-84-130 thermal sensor equipped as standard
- SIN/COS magnetic sensor optional
- Protects your business against future emissions regulations.



ANTI-VIBRATION SOLUTIONS

We have a comprehensive portfolio of anti-vibration mounting suitable for a wide range of vibration-producing industrial machinery.

We have both Conical and Sandwich mountings, as well, as MecLev mechanical levelling mounts, ideal for medium-sized diesel engines, auxiliary engines and generator installations.



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MATERIAL HANDLING



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OIL AND GAS



RECYCLING MACHINERY AND POWER GENERATION



WATER TREATMENTS

KEY FEATURES

- Expert engineering advice on a number of mounts, rubber mix and mounting positions
- All mounts are tested and selected for stiffness prior to delivery
- Calculations based on individual specifications
- Spare parts available
- Reduced noise and vibration pollution
- Protection of rubber from oil and ozone
- Internal deflection limiter avoids overload
- Maintenance free
- Easy to install
- Help to align and re-align your machinery quickly and accurately
- Fast and simple elimination of soft foot under your machinery
- Eliminate time consuming and expensive machining of steel chocks
- Eliminate the extra work required when installing epoxy resin chocks
- MecLev mounts are re-usable
- Self-levelling
- Can handle angular difference between machine foot and foundation up to 4°.



COUPLINGS

Offering a comprehensive range of coupling solutions from D2C (design to customer) ethos, our partner Reich Couplings design and manufacture a range of precisely engineered couplings suitable to our customer's applications.

The extensive range covers many coupling systems covering highly flexible rubber couplings, highly flexible, torsionally soft couplings, highly flexible tyre and shaft couplings, and torsionally flexible flange torsionally elastic claw couplings, torsionally rigid full-metal couplings as well as the TOK coupling system and tooth couplings.



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RECYCLING MACHINERY AND POWER GENERATION

KEY FEATURES

ARCUSAFLEX

- Very high torsional elasticity with a linear torsional spring characteristic
- High damping capacity of torsional vibrations and load impacts
- Backlash-free torque transmission
- Simple plug-in installation with large length compensation
- Compensation for larger misalignments
- Protection of the drive against overload by torque limitation
- ATEX



MULTI MONT SELLA

- Compensate for axial, radial and angular displacements
- Dampen shocks and vibrations
- Work puncture-proof and are highly overloadable
- Easy to assemble and align as plug-in couplings
- Simple radial element change is possible by pushing back the retaining cap
- Maintenance-free
- Can be adapted to almost any installation situation
- Simple assembly of the shaft connection when using the cone clamping bushes
- ATEX



RCT

- High torsional rigidity enables subcritical operation
- Elastic rubber coating dampens vibrations and torque shocks
- High torque capacity, puncture-proof
- Ambient temperatures from -25°C to +100°C
- Compact, robust, maintenance-free
- Easy assembly due to axial pluggability
- Backlash-free shaft-hub connection
- Compensation for axial, radial and angular displacements
- Diverse toothing variants for connection to the pump shaft
- Bellhousing flanges for almost every installation situation



BRAKES

Offering both spring loaded and drum and disc brakes, MIT can provide a solution for a wide range of industrial applications.



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RECYCLING MACHINERY AND POWER GENERATION



WATER TREATMENTS

COMPOSITE PARTS AND BEARINGS



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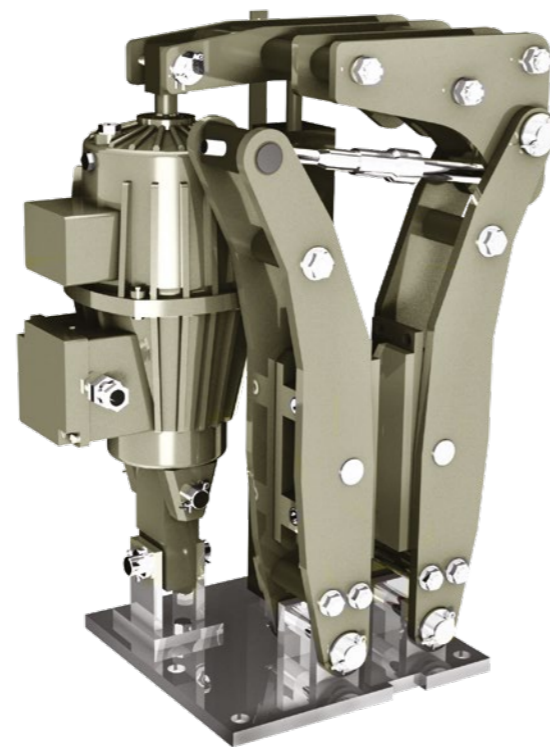
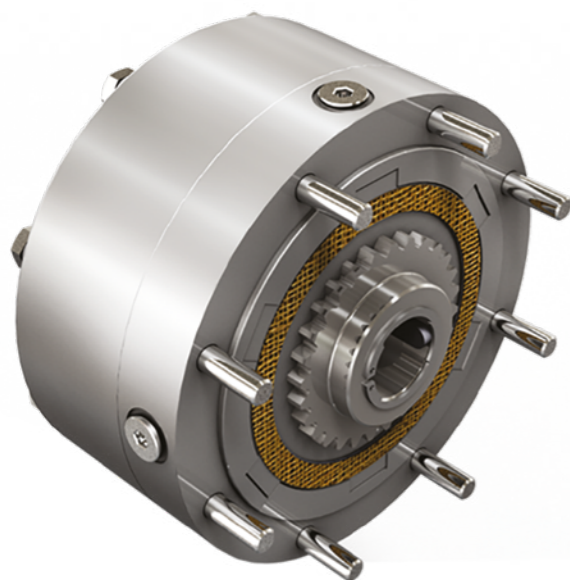
RECYCLING MACHINERY AND POWER GENERATION



WATER TREATMENTS

KEY FEATURES

- Spring loaded brakes suitable for any heavy duty application that requires a failsafe braking system which is spring loaded and hydraulically released
- Drum and disc models for applications that require a breaking force obtained by the means of a spring.



Composite Parts and Bearings

Our composite parts and bearings are suited for equipment working in the most arduous environments due to their excellent mechanical, physical and self-lubricating properties. In addition, the wear of these material can be less than that of conventional metallic materials and with minimal surface damage to the counter face, a longer life can be achieved.



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MIT Group



Marine and Industrial Transmissions



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Marine & Industrial Transmissions Ltd is part of Axel Johnson International, a global industrial group that acquires and develops companies in strategically selected niche markets, primarily technical components and industrial process solutions.

The group is an active and long-term owner whose mission is to drive business development and growth. It builds and develops groups of companies with shared strategic objectives, stimulating joint initiatives and knowledge sharing. Axel Johnson International has six business groups: Driveline Solutions, Fluid Handling Solutions, Industrial Automation, Lifting Solutions, Power Transmission Solutions and Transport Solutions. Axel Johnson International has an entrepreneurial culture where decentralised and committed leadership enables quick decisions. The group has four focus areas: digitalisation, service, sustainability and people development.

Axel Johnson International is headquartered in Stockholm, Sweden. The group comprises 170 companies in 30 countries. Axel Johnson International is part of the Swedish family-owned corporate group Axel Johnson.

www.axinter.com

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