

# **SERVICES OVERVIEW**



Preventative Maintenance



Repairs & Rebuilds



Dust Collector Servicing



Mechanical Installation



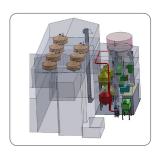
Bulk Materials Handling



Specialised Mechanical Services



Power Transmission



Consulting & Design

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### Introduction

# Techquip - Supplier of Technical Engineering Services for Bulk Materials Handling and Power Transmission.

Techquip is the technical services provider division in our group of companies which include Chain & Drives, a leader in power transmission and Inquip, a specialist in bulk materials handling.

Our team are trained in all aspects of power transmission and bulk materials handling and have the support and expertise of Chain & Drives and Inquip along with the market leading products our group supplies throughout Australia from leading manufacturers around the world.



#### Design

Our engineering team are proficient in the use of cutting edge drawing software, utilising AutoCAD and SolidWorks in the production of full 3D virtual space modelling and simulation, enabling prompt and accurate project installation and future servicing.



#### Supply

Our sales team are able to supply all of our products from stock. We represent various brands from around the world such as WAM, OLI, Kinder, Sumitomo, Motovario, WEG, Lafert, Transtecno, Bosch Rexroth, AEG, PIX and Damon as well as many power transmission and bulk materials handling manufacturers, allow us to provide the most competitive price possible.



#### Installation

Once your design is complete and equipment procured, Techquip can provide installation services to complete your project (*WA location* 

only). Some of our value added services include project estimating, costing, scheduling, resource management and equipment hire; meeting our client's confidence in completing their project's unique requirements. After installation we also provide full commissioning of equipment and supplied systems.



#### Maintenance

Techquip can provide full and ongoing maintenance services for all your plant and equipment, including gearboxes, drive assemblies, valves, dust collectors and conveyors. Effective servicing and maintenance can be the difference between reliable, efficient equipment and one plagued with continuing problems, costing you time and money.

We offer ongoing maintenance plans that allow you to be assured your equipment will be able to operate at its peak performance and efficiency.

We also offer after hours and breakdown assistance where and when required (WA Location Only).

### **Industry Sectors**



# TECHQUIP PROVIDES ONSITE AND IN-HOUSE SERVICING FOR BULK HANDLING AND POWER TRANSMISSION PRODUCTS FOR A RANGE OF INDUSTRIES STATEWIDE.

Our team has many years experience in all industry sectors across regional Australia.

Our knowledge and specialised product development provides you with a level of service and proven results that you can rely on to achieve greater productivity and results.

Our partnership with clients and suppliers across these sectors allow us to share a wide range of knowledge gained from industry experiences.

- Asphalt Mixing
- Biomass
- Building & Construction
- Concrete Batching
- Feed, Food & Flour
- Factory Automation
- Grain Handling & Agriculture
- Lime Dosing Equipment
- Mining & Mineral Processing
- Plastics & Chemicals
- Quarry Crush & Screen
- Renewable Energy
- Stock Feed & Processing
- Waste Water Treatment

#### **SERVICING ALL EQUIPMENT:**

**GEARBOXES** 

**MOTORS & BRAKES** 

**DRIVE ASSEMBLIES** 

**DRIVES & CONTROLS** 

**COUPLINGS** 

**CHAIN & SPROCKETS** 

**BELTS & PULLEYS** 

**BEARINGS** 

**SEALS** 

**CLUTCHES** 

**SPECIALISED PRODUCTS** 

**DUST COLLECTORS** 

**SCREW CONVEYORS** 

**BELT CONVEYORS** 

**WEIGHING EQUIPMENT** 

**BULK MATERIAL EQUIPMENT** 

**VALVES** 

VIBRATION & FLUIDISATION EQUIPMENT

WASTE WATER TREATMENT EQUIPMENT

### **Dust Collector Servicing**

Techquip provides the Dust Collector in Situ Cleaner (DISC) for Dust Collector Maintenance.

At Techquip, the service division of Inquip, bulk materials handling specialists, we have reviewed the methods used to clean dust collectors. With some specialised equipment we hope to vastly improve performance and some issues commonly found in dust collector servicing.

Techquip has developed a unique system known as the "Dust-collector In Situ Cleaner" or DISC for short. This handy little machine allows for cleaning of filter media, without removing it and keeping the dust inside the collector

Our unique method, we can reduce typical time taken to service a dust collector by 60 percent and has an added benefit of significantly reducing the cost of not only servicing the dust collector, but reducing down time and other procedures affected by such operations

Standard cleaning of a dust collector would be to manually remove the filter media and hand clean them, allowing dust and material to escape. We aim to drastically reduce and possibly remove any environmental impact from this process, benefitting operators and surrounding areas.

Techquip's DISC cleaning system can be tailored to suit almost any pneumatic reverse pulse dust collector, cleaning the media while it remains with the confines of the collector housing, while more effective at breaking away dust buildup helping improve the standard operating life of filter media keeping them cleaner for longer.

Below you can see a comparable difference between a WAM dust collector cartridge taken literally seconds apart mid clean with Techquip's "Dust-collector In Situ Cleaner"



**Before** 



After







Contact Us for all your Dust Collector Servicing, Maintenance & Testing Today

### Silo Safety System

#### Techquip supplies and installs all Dust Collector related Safety Products.

Damage to silos and accessories is most likely during tanker filling operation due to the risk of overfilling or excessive pressurisation.

The KCS Silo Safety System, which comes in component form, prevents both overfilling and excess pressure, thus avoiding damage to the silo, the venting filter or any other accessories, at the same time reducing the risk of dust emission.

#### Benefits:

- Avoid damage to silo and accessories
- Reduce risk of air pollution
- Eliminate risk of filling the incorrect silo
- Start and stop filter cleaning automatically
- Receive indication from electronic pressure meter whether filter might need attention
- Benefit from control panel monitoring of:
  - Internal pressure of any silo
  - Maximum level indicator free
  - Presence of compressed air to venting filter (if air jet filter)
  - Presence of compressed air to pinch valve



SC-Touch / SC-Hub Control Panel



VM/ VMM Pinch Valve



Valve Control Panel



Pressure Relief Valve



KAT Tanker Coupling Pipe



Silotop Venting Filter



Pressure Switch



Rotating Level Indicator



IPE / IPM Pressure Measuring Device



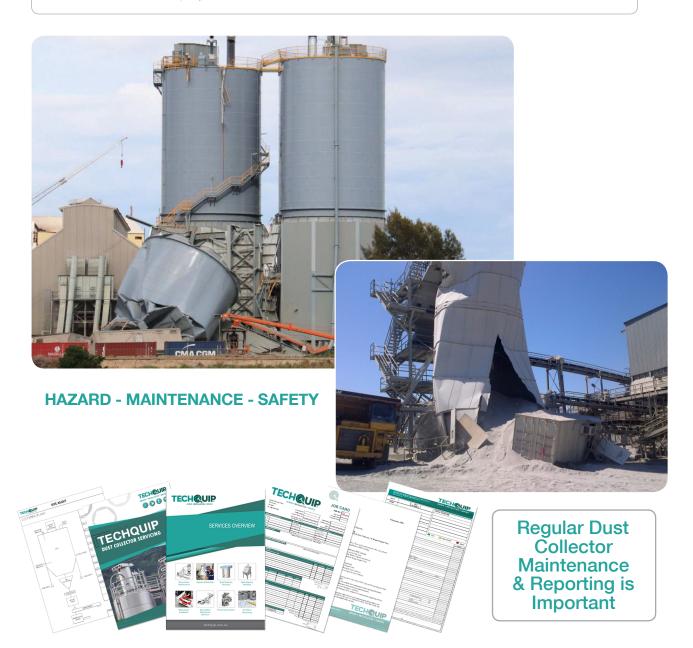
**Audible Alarm** 



### Dust Collector Maintenance & Reporting

The Techquip team offer scheduled dust collector maintenance and reporting for all manufacturers' dust collectors and maintenance systems.

Our team are fully trained in our manufacturers' dust collectors and silo equipment. We provide maintenance planning and site services for all dust collector applications. All services are carried out on a six (6) monthly basis and comply with OHS Australian standards. Silo Safety and Silo Operational OHS, our key commitment to our clients. Regular maintenance of dust collection equipment is essential as faulty dust collection equipment can result in over pressurisation of silo and hazardous site environment resulting in injury, property damage and production down time. Our commitment through regular servicing will reduce dust emissions and protect the environment of our clients and their employees.



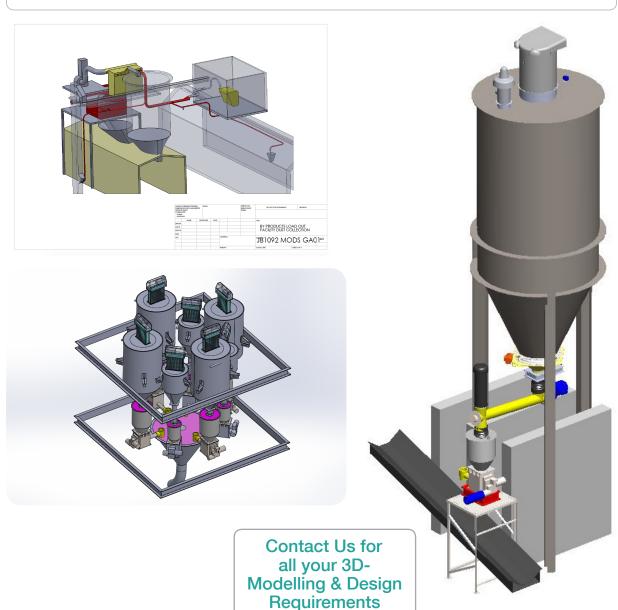
### 3D Modelling & Design Services

#### Techquip provides 3D Modelling & Design services.

In close consultation with your process and operating team, Techquip can provide project planning and plan upgrades can be fully conceptualised with 3D modelling techniques

Working with engineering software packages such as SolidWorks, gives us the ability to design and test your entire project within virtual space before entering production. This gives us the ability to iron out problems such as fitment concerns through to simulating strength and material flow, giving Techquip the ability to design the simplest sprocket all the way through to entire plants, utilising multiple components and integrating systems new and old.

If you would like to see some examples of work we have done, please do not hesitate to contact Techquip for all your mechanical drafting needs



# **Installation Applications**

The Techquip team have completed many successful projects across various industry sectors.

These include Dust Collection, Materials Handling, Concrete Reclaiming, Asphalt Processing and more. Here are some examples of completed projects.

Contact our team for more case studies relevant to your industry.











Contact Us for Case Studies relevant to your Industry



### Standard Services

#### Balancing

After installation or long service equipment can become unbalanced. Such fans, pumps and rotors can place undue stresses and additional loads in bearings, motors and couplings substantially

reducing component service life and potentially causing catastrophic failure with harmful potential. Techquip offers a balancing service to ensure long product life to maintain peak efficiency.



#### Consulting & Design

Techquip provides engineering consulting services for upgrades and new equipment designs with aid from our experienced staff within our group of companies. Utilising the latest up to date information,

we provide optimised solutions for your plants design requirements. Our trained engineers can design individual components through to complete plant layouts.



#### Preventative Maintenance

Techquip recommends adding security to your process by offering Preventative Maintenance Contracts for your equipment. This can significantly help reduce failures and detect faults early on before they

lead to larger issues, adding peace of mind to your operation. Each PMC is tailored to suit individual requirements of each customer with prioritised service as a key feature.



#### **Onsite Plant Repairs**

Our field services team have had many years experience in plant maintenance and can assist with breakdowns and installations. This may be after hours or scheduled. Attached to these can be full plant

audits pre and post repairs, backed by our engineers to ensure the correct fix has been employed to keep your operation functioning well into the future.



#### Mechanical Refurbishment

Techquip has a fully equipped service centre facility where strip and rebuild refurbishment or project builds can take place. Spanning from gearboxes, motors, couplings, bearings, seals, actuators, complete drive assemblies, screw conveyors, dust collectors and more can

be overhauled or built new with the confidence of being tested and functioning before reaching site. Our service centre carries a large inventory of spare parts for immediate repairs and breakdown situations



### Advanced Services

#### Oil Analysis

Oil analysis is a cost effective method of determining the condition of existing lubricants, helping to extend service life and reduce failure of equipment. Programs can consist of either in-

house or external testing which test for 4 major indicators; base oil degradation, water content, presence of contaminants, and metal or iron particle contaminants.



#### **Energy Audits**

Energy consumption can be reduced by up to 40% in some applications through analysing inefficient and poorly designed systems, by adopting modern, design practises. Environmental Sustainability begins with understanding how much energy you currently use and how you can reduce that consumption to a more environmentally friendly level.



#### Laser Alignment

Misalignment in mechanical systems such as drive assemblies is a major factor in increased wear and premature failures. Using traditional alignment techniques incorporating straight edges and dial indicators

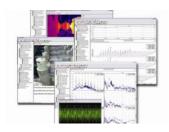
are extremely time consuming, subject to methodology errors and physical limitations. Laser alignment techniques are fast, accurate and remove many human errors from the process.



#### Vibration Analysis

The predominant technology employed in condition monitoring used to determine the condition of various mechanical components is Vibration Analysis. This non invasive technique

collects vibration data from machines under normal operating conditions, usually around bearing locations, can help to predict service life expectancy and urgency of repairs. Planned and



#### **Training**

Utilising technical expertise, Techquip have developed comprehensive product training programs. From the engineer seeking assistance with selecting the appropriate materials or components, a distributor who wants to provide the best available advice

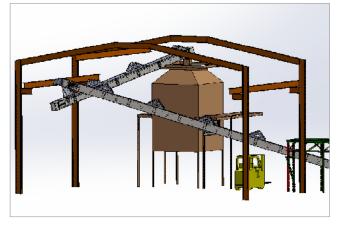
and products to their customers, or a maintenance person interested in getting the maximum uptime and service life, we have the solution for your plant, staff and equipment training needs.



### Modquip Conveyor Design

Utilising new design methods and products available from our Bulk Materials Handling division - Inquip, Techquip have developed a very competitive modular conveyor system.







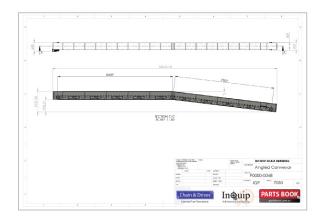
Our Modquip Conveyors are assembled from locally stocked components for immediate delivery, and are manufactured and assembled using basic tools - no welding or special equipment is required. Flat packed to minimise freight costs, they can be delivered anywhere in Australasia quickly. We offer full assembly and site installation including commissioning when required.

The conveyors can be ordered in standard widths and lengths, or special requirements are also available and designs are completed in hours.

Standard sizes: 400mm, 600mm, 900mm and 1200mm widths. The lengths are constructed in 500mm increments, therefore any length requirement can be supplied.

Our design team also offer customisation to your specific requirements and our conveyors are manufactured to accept the following with no modifications: Belt Cleaning, Magnetic Systems, Drive Control, Systems, Diverter Chutes, Dust Collection and Food Grade options.

Due to its versatility the Modquip Conveyor System can be adapted to suit most applications at low cost.





# Modquip Conveyor Manufacturing



**Installation Options** 



Flat Packed Delivery



Designed to Suit Any Requirements



Customisation Available

CODE	STANDARD WIDTHS	ТРН	ANGLE	HEAD DRUM DIA	RPM	STANDARD SPEED Mtr/Sec	STANDARD CONVEYOR LENGTH (Available up to 100metres)					
							3m	5m	8m	10m	15m	20m
MQPA050A	300	5	0	168	56.8	0.5	0.37 kW	0.37 kW	0.37 kW	0.37 kW	0.37 kW	0.37 kW
			15				0.37 kW	0.37 kW	0.37 kW	0.37 kW	0.37 kW	0.37 kW
MQPB063B	350	10	0	168	56.8	0.5	0.37 kW	0.37 kW	0.37 kW	0.37 kW	0.37 kW	0.37 kW
			15				0.37 kW	0.37 kW	0.37 kW	0.55 kW	0.55 kW	0.55 kW
MQPC063C	450	20	0	219	65.4	0.75	0.37 kW	0.37 kW	0.37 kW	0.55 kW	0.55 kW	0.55 kW
			15				0.37 kW	0.37 kW	0.55 kW	0.75 kW	0.75 kW	1.1 kW
MQPD075D	600	50	0	219	87.2	1	0.55 kW	0.55 kW	0.55 kW	0.75 kW	0.75 kW	1.1 kW
			15				0.75 kW	0.75 kW	1.1 kW	2.2 kW	2.2 kW	3 kW
MQPE080E	750	75	0	273	70.0	1	0.55 kW	0.55 kW	0.75 kW	1.1 kW	1.1 kW	1.1 kW
			15				1.1 kW	1.1 kW	1.5 kW	3 kW	3 kW	4 kW
MQPF093F	1000	125	0	323	59.1	1	0.75 kW	0.75 kW	1.1 kW	1.5 kW	1.5 kW	1.5 kW
			15				1.1 kW	1.5 kW	2.2 kW	4 kW	4 kW	5.5 kW

Based on: Bulk Density 1t/m3 Surcharge Angle 15deg

#### **Features:**

- Conveyor widths also available in 1250mm and 1400mm
- All Conveyors are powder coated before assembly
- Inclination up to 33 degrees available
- Stainless Steel Conveyors available for food application and corrosive environments
- Standard Duty and Heavy Duty trough conveyor also available.
- All Speeds available All Drives supplied from Inquip stock
- VSD Drives Scrapers Magnets Diverter Chutes and many other standard additions available

- Conveyor Lengths available in 500mm increments
- Special customised designs available
- 3D Models available
- Conveyors supplied flat packed for on site assembly and economical installation
- Site installation teams available in all states
- Designed and manufactured in Australia
- Distributors, Service Agents and Parts available throughout Australia





Contact Us for your Conveyor requirements



### Modquip Return Roller Guard

Utilising new design methods and products available from our power transmission division - Chain & Drives, Techquip have developed a very competitive Return Roller Guard.

The Return Roller Guard with bomb bay doors provides adjustable fitting to accommodate multiple roller and belt sizes.

The design incorporates the ability to track the return roller with the guard in place.

The bomb bay doors allow for easy cleaning and roller maintenance.

Our Modquip Return Roller Guard is assembled from locally stocked components for immediate delivery, and are manufactured and assembled using basic tools - no welding or special equipment is required. Flat packed to minimise freight costs, they can be delivered anywhere in Australasia quickly. We offer full assembly and site installation including commissioning when required.

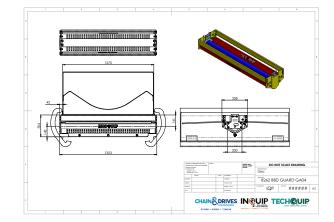
Our design team also offer customisation to your specific requirements and our guards are manufactured to accept the following with no modifications: Belt Cleaning, Magnetic Systems, Drive Control, Systems, Diverter Chutes, Dust Collection and Food Grade options.

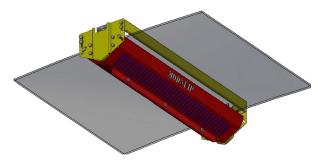




Customisation Available

Easily Accessible Side Entry





Contact Us for your Return Roller Guard Requirements





### **MEG Group**













meggroup.com.au



MEG, Mechanical Equipment Group, was established as an identity to bring together our specialised companies; Chain & Drives, Inquip, Techquip, Parts Book & Tank Enviro Systems and provide our clients with the complete solution for mechanical equipment & engineering services.

Our goal is to provide Design > Supply > Installation > Maintenance across a large range of industry sectors utilising Bulk Materials Handling and Power Transmission.

Our team provides 24/7 experienced personalised technical service and direct e-commerce access & supply solutions to our manufacturers & supply partners globally through our newest company, Parts Book.

With the advantage of five companies, MEG now provides a larger range of quality & great value products, technical 3D-design, advice, installation & maintenance services; both on our premises or onsite within Western Australia and New South Wales; to our ever growing customer base.

To assist our customers, we also offer fast delivery from our distribution partners located throughout major centres in Australia.

Welcome to MEG - Innovate > Build > Support.

Contact our friendly team today for your enquiry at info@meggroup.com.au.

### techquip.com.au

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POWER > SPEED > TORQUE









materials handling solutions





