# The driving force behind industry.

Bespoke driveline solutions for global producers and manufacturers.

# Beattys



# It's the thinking before production that makes our drivelines different.



### WE ARE BEATTYS.

### FAMILY-OWNED COMMITMENT FROM NZ TO THE WORLD.

Family-owned businesses have something special. A core value that larger corporations cannot duplicate. When you have three generations of a family involved in a business, there's a genuine desire to look out for those people who work in, for and with the business. And there's a will for the business and our customers to collectively succeed. Since 1963 three generations of our family have given their best to ensure that Beattys Group's reputation as a quality manufacturer, supplier and employer is entrenched with those we value most - our people, our customers and our suppliers.



လိုလို **100% FAMILY** OWNED



## **LEADING-EDGE** DESIGN **INNOVATION**

The intelligent design of a driveline is very critical to ensure ongoing reliability. It is important that the power source, speed and universal joint angle are ascertained prior to specifying a shaft to suit any situation. We offer a full consultation and design service so your custom requirements can be met with products that deliver optimal performance.

## YOUR PROBLEM. **OUR PASSION**

We take problems of complexity and scale and create bespoke driveline solutions to optimise performance. To us, every project is a different proposition – and an opportunity to craft the best solution.

At Beattys we understand that the industrial environment and the demands of the industry present the ultimate challenge for product quality and durability. Our design expertise has been proven time and time again, working with some of the leading industrial corporates in New Zealand and Australia.

MANUFACTURED IN NZ

### **OUALITY COMPONENTRY**

# STATE-OF-THE-ART MANUFACTURING



Turret Driveline is our legacy. With over sixty years of experience, we are New Zealand's most trusted manufacturer and supplier for all driveline needs. Turret drivelines and componentry are designed and hand built to extremely high standards here in our state-of-the-art Beattys Group Auckland facility, and backed by our dedicated and accessible team.

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# Our attention to your detail

### ASSESS

critical parameters and challenges that we need to overcome

### DESIGN

Our team of technical engineers will then design a custom solution using state-of-the-art CAD and programming systems to ensure that we will meet all the client's needs.

### MANUFACTURE

Throughout our driveline manufacturing process, you can be guaranteed of the highest level of engineering excellence and commitment to quality.

### BALANCE

All drivelines are dynamically balanced in one of our four, multi-plane balancing machines. We spot-weld any weights to reduce stress on the driveshaft tube.

### REVIEW

Once a driveline has been dynamically balanced and painted, it goes through a series of rigorous inspections and quality control measures to ensure the products we deliver will fit our commitment to premium quality.

TUBE CUTTING

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**ASSEMBLY LINE** 



FITTING COMPONENTS



BALANCE WEIGHT SPOT-WELDING

### AUTOMATIC WELDING

### FITTING COMPONENTS

DYNAMIC BALANCING

COATING PLANT

# Global supply capabilities

## **PROJECT CAPACITY**

Whether your project is universal couplings for a conveyor system or a large industrial driveshaft to drive rolls in steel mills, Beattys Group has the in-house capabilities to design and manufacture industrial drivelines to suit all duty applications; from light to heavy industry.

## **RAW MATERIAL**

More than 30,000 driveshaft components stocked locally in New Zealand make Beattys Group one of Australasia's leading driveline specialists.

## EXPORT

Supporting our valued global client base, Beattys Group despatches componentry and complete drivelines worldwide via our international freight partners.

## **DRIVELINE RATINGS**

200Nm - 750,000Nm torque capacity ratings, and connection flanges from DIN 58mm to DIN 480mm.

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# Industries we work with



## PULP AND PAPER

STEEL MANUFACTURING

**PORT HANDLING** 

OIL AND GAS

WATER TREATMENT

**FOOD PROCESSING** 



# Industrial Driveshafts

Powering industry with optimal performance.

### **KEY STRENGTHS & BENEFITS:**

The demands of the industrial environment provide the ultimate challenge for product quality and durability, along with the need for proven design expertise. Beattys has risen to this challenge and has enjoyed working alongside Australasia's leading manufacturers for many years to assist with their driveline design, and is now the preferred manufacturer and supplier for a number of these corporates.

Beattys Group has made a significant investment in specialised equipment and technical know-how training to ensure our team is at the forefront of industry requirements, to deliver excellence and premium driveline solutions. All componentry, processes and workmanship is completed in our own NZ-based workshop, and are of the highest industry standards. Our products are trusted globally by manufacturers that service the steel, wood, recycling and mining industries to name a few.

# Premium driveshaft solutions.

Sliding spline assemblies have heavy duty housings and an integral seal system for protection from contamination and wear.

Industrial grade 2 pack industrial coating prevents corrosion in harsher environments.

Automated welding process allows deeper penetration and precise control while maintaining maximum consistency.

European involute-style splines that are larger in diameter with finer tolerances and less clearance result in quieter operation, increased capacity and longer service life.

Rilsan<sup>®</sup> coated splines reduce axial load and provide electrical isolation between shaft ends.

High grade tubing with internal tube damper increases the resistance to high shock loadings.

All driveshafts are balanced to ISO 1940 Grade 6.3 standard and balance weights are spotwelded to prevent fracturing and stress on the driveshaft tube.

4-point greasing options available for ease of access during maintenance. Sealed-for-life options also available for areas with limited greasing access.

# **CV** Shafts



### **OVERVIEW**

In applications with unequal angles, the introduction of a Turret CV shaft results in higher performance and extended life hours from the low axial force ball design.

Internal thrust washers allow the universal joints to run cooler and minimise noise and vibrations from clearance.

Custom made flanges to suit any gearbox, engine or machine/roll couplings, removing the need for additional adapter flanges.

### **SPECIFICATIONS**

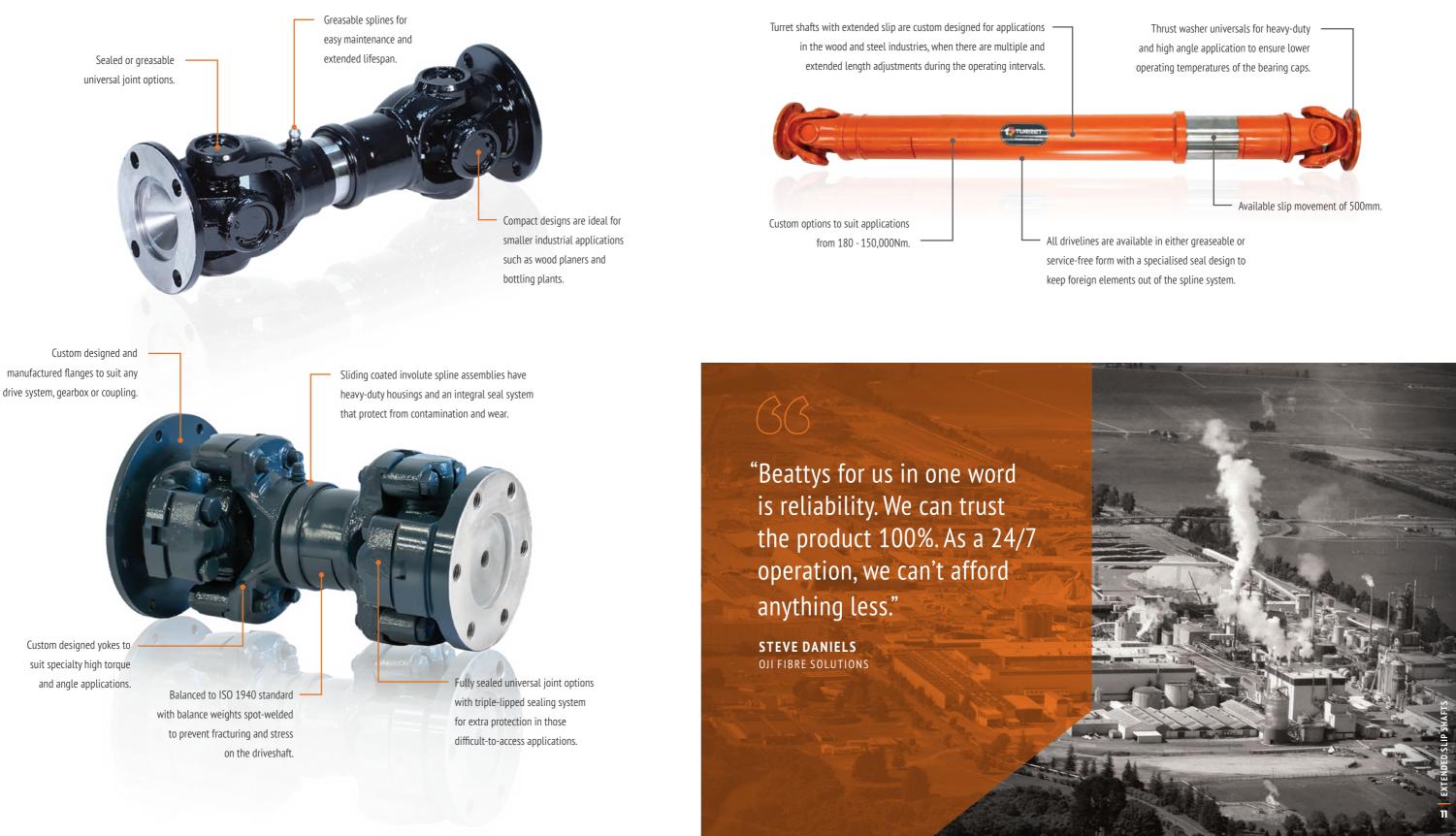
- Short coupled options for minimal length requirements as well as tube options to allow for increased operating lengths
- Maintenance-free design with high speed rubber boot
  - sealing system
- Complete range available from 180 3500Nm

u INDUSTRIAL DRIVESHAFTS



# Short Coupled Shafts

# Extended Slip Shafts





# Layrub Couplings

# **Precision Couplings**



E PRECISION COUPLINGS

### CASE STUDIES

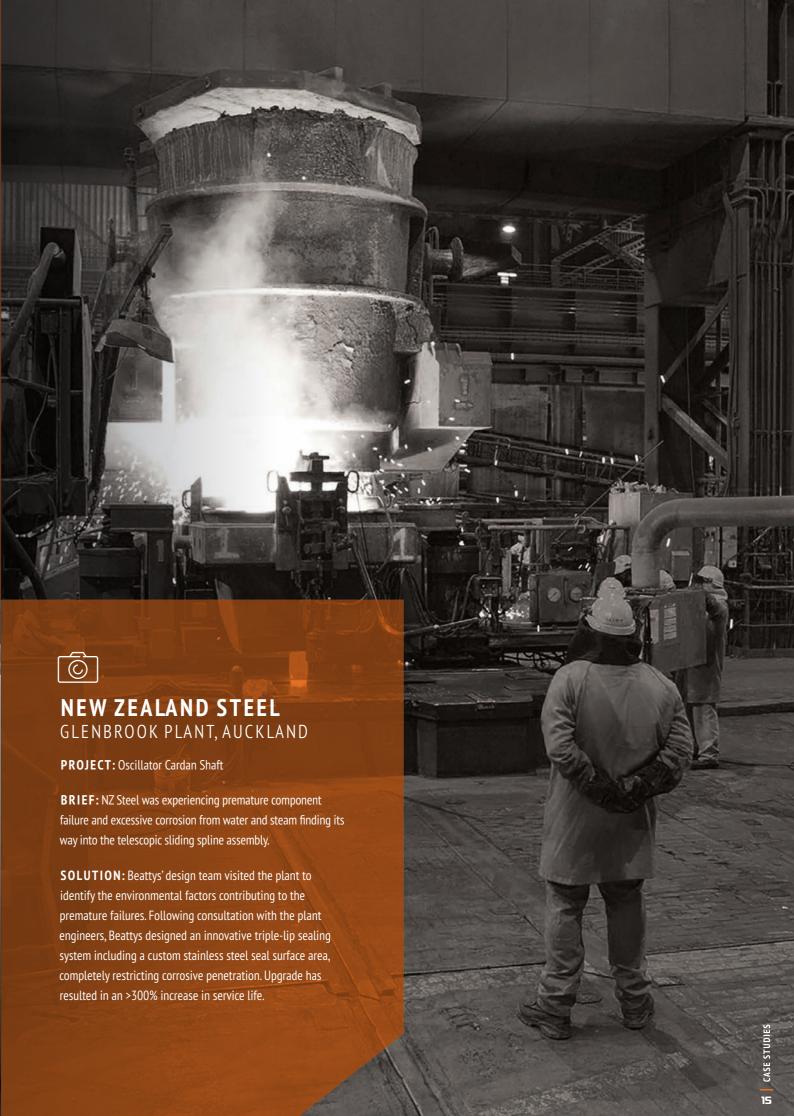
## $\overline{\bigcirc}$ **BLUESCOPE** PORT KEMBLA, AUSTRALIA

**PROJECT:** Gimbal Shaft for Slag Car

**BRIEF**: Due to the slag car frame being out of alignment following years of operation, the original gear coupling was working outside of recommended operating angle parameters, therefore resulting in premature wear and component failure.

**SOLUTION:** Following discussions with Beattys' technical team and Bluescope engineers, Beattys designed a cardan shaft solution with universal joints and integrated sliding spline to manage the variable and increased operating angles. Custom-manufactured flanges to suit the existing drive flanges allowed fitment without modification to existing slag car design. Universal joints were custom fitted with heavy duty thrust washers and sealing system to withstand the operating temperatures in excess of 150°C.





# $\fbox{0}$ WHAKATĀNE MILL WHAKATĀNE, NEW ZEALAND

**PROJECT:** Cardan Shaft for Pressing Machine

BRIEF: Following assembly of a new press machine, there were extended lead times for the OEM-supplied drive couplings and lack of technical expertise and communication.

**SOLUTION:** Beattys' engineers were contacted by the plant managers and following a site visit gathered all the technical duty data, including motor power and roll speeds. A comprehensive design proposal was put forward for a full set of cardan shafts, drive couplings and spares. Following plant approval Beattys were able to manufacture and supply all components in the agreed timeframes, speeding up productivity and minimising downtime.

# Beattys

### DRIVELINE SOLUTIONS TO DRIVE YOUR BUSINESS FURTHER

When it comes to drivelines, at Beattys we get satisfaction from resolving any challenge that comes through our world-class workshop and manufacturing facility. This comes not only from our can do attitude, but is backed by technical expertise, leading-edge manufacturing robotics and advanced design facilities. No matter the project - from a single specialist application to multi-industrial sites, there isn't a driveline problem we can't solve.

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