



# The drive behind performance.

Automotive driveshafts optimised  
for durability, reliability and high-  
performance consistency.

**Beattys**

**DRIVELINE**  
AUTOMOTIVE

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

## YOUR PROBLEM. OUR PASSION.

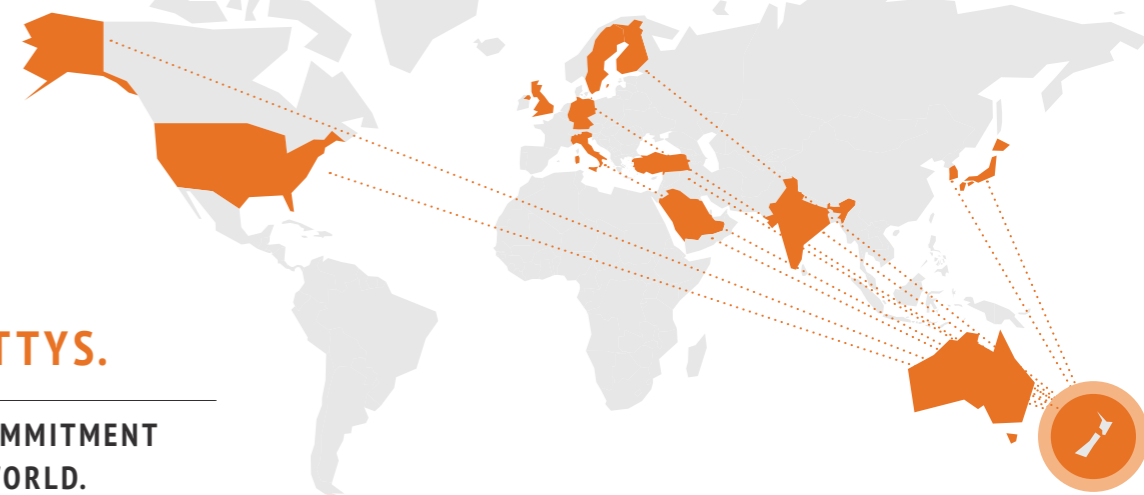
We take problems of complexity and scale and create bespoke driveline solutions to optimise performance. To us, every project is a different proposition – and an opportunity to craft the best solution.

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 Globally.

## 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 Drivelines reputation as a quality manufacturer, supplier and employer is entrenched with those we value most - our people, our customers and our suppliers.



100% FAMILY OWNED



VIP CUSTOMER SUPPORT



MANUFACTURED IN NZ



QUALITY COMPONENTRY

## 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.

## STATE-OF-THE-ART MANUFACTURING



Turret 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 facility, and backed by our dedicated and accessible team from which we deliver to our global clients.

# Our attention to your detail

## 1 ASSESS

Beattys will scope the project, identifying any critical parameters and challenges that we need to overcome to ensure we deliver a premium product.

## 2 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.

## 3 MANUFACTURE

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

## 4 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.

## 5 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



AUTOMATIC WELDING



ASSEMBLY LINE



FITTING COMPONENTS



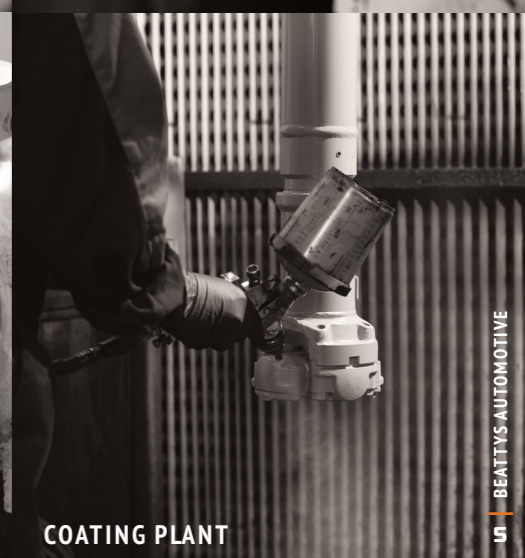
FITTING COMPONENTS



DYNAMIC BALANCING



BALANCE WEIGHT SPOT-WELDING



COATING PLANT

# Automotive Driveshafts

Premium driveshaft solutions - The drive behind performance.

## KEY STRENGTHS & BENEFITS:

Beattys' coverage and expertise within the automotive sector sets us apart as a clear market leader. Due to the long association and rapport established with vehicle manufacturers and their dealerships, Beattys automotive specialists have been called on by many respected car manufacturers to problem solve and develop specific driveline solutions for their market requirements. Beattys provides the automotive industry a complete package with the Beattys technology team taking care of your automotive driveshaft repairs and servicing for all makes and models. Beattys componentry maintains a comprehensive inventory of replacement automotive driveshaft parts to suit all makes and models, both past and present.

**Savings:** Instead of being faced with the outlay of full OEM replacement, the Beattys technology team has the specialised equipment and technical know-how to upgrade the worn components, delivering substantial savings and benefits.

**Reliability:** All componentry, processes and workmanship are of the highest industry standards to ensure that Beattys-supplied drivelines meet or exceed OEM specifications and tolerances.

**100% QUALITY COMMITMENT**



Upgraded and reinforced yoke design to prevent catastrophic failure.

All driveshafts are coated in a premium anti-corrosive paint to ensure they are protected from the elements throughout their life.

Premium automated welds allow for deep penetration and precise control while keeping maximum consistency.

Upgraded splines with increased spline engagement resulting in a more durable longer lasting driveline.

All driveshafts are balanced to ISO 1940 standard and balance weights are spot-welded to prevent fracturing and stress on the driveshaft tube.

Upgraded driveshaft tube with thicker walls and larger diameters to allow for higher torque applications and increase the resistance to high shock loadings.

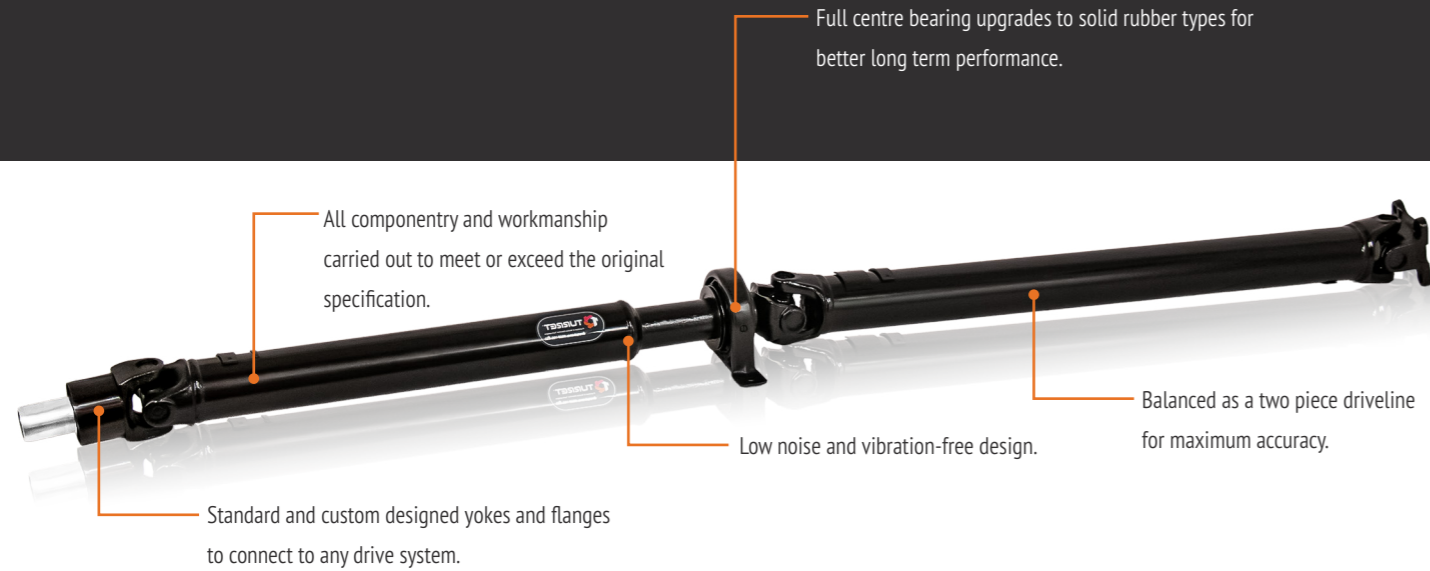
Worn centering bush replacements.

Internal circlip, external circlip and staked universal joints meet or exceed OEM specification and are fitted to suit multiple applications.

Large range of rubber couplings for all automotive applications.



## Two Piece Shafts



## Steering Shafts



## Performance Shafts



## Double Cardan Shafts



## Universal Joints



### OVERVIEW

The universal joint is one of the most critical parts in any driveshaft, that's why at Beattys we only use the best. Beattys' Turret universal joints are of the highest industry standards and are trusted by many large organisations nationwide to deliver reliable performance day after day. We are proud to offer the largest stocked range of universal joints in New Zealand covering all applications with over 500 different styles and sizes.

### SPECIFICATIONS

- Standard and premium styles
- Triple-lipped seals and internal thrust washers
- Sealed and lubed options
- Offset options for high angles and axle applications

## Transmission Yokes



### OVERVIEW

Turret transmission yokes are forged, not cast, for greater strength and undergo a precision machining process to guarantee exceptional balance and minimal runout. All our componentry is sourced from market leading suppliers that have the skilled engineers and craftsmen ensuring every yoke is made to exacting standards. We hold a large range of transmission yokes in stock to suit various applications.

### SPECIFICATIONS

- Standard and long snouts available
- Various types for American and Japanese vehicles
- Billet steel types for high performance
- Internal / external circlip types

## Centre Bearings



### OVERVIEW

Beattys' Turret centre bearings always provide optimal alignment, which translates into improved performance and durability of the driveline. Our advanced technology reduces noise and vibration, while maintaining the proper driveline angle to maximise driveshaft and component life. We offer a large range of solutions for all applications including maintenance free options and high performance styles.

### SPECIFICATIONS

- Solid and slotted rubber types
- Self-aligning bearings
- Heavy duty options
- Replacement rubber types

## Rubber Couplings



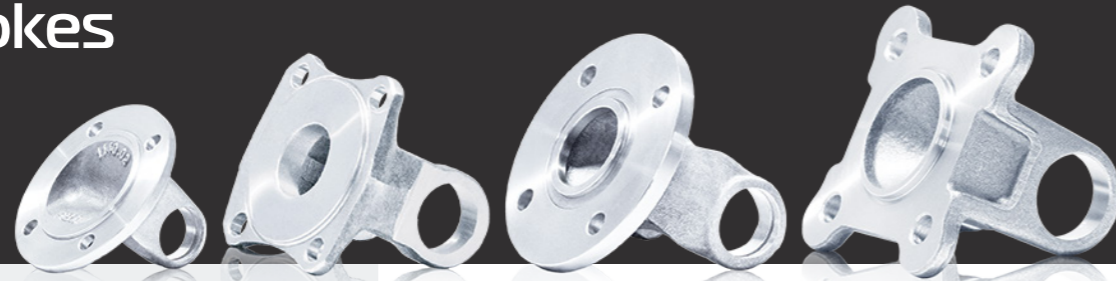
### OVERVIEW

Beattys Driveline has a complete range of Turret rubber couplings to suit automotive, transport, industrial and marine applications. With over 55 years of experience in the driveline industry, we know what to look for when it comes to finding premium couplings that last. All rubber couplings we supply are backed by our exceptional service and promise to deliver componentry that provides optimal performance, whatever the challenge.

### SPECIFICATIONS

- Quick and easy installation
- Dampens drivetrain disturbances
- Prevents angular misalignment
- Ideal for cars, SUV's and small trucks

## Flange Yokes



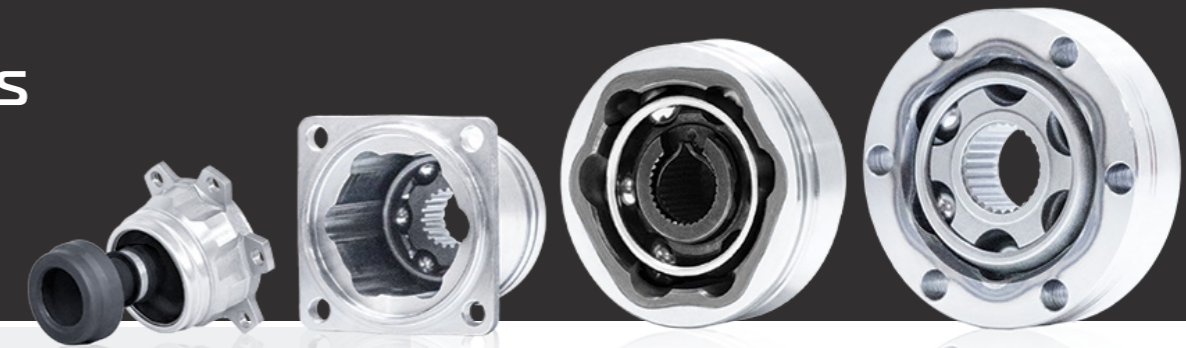
### OVERVIEW

The multitude of mounting options is forever increasing in the driveshaft industry. That's why Beattys Driveline carries a vast range of different profiles and sizes with many bolt patterns and locating options. Our production centre can also modify a range of blank undrilled flanges from scratch to meet any custom requirements.

### SPECIFICATIONS

- SAE and DIN spec
- Single and double joint styles
- Blank type for custom made options

## CV Joints



### OVERVIEW

Our full suite of constant velocity (CV) joints for rear wheel drive vehicles caters for the automotive and light commercial industries. All Turret CV joints are sourced from industry leading suppliers and are guaranteed to outperform and out last.

### SPECIFICATIONS

- High speed and performance types
- Ideal for difficult angle applications
- Complete range of high speed boot available
- Complete shafts available

## Tube Yokes



### OVERVIEW

Tube yokes come in a large range of styles and profiles. All Beattys Turret tube yokes have been sought from the industry leading suppliers around the world. We know how important it is to keep you moving, so we only use the best componentry that has been tested and proved over our many years of industry experience.

### SPECIFICATIONS

- Solid and hollow type
- To suit various tube diameters in each series
- Standard and high angle

## Sliding Spline Sets



### OVERVIEW

One of the key components for any driveline is the sliding splines. Any wear on these will result in vibrations and premature wear of other moving components. Beattys holds a complete range of Turret slip sets that suit all applications from automotive to industrial. All splines are thoroughly inspected by one of our engineers before leaving our parts department to ensure we continue to provide a high standard of componentry.

### SPECIFICATIONS

- Involute splines - European design
- SAE spline for standard series
- Various spline lengths in each series
- Low noise especially for marine applications

## Design



### OVERVIEW

The intelligent design of an automotive 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. Whether your requirement is for a precision coupling with less than 7 Nm of torque, or a large equipment shaft with an excess of 80,000 Nm, we offer a full consultation and design service so your custom requirements can be met with products that deliver optimal performance.

### SERVICES

- Specifying driveshafts
- Angle and speed calculations
- Driveline layout design and configuration
- Problem solving – vibration, torsional and reliability issues

## Manufacturing



### OVERVIEW

We have the internal resources, skills and expertise to produce all types of automotive drivelines. Throughout our driveshaft manufacturing process, you can be guaranteed of the highest level of engineering excellence and commitment to quality. All driveshafts we manufacture are then dynamically balanced to ISO 1940 standards to ensure the durability and performance.

### SERVICES

- Sealed for life driveshafts
- Short coupled driveshafts
- Two piece driveshafts
- Multi-piece driveshafts
- Centre bearing shafts
- Custom design components
- Custom driveshafts
- Larger OEM production runs
- Multi-piece drivelines
- Industry-specific drivelines

## Modifications



### OVERVIEW

Due to the wide range of special purpose vehicles and equipment needed to meet the demands of many industries, we offer a modification service for all types of drivelines including shortening, lengthening of driveshafts and changing drive ends. This service is often used in applications such as transmission or engine upgrades.

### SERVICES

- Driveshaft shortening
- Driveshaft lengthening
- Changing flange and yoke connections
- Upgrading for higher power ratings and heavy duty applications
- Enhanced greasing systems

## Dynamic Balancing



### OVERVIEW

Driveline dynamic balancing is a crucial part of the process to create a lasting solution. With four multi-plane balancers we cover the needs of a diverse range of applications. With drivelines spinning at higher rpm's than ever before, it is important that they are balanced to the finest of tolerances. Our equipment provides the best balance precision by carrying out a simultaneous 4-plane balance at speeds of up to 10000 rpm. All balancing weights are spot welded to ensure an accurate, lasting balance.

### SERVICES

- Spot-welded weights to minimise fracturing of driveshaft tube
- Driveline dynamic balance correction
- Driveshaft straightening
- Dynamic balancing reports



## 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.

+64 9 263 7761 / [enquiries@beattys.com](mailto:enquiries@beattys.com) / [beattys.com](http://beattys.com)

**100%** FAMILY OWNED  
FAMILY PROUD