



# **REAL PARTS FROM A REAL MANUFACTURER**

You might not know it, but there is one thing that sets our product apart from all the others. Every single part manufactured by the Metelli Group was conceived with one and the same objective – to match or improve on the OEM part it was designed to replace. And how do we go about that?

We begin by analysing each OEM part. While reverse engineering the part, we carry out our own metallurgic analysis – often enabling us to offer a better material or compound. Once we have recreated the design with 3D CAD systems, our R&D team are able to suggest further improvements. Like our quality standards, you'll find we use the same software, machine tools and robotic assembly lines as the major automakers.

Of course, our parts comply with the same quality and safety standards as the originals. And like OEM parts, once ours have been tested in computer simulation, we test them in real life (in the plant and on the road). Then we prepare and pack them to meet your specific demands – in our purpose-designed packaging.

This is how we match or improve on every automotive part we set out to replace. You might even say this is what makes our parts more real than their predecessors.

Welcome to the real automotive parts of the Metelli Group.

# WATER PUMPS

#### **WATER PUMPS**

As European leaders for aftermarket (and as original equipment suppliers), our water pumps are hard to beat. In fact, we often improve on the standards of other original products, and we have even developed our own patented products. Today we cover the entire European, American and Asian car parc, with approximately 1,000 items. In almost all cases the body is an aluminium alloy, in some cases cast iron. Bearings can be ball-ball or roller-ball according to their type of use. Impellers come in sheet metal or stainless steel, brass, cast-iron, or the most modern techno-polymers. Mechanical seals are produced with advanced materials such as silicon carbide. Pulleys are sintered, sheet metal or cast iron – in shapes that withstand high belt tensions.

### TIMING BELT KIT WITH WATER PUMPS

Including timing belt, water pump and tensioners, this kit makes life easier for the mechanic to identify the components needed for a replacement. Just one kit code is necessary for all three parts.







# **TRANSMISSION PARTS**



#### **CONSTANT VELOCITY JOINTS**



Our wheel-side and gear-side constant velocity joints come with the relevant sealing system boot, clamps, bolts, nuts, seeger, locking rings, and grease. Our steel outer race, cage and inner race are manufactured and treated for maximum resistance to wear. We grind them to tolerances of hundredths of a millimetre so that together with high precision balls they guarantee regular and lasting performance. Most articles have an ABS ring made in a sintered material or forged steel.

### DRIVESHAFTS



Our range of ready-to-use driveshafts covers the aftermarket demands of the entire European car parc (including those of our OE customers). The components – wheel side joint, gear side joint, shaft and seal systems – are all already assembled. This means they're quick and easy to install.

#### **BOOT KIT**



The kit consists of boot, clamps, bolts, nuts, seeger, locking rings and grease. We use two different materials for the boots – mostly rubber as it's easiest to install and most reliable over time, but also thermoplastic, which is more resistant to wear and corrosion from aggressive agents.

# **ENGINE PARTS**

## **VALVE GUIDES IN VARIOUS MATERIALS**

We make intake and exhaust valve guides using ferrous or non-ferrous metals. The cast iron (ferrous) is more resistant to wear, while copper based alloys (non ferrous) provide optimal heat conductivity. Then we make valve guides in sintered steel. With selflubricating properties and greater resistance to high temperatures, these are ideal for aspirated and turbocharged engines with very high performance.

### **VALVE SEATS**

Our ferrous valve seats are made with temperature resistant steel and special cast iron. Then, for greater heat conduction, we make sintered valve seats using metals and carbides with high mechanical and thermal properties.

#### **VALVE SHIMS & ADJUSTING PADS**

Made with case-hardening steel, the accuracy of our valve shims is measured in hundredths of a millimetre. This enables them to meet the small tolerances demanded. In fact, the increments of sizes are just five hundredths of a millimetre.





# **BRAKE PARTS**



#### **BRAKE DISCS**



With approximately 1,400 items, our range covers the entire European, American and Asian car parc. The brake discs are made in cast iron with varying percentages of carbon according to the performance needed by the vehicle. We have solid discs and selfventilated discs, and a wide range of coated brake discs to keep them looking good. To coat the brake discs we use ALUTHERM® 80 or DSP® paint. The first leads to a lower environmental impact compared to solvent-based paints – and higher corrosion resistance. The DSP® paint makes the disc ready to use, so there's no need to degrease them before mounting. And every one is ECE R90 certified.

#### **BRAKE PADS**



Depending on the specifications, our brake pads are made with compounds of different composite materials. We are currently launching our very own compound, Hybrix<sup>®</sup> – a new and patented technology which sets a new benchmark in the field. Brake pads made with the Hybrix<sup>®</sup> compound have an unmatched combination of performance and comfort. Of course, they're certified according to ECE R90, and as an added bonus they're copper-free.



#### **BRAKE DRUMS**

Like our discs, our brake drums are manufactured in machined cast iron. Accurate workmanship of all the elements ensures perfect coupling between the drum and the shoes - and excellent braking performance.





Our constantly updated range of brake shoe products consists of more than 700 items - and like all our safety-critical parts, every one is certified ECE R 90. Every brake shoe is made with meticulous attention to detail from high quality raw materials.

### **PRE-MOUNTED BRAKE KITS**

With more than 430 brake kits, we have the most extensive range on the market. With all the components pre-mounted, our brake kit allows you to replace every component which can become worn - making assembly easier, faster and safer. Also, to make life quicker and easier when ordering, we have pre-mounted (self adjusting) Brake Shoe Kits, Reduced Fast Kits (without cylinders), and Repair Kits with wheel cylinders.

### **HYDRAULIC BRAKE & CLUTCH PARTS**

Apart from a full range for aftermarket, we supply original equipment braking systems and brake parts for other brake manufacturers. This includes wheel cylinders, brake master cylinders, pressure regulating valves, slave and master cylinders for clutches and more. All these are produced in different quality materials including cast iron, aluminium and plastic.

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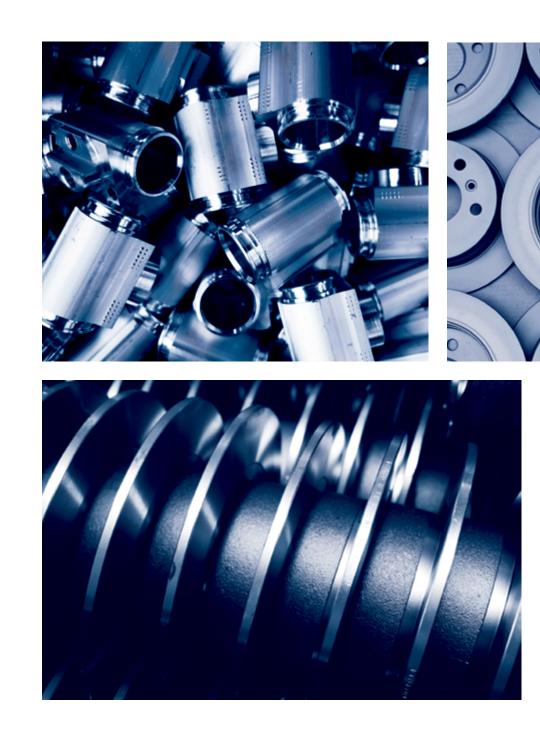
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# www.metelligroup.it

Metelli S.p.A. | Via Bonotto, 3/5 - 25033 Cologne (BS) - Italy - T. +39 030 705711 - M. metellispa@metellispa.it