Manufacturing programme
Since 1973 we have been manufacturing high quality and accurate gears for different industries including aerospace, robotics and textile machinery. We are specialized in gearboxes, bevel gears, and cylindrical gears and we provide you with a total in-house production ensuring the highest product quality.

Sampingranaggi is certified to the ISO 9001 and ISO 14001 standards.

**OMNI Gearbox**

Sampingranaggi OMNI gearbox is our new line of high-precision planetary gearboxes. It stands out for its extraordinarily compact design and meets the increasing market demand for:
- Flexibility and customization
- Robustness and reliability with minimal maintenance.

OMNI gearbox is designed to satisfy all applications which demand high precision, stiffness and lightness and is available in a wide range of sizes and ratios with customizable input interfaces.

The mechanism behind the design of OMNI is an evolution of the Wolfrom gear, a peculiar planetary reducer where planets wheels mesh at the same time with two internal gears. In the OMNI gearbox, each gear has a beveloid profile, therefore a lost motion compensation with springs is possible. This mechanism ensures a compact structure and a lower lost motion compared to a standard planetary gear train.

The high-precision OMNI gearbox has a ready-to-use design which makes it suitable for most applications without the need to make an adaptor. Moreover, its low number of components and suitability for standard oils make its maintenance extremely fast and easy.

Thanks to our solid 40-year experience in gear design and manufacturing, we have developed this innovative concept completely internally. All components are manufactured in-house; hence we are able to truly control the quality of our products during the whole process and at each single production step, thereby ensuring a world class product.

Advantages:
- High-precision positioning with lost motion ≤ 1 arcmin
- High torsional and tilting stiffness
- High transmission ratio, up to 1/150
- Continuous backlash recovery over time
- Easy maintenance (standard oil lubrication)
- Use at low temperatures
- Ready-to-use design
- Input from customer specifications
- Hollow version available for every size

The OMNI gearbox is designed for:
- Robotics
- Packaging and Automation
- Machine tools
- Medical devices
- Material handling
- Positioning systems
- Solar power

Owing to its reduced number of components, the OMNI gearbox also guarantees low maintenance costs and high availability.

**Technical data subject to change, work ranges depending on application**