



Design

OMME GEARS SRL (Ltd) carries out activities of design and prototyping on specific customer requirements, from which it is able to design, size, and engineer individual parts and simple or complex machines.

Range of products

Gears up to 1200 mm in outer diameter, module 6-30
Planetary Gearboxes parallel axis
Gearboxes Planetary Cycloidal up to 7000 kg.

Turning

from diam. 100 mm to diam. 450 mm up to 1000 mm length
from diam. 450 mm to diam. 1200 mm up to 500 mm length

Milling

up to a capacity of 900 mm x 900 mm x 900 mm

Gear-cutting

from diam. 100 mm to diam. 300 mm up to module 10
from diam. 300 mm to diam. 1200 mm up to module 24

External grinding

from diam. 100 mm to diam. 500 mm up to 1000 mm length

Hole grinding

from diam. 100 mm to diam. 500 mm up to 300 mm length

Plan grinding

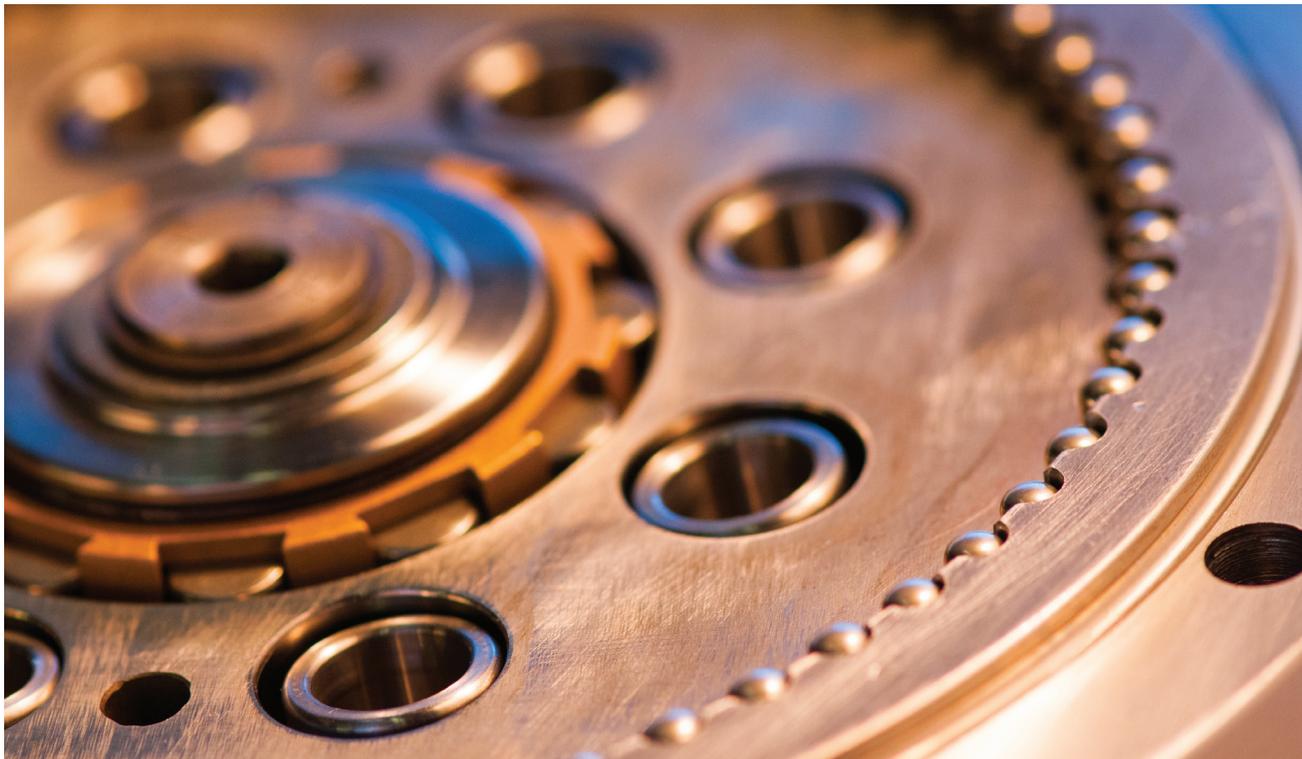
up to 700 mm x 400 mm

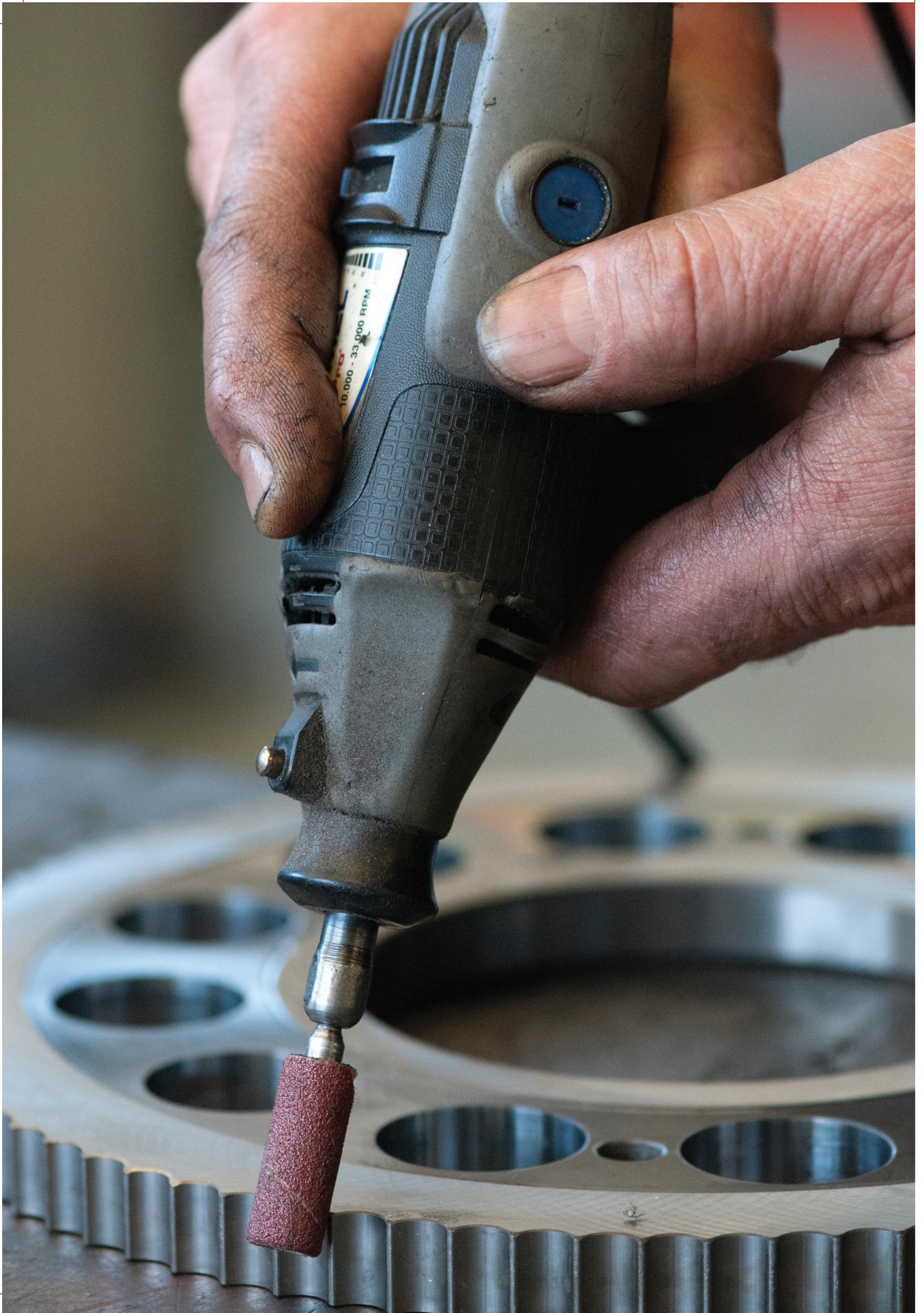
Tooth grinding

from diam. 100 mm to diam. 700 mm up to module 25

Spline grinding

from diam. 50 mm to diam. 300 mm up to 1000 mm length







Cycliodal reducers

Intro

1.

A cycliodal reducer can be referred to as gearless reducer. Unlike classic reducers, which are operated by shearing forces, cycliodal reducers rely on compression forces.

2.

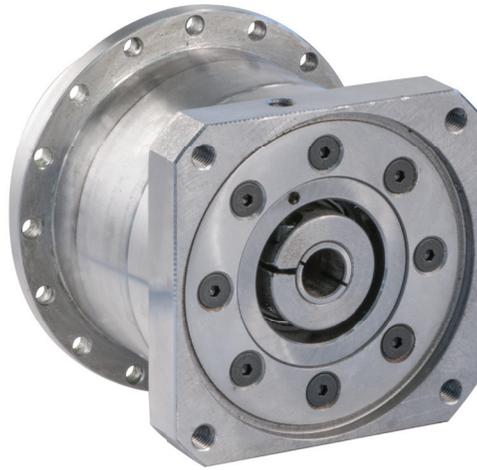
The uniform distribution of loads on every component of the mechanism enables the coupling to achieve a higher transmission capacity, which is not possible with traditional reducers.

3.

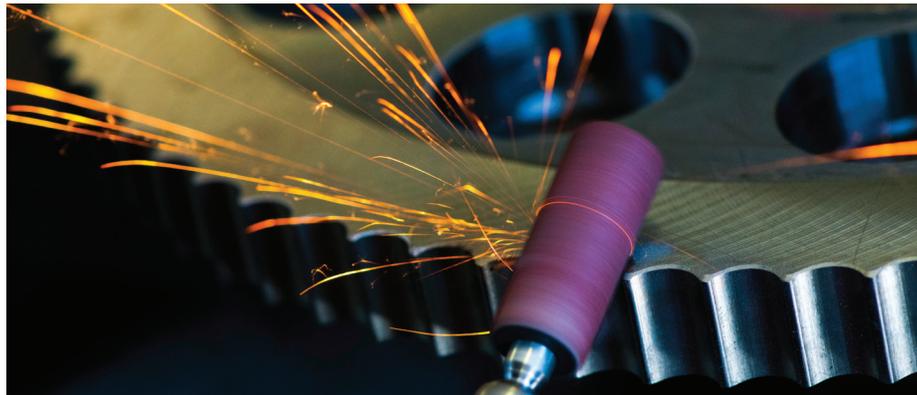
Cycliodal reducers are the result of the development of epicyclic gearboxes and represent the perfect transmission for centrifugal separators having horizontal axle, which are used in several fields, from the food industry to the mining industry. The compact design and the high transmission ratios, achievable in only one phase and with very limited clutter, the considerable reduction of the number of mechanical components, the high loading and overloading capacity along with the versatility of user interfaces, make this product the ideal transmission for centrifugal applications and for all applications requiring kinematics of two degrees of freedom.

4.

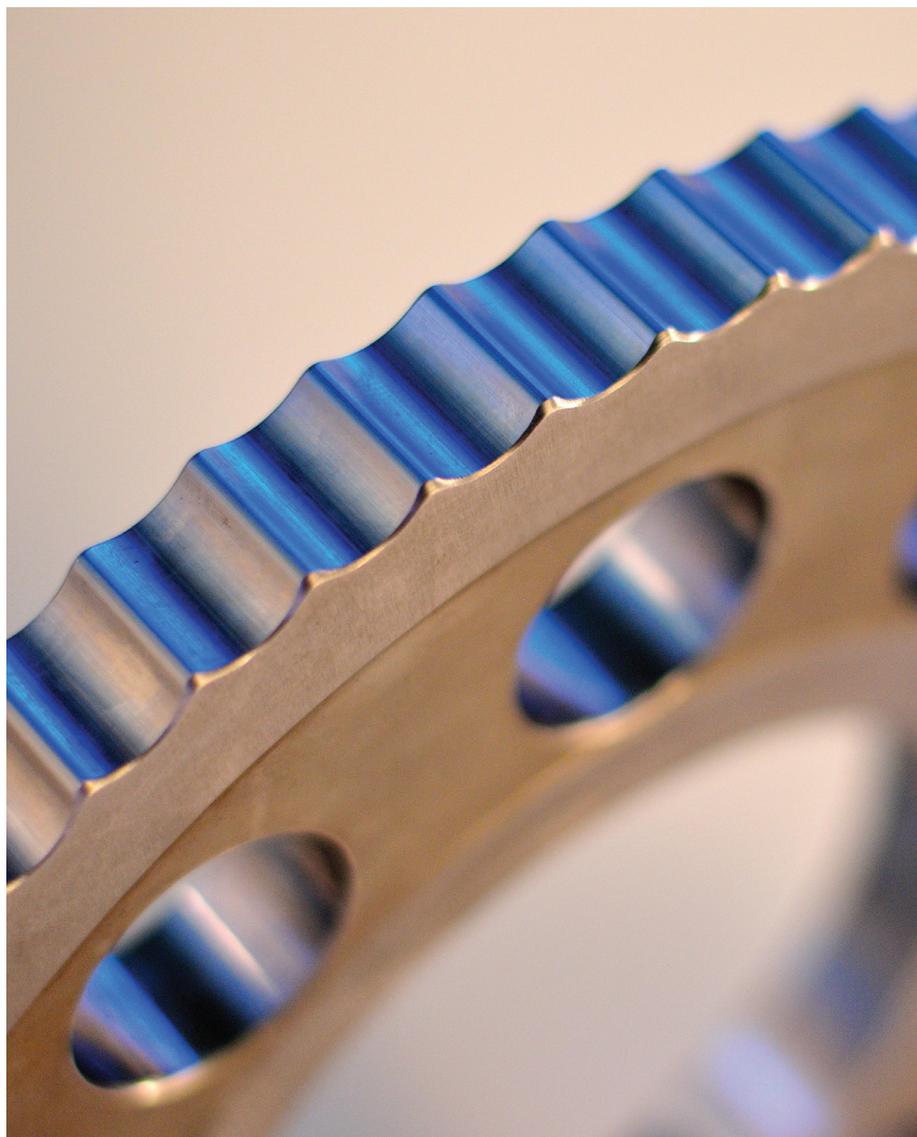
During a centrifugal separation, which is a typical application of cycliodal reducers, the transmission with cycliodal reducer provides the relative velocity between drum and screw. The external case is firmly connected to the centrifuge's drum and rotates at the same speed as the drum. The reducer's output shaft is linked to the screw through an axle shaft, the centering of which is provided by the splined couplings DIN5480, and is able to transmit the required couple for the conveyance of the solid component of the fluid being centrifuged. An electric motor, operated by Inverter, is connected to the input shaft and enables the screw to reach the required speed differential. This function of dehydration is required in separated solid bodies.



OMMEGEARS's smallest reducer
Ideal for application in robotics and motion control
Stationary external case
High reduction ratios and extremely low volumes of couple values



Coupling from 300 Nm to 40000 Nm	Grease lubrication up to size O26
One phase ratios up to 87:1	For specific needs, design and prototyping of specific customer requirements
Multiple phase ratios up to 260:1	Compact
Low noisiness due to the balance according to ISO1940	Use of special materials (i.e. stainless steel) for dietary or biochemical applications
Reduced sizes, compared with epicyclic reducers in terms of reduction ratio	
Drastically reduced maintenance	



Typical applications



Chemical industry



Petrochemical industry and plastic materials industry



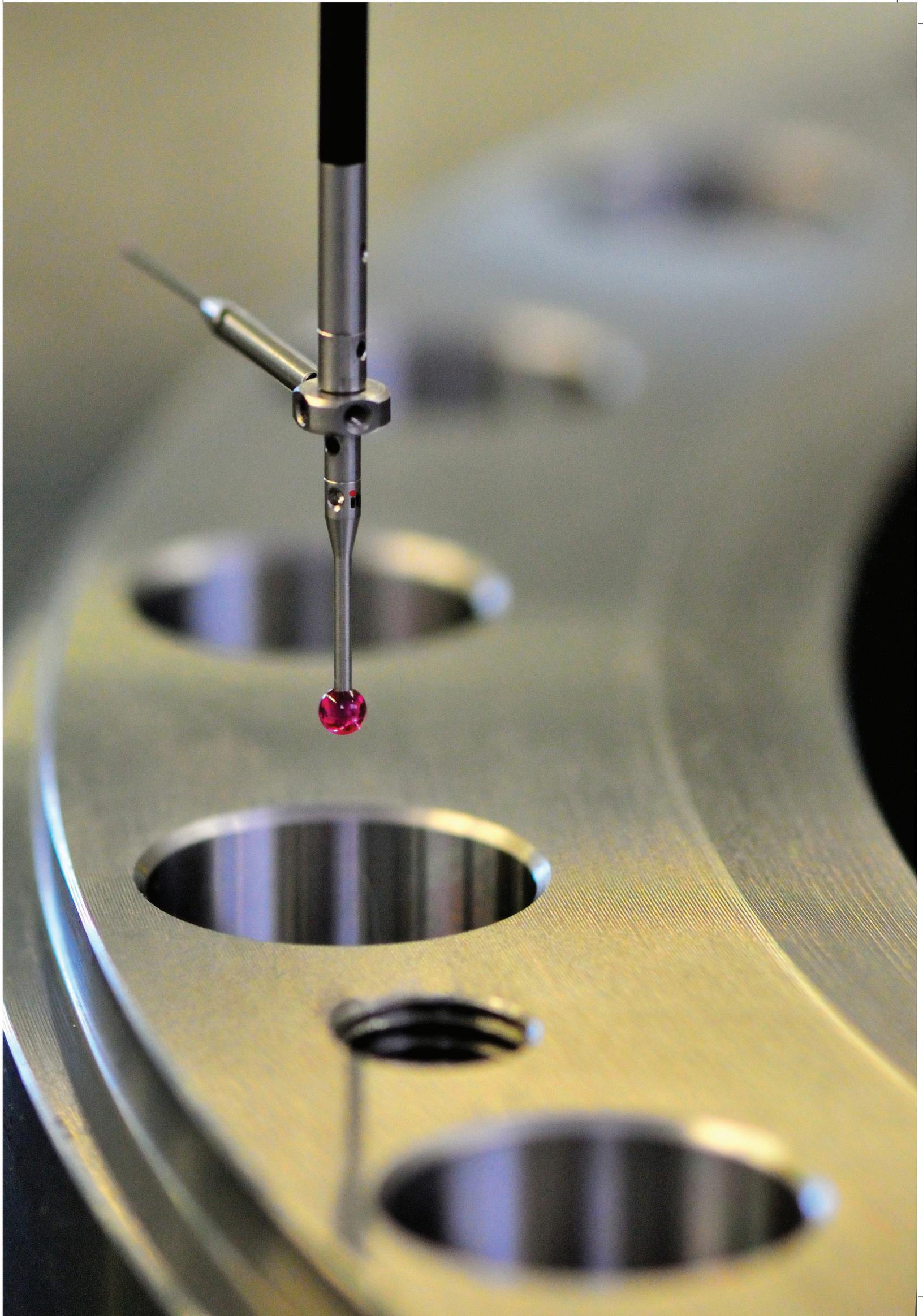
Food industry for the extraction of oil and fats



Purification of waters



Purification of washing fluids and drilling muds





OMME GEARS SRL (Ltd) is specialized in design and co-design either of components and of standard or special machines, in the manufacturing of cycloid gear boxes and in the production of medium and large-size gears.

Our staff is highly trained and motivated to continuous professional growth through regular training courses.

The varied and flexible machine park and the high attention to the evolution of technologies let us introduce ourselves as a **reliable and concrete partner**.

Our aim is to make the customer protagonist in the business process through the continuous dialogue and a close cooperation.

Our seat covers an area of 4000 mq.





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