

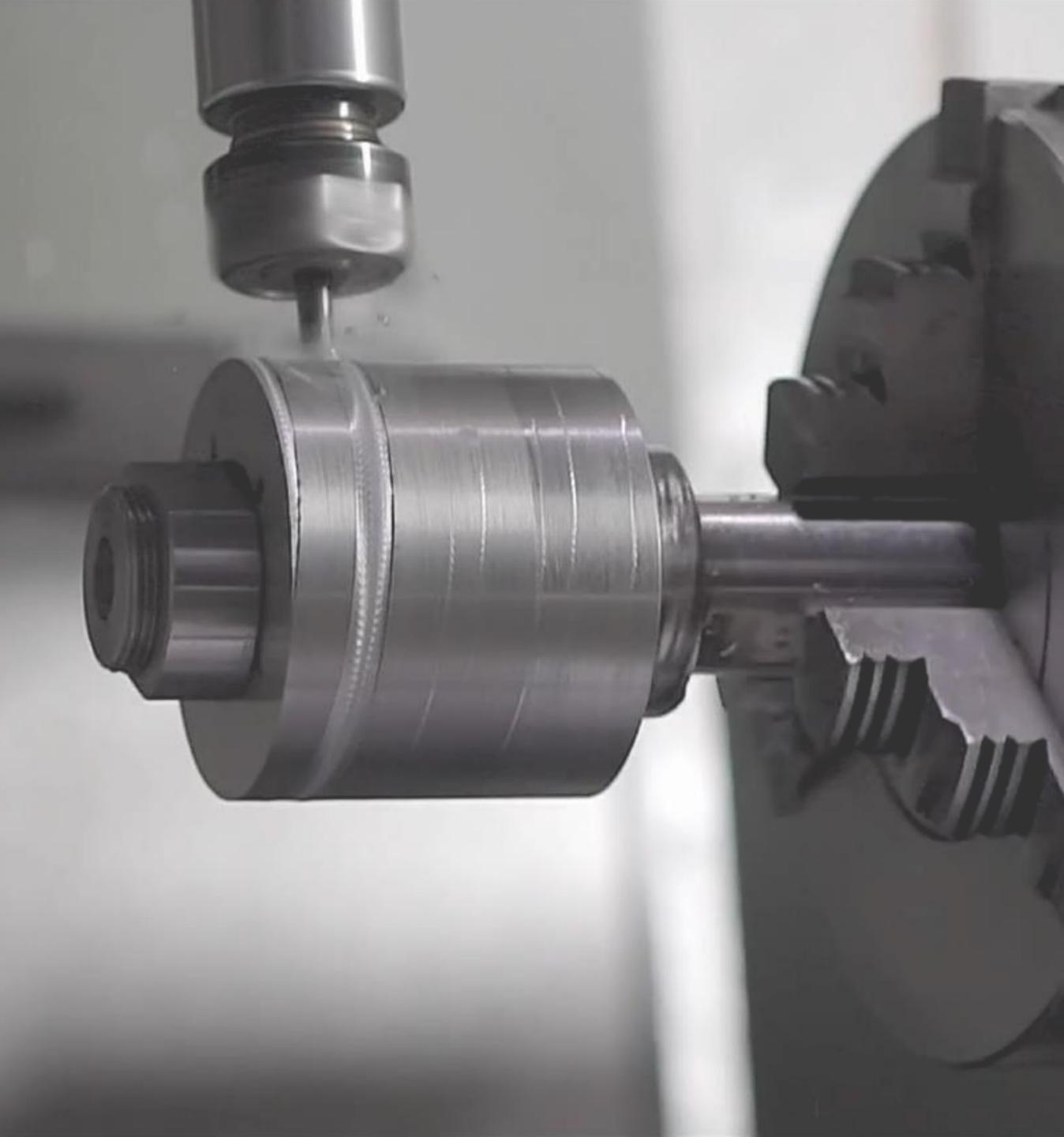


### MANRO company Represented in Europe by Plastic World Solutions GmbH

Engineering and production of the spare parts for the extrusion equipment

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## About company

The main activity of the company Manro is engineering and production of the components, spare parts for the extrusion equipment, using in the different industrial branches

### Advantages of working with us

Manufacture elements acc. to your samples and drawings

Experience in production the screw elements since 2009

Work on the modern and high-quality equipment by DMG MORI

Produce and supply in the shortest time

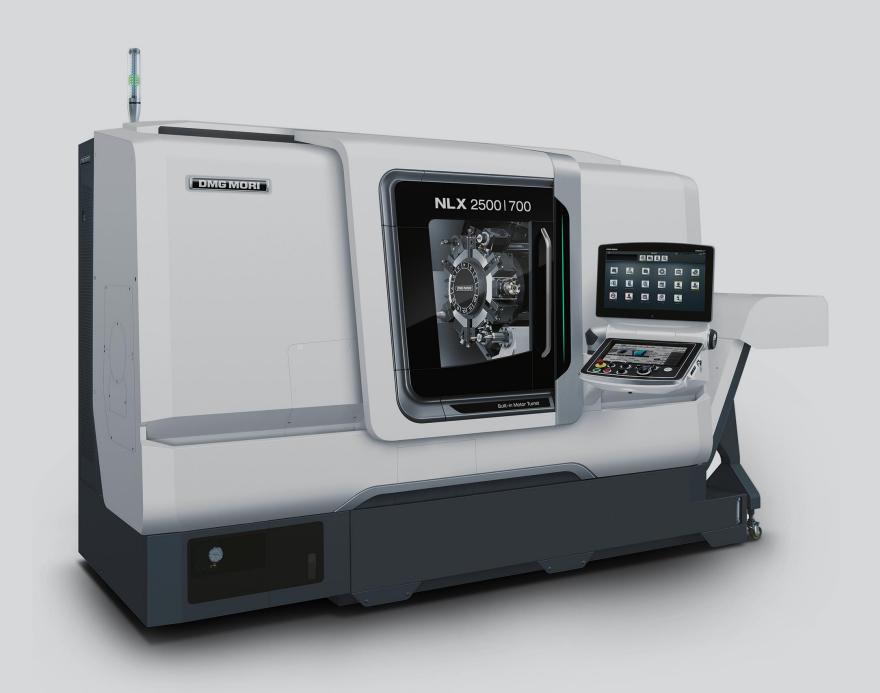
After sale service

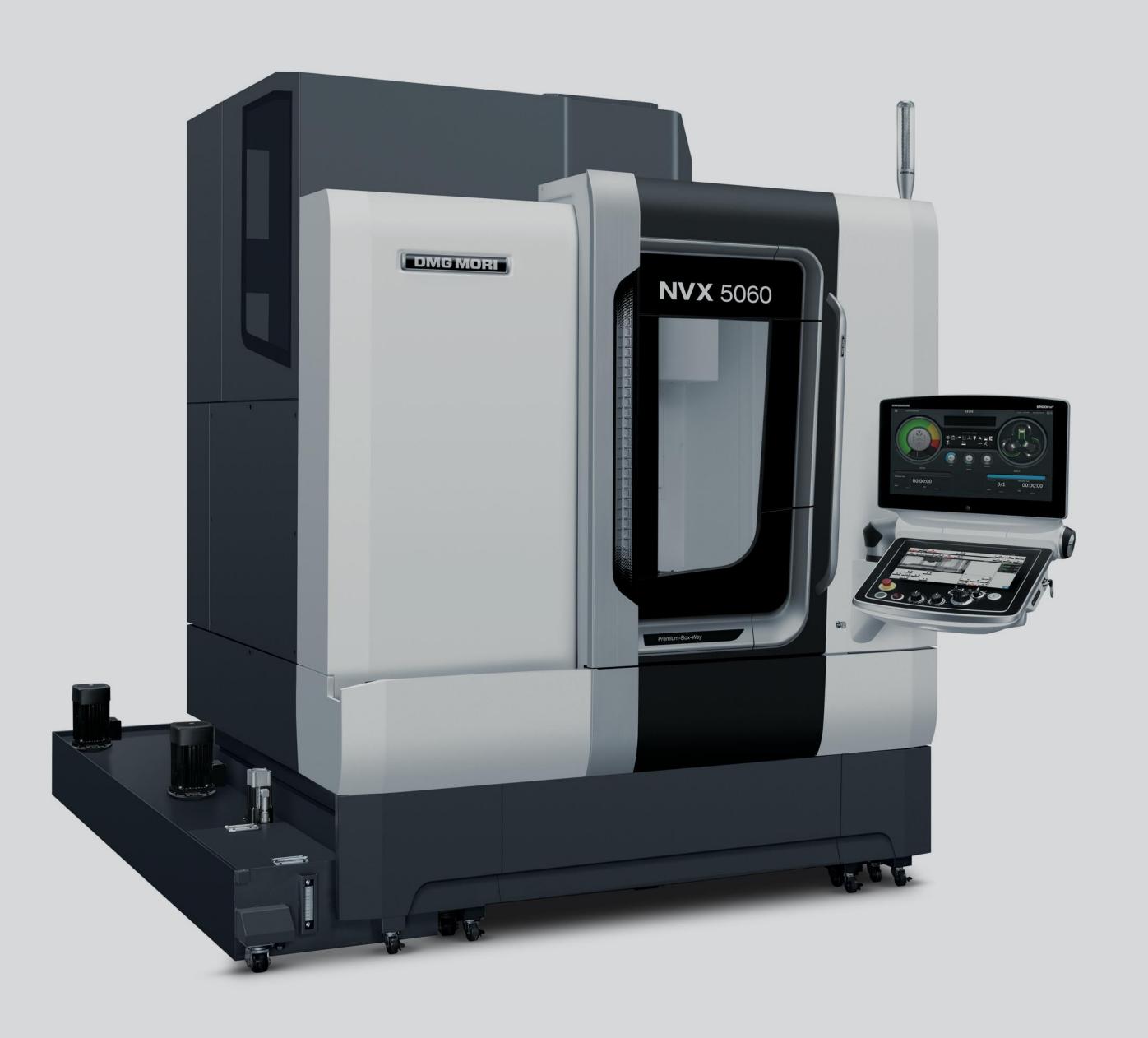
Use high-quality material for elements

## Equipment

Our company has modern metalworking equipment by the world's leading manufacturers as DMG MORI

www.dmgmori.com







### Screw elements

We produce screws and screw elements for different extruders and side feeders. This is one of the main delivery program of our company.

We have a big knowledge base for the engineering and production of the screw elements to different twin-screw extruders by world producers.

If you do not find the necessary brand, our specialists need only one sample of your part for the engineering of a spare part for you.











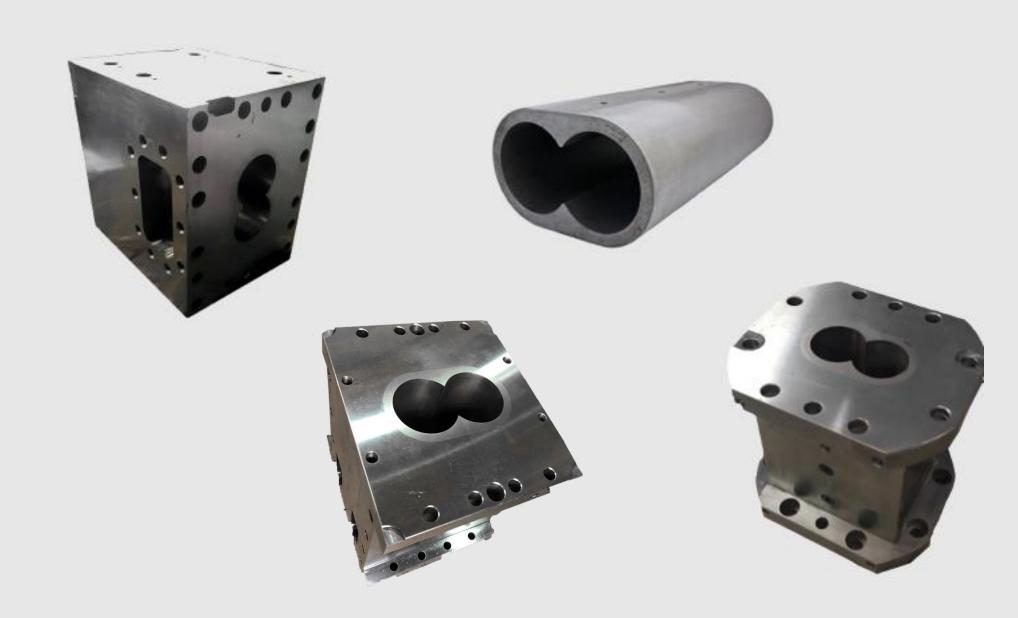


### Barrels

Our company began the production of the barrels with the interchangeable liners for multiple uses.

The cooling ducts of the material cylinders have an entrance with the end surfaces, removing the sealing caps to serve them freely and repeatedly. Our specialists can repair the weared barrels successfully.

The repairing we do even in that case if the material cylinder has a one-piece design without the removable liner. And so we can give, the second life your weared barrels without to prepare new one.



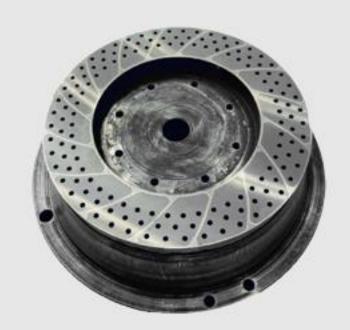
## Dies, knives, inserts

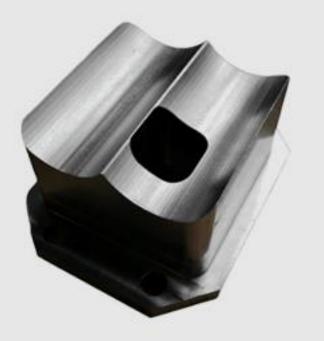
Every tool, even having very high quality, can blunt and break over time, anyway, it fails in regular operation mode. To begin the practical and economical work we recommend to buy the knives for your pelletizing system. Our machines are able to produce knives from a thickness from 2 mm.

It's possible to make the screw dispenser, insert the degassing, the screw of the side feeders and dispensers, coupling shafts, spare parts for power reducer, the hopper of the dispensers, degassing's vacuum chambers and many others using the individual specifications.











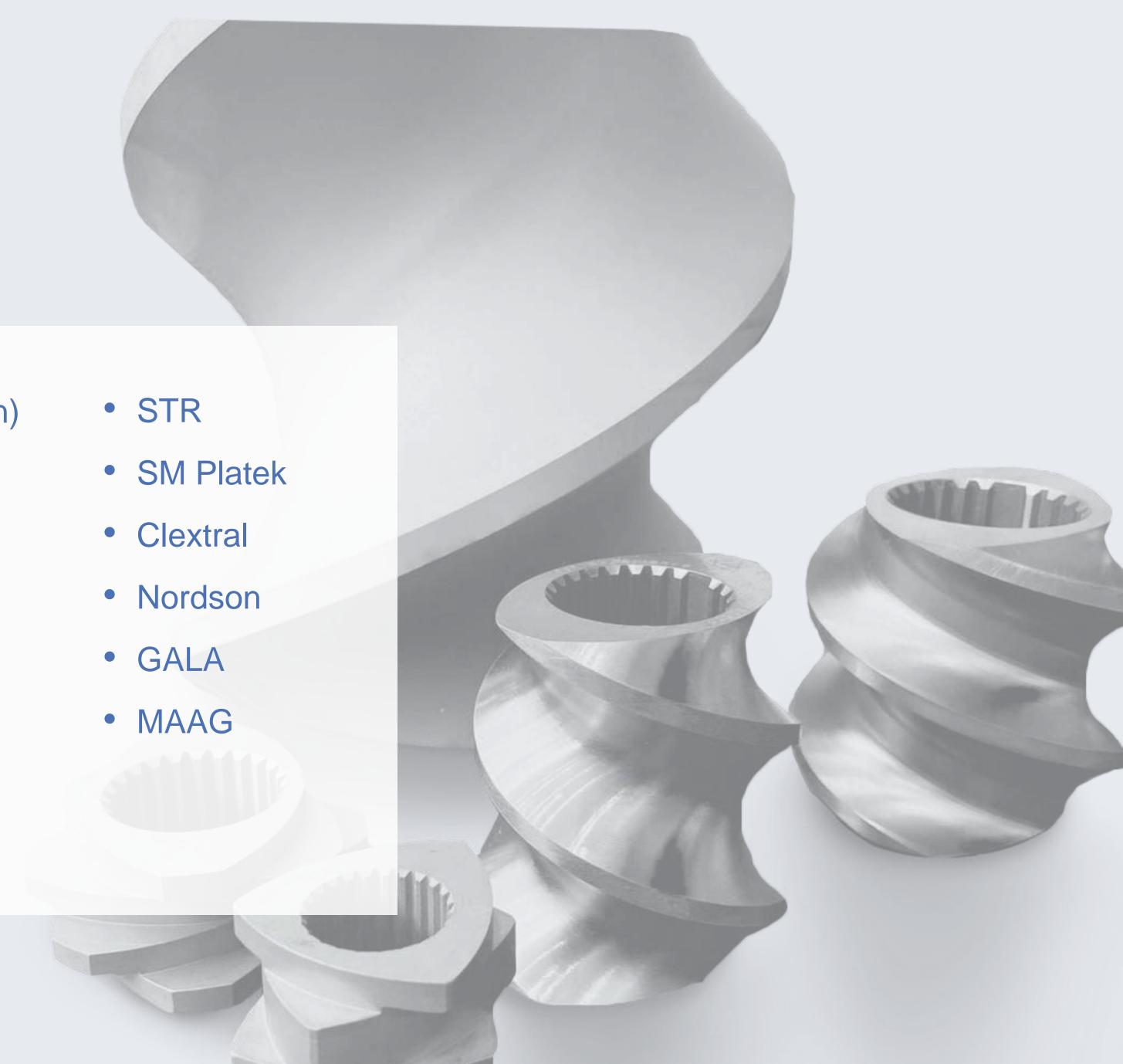




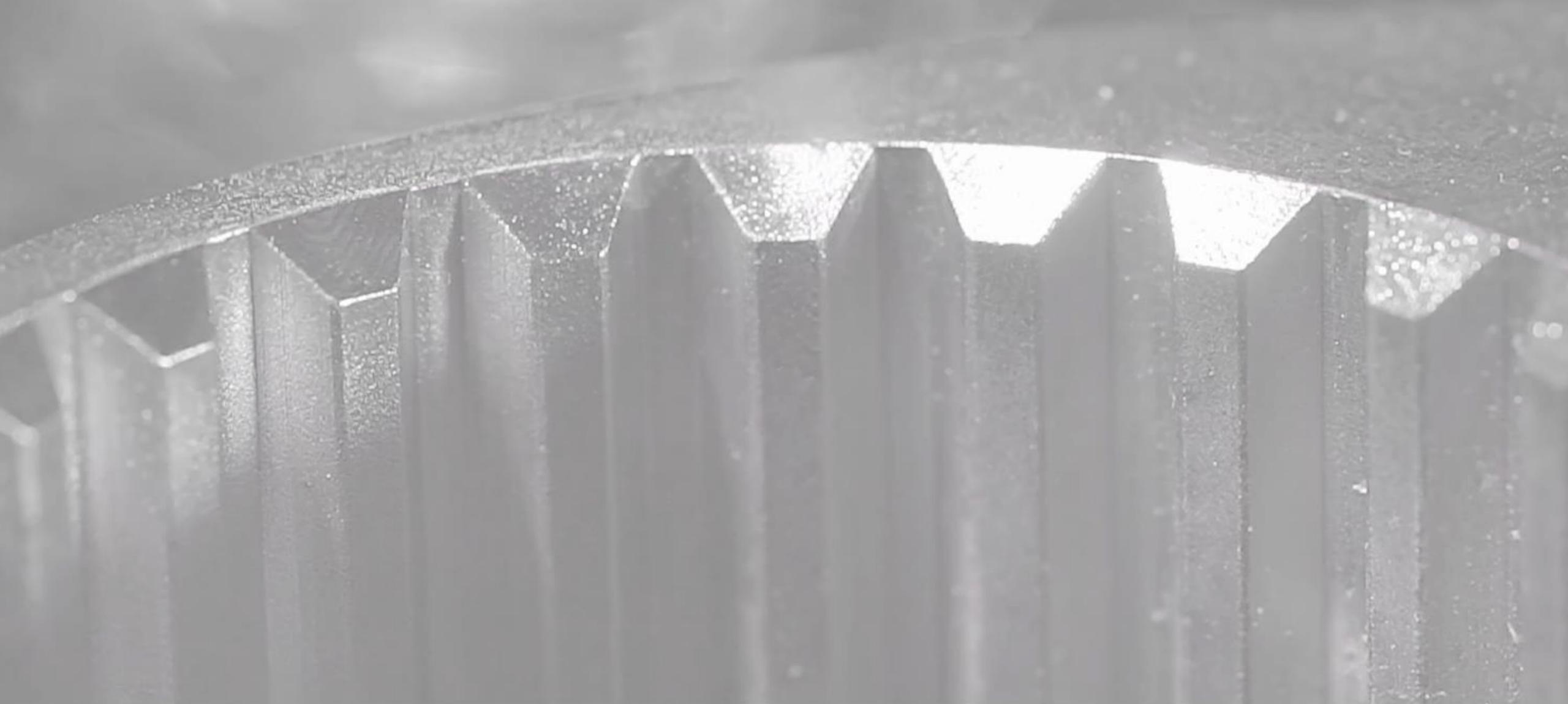
# Compatible with equipment

- Krauss Maffei
- Bühler
- Buss
- Coperion
- ICMA
- APV
- GME

- Leistritz (HP design)
- Maris
- Mas
- NR
- OMC
- SHJ
- Theysohn



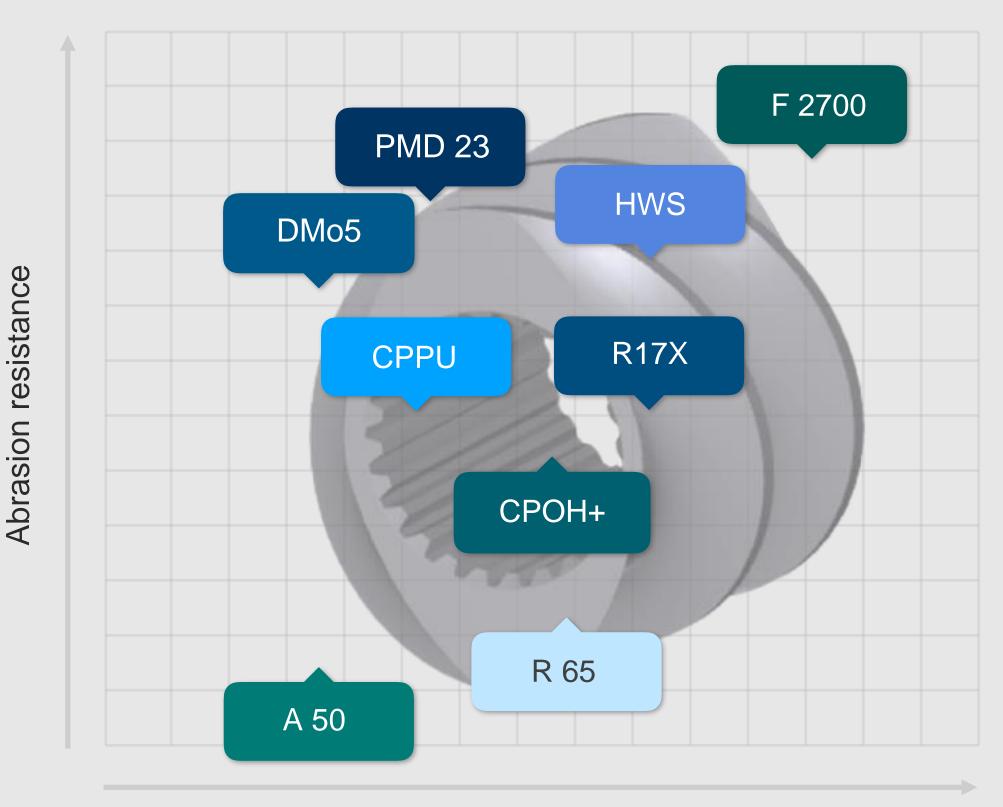
## Material portfolio



### Screw elements

We use innovative and efficient material solutions with global manufacturers to maintain and hold the hide quality. You can choose any steel for the manufacturing your elements

Code	Material	Hardness
CPPU	Tool steel	61-63 HRC
A 50	Nitrided steel	Surface 64 HRC
PMD 23	PM-HSS	62-64 HRC
R 65	Stainless steel	50-55 HRC
F 2700	PM-stainless tool steel	58-60 HRC
HWS	PM-tool steel	60-63 HRC
CPOH+	PM-tool steel	58-61 HRC
DMo 5	HSS	60-63 HRC
R17X	Stainless tool steel	58-61 HRC



Corrosion resistance

#### Building Types:

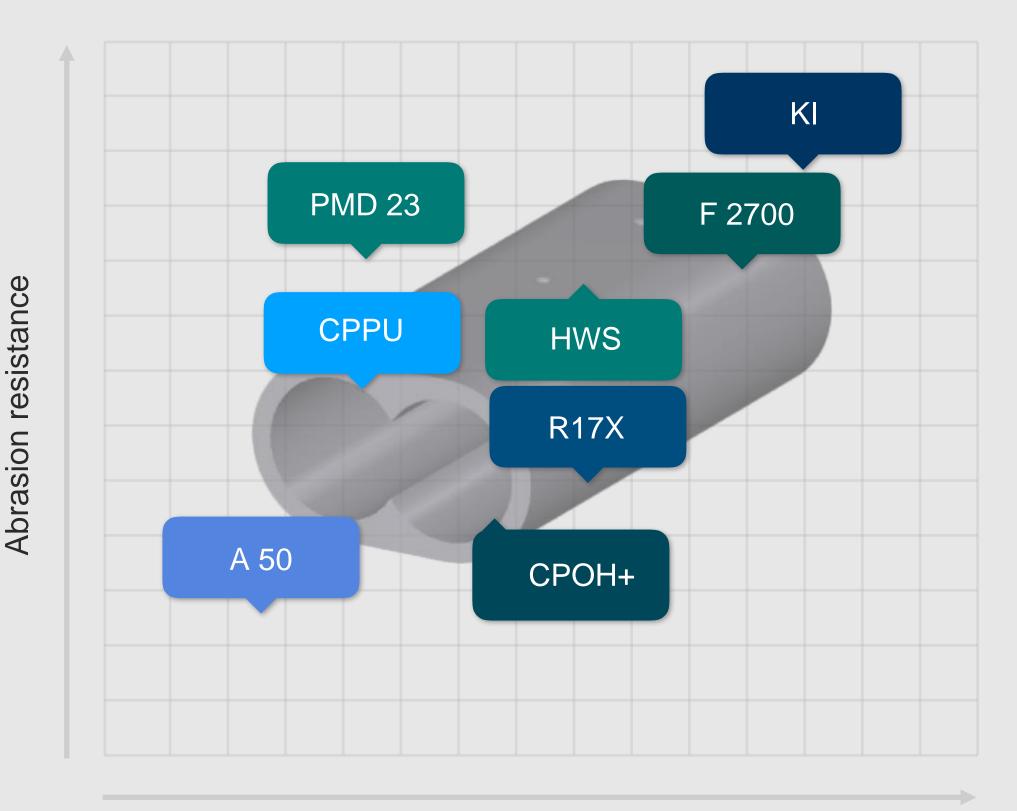
- Conveying elements
- Reverse conveying elements
- Kneading blocks and disks
- Mixing elements

- Undercut elements
- Side feeder elements
- Single, double, triple lobe
- Diameter 18 to 250

### Liners

We use innovative and efficient material solutions with global manufacturers to maintain and hold the hide quality. You can choose any steel for the manufacturing your elements

Code	Material	Hardness
A 50	Nitrided steel	Surface 64 HRC
F 2700	PM-stainless tool steel	61-63 HRC
CPPU	Tool steel	60-62 HRC
HWS	PM- tool steel	61-63 HRC
R17X	Stainless tool steel	52-57 HRC
CPOH+	PM-Tool steel	57-60 HRC
KI	PM-HIP	54-57 HRC
PMD 23	PM-HSS	61-63 HRC



#### Corrosion resistance

#### **Building Types:**

- Feed barrels
- Closed barrels
- Side-feed barrels
- Venting barrels
- Combi barrels
- Wear liners

- Thermocouple bores
- Injection bores
- Degassing inserts
- Plugs
- 8-bore diameter 12
  to 170 mm



Ireland

Portugal

## Contacts

#### Official representative in Europe

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