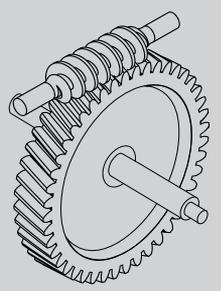
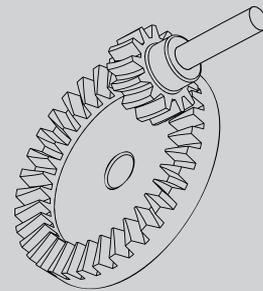
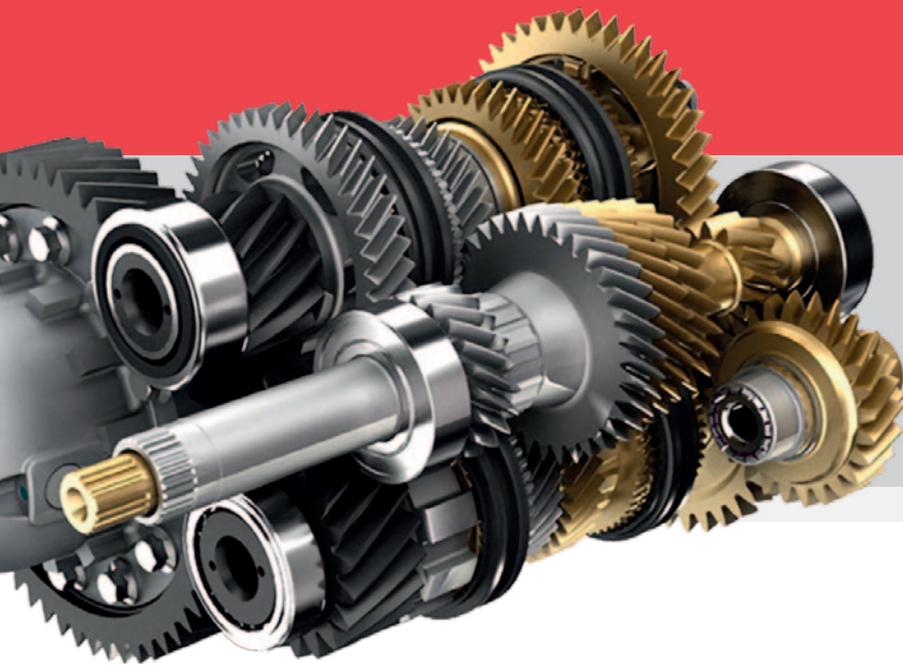


CONVENTIONAL
ABRASIVES AND
SUPERABRASIVES
IN THE
TRANSMISSION
INDUSTRY



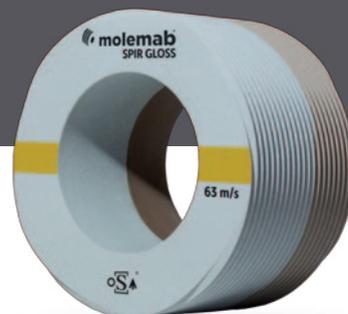
 **molemab**[®]
we shape your world

C1



CONTINUOUS GENERATING GEAR GRINDING

Tailored to the requirements of the following machines: Kapp Niles, Reishauer, Liebherr, Klingelberg, Gleason, Burri, Samputensili, Mitsubishi and others on request.



SPIR-3E

Excellent, Economic, Efficiency

Standard Grains available:
11A 080 - 21A 120

Standard Bonds available:
V40 (63 m/s) - V45 (63 m/s)
V20 (80 m/s)

Maximum speed of use
up to 80 m/s

Excellent sharpness and cutting
capacity, high profile retention

Cool grinding with porous
bond system

Optimized economic efficiency
with high performance
parameters

Available in stock
in different sizes

SPIR-PLUS1

Premium

Standard Grains available:
3AZ 080 - 3AZ 100

Standard Bonds available:
V44 (63 m/s) - V20 (80 m/s)

Maximum speed of use
up to 80 m/s

Excellent sharpness and stock
removal, high profile retention

Excellent profile retention and
cutting capacity considerably
reduce the dressing cycles,
allowing a significant increase in
productivity with corresponding
cost reduction

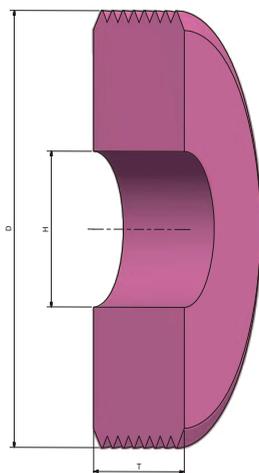
SPIR-GLOSS e GLOSS-PLUS

Standard Grains available:
11A 080 + Gloss
3AZ 80 + Gloss

Standard Bonds available:
Gloss V40 (63 m/s)
V44 (63 m/s)
Plus V20 (80 m/s)

Double layer screw grinding
wheel for gear grinding

The vitrified bonded layer is
intended for roughing and is
coupled with a resin bonded fine
abrasive layer. This double
combination allows the grinding
wheel to do the roughing
operation and at the same time
to carry out a finishing step with
final values equal to $R_z = 1.2$
and $R_a = 0.15$



SPIR profile

D = Diameter
T = Thickness
H = Bore
R = Thread depth, optional lieid

Modul =
Pressure angle =
Number of stairs =
Thread direction (L - R) =

SINGLE RIB GEAR GRINDING

Tailored to the requirements of the following machines: Kapp Niles, Liebherr, Klingelberg, Gleason, Samputensili, Mitsubishi and others.



SPIR-SP

Standard Grains available:
3SP 060 - 3SP 080

Standard Bonds available:
V44 (63 m/s) - V20 (80 m/s)

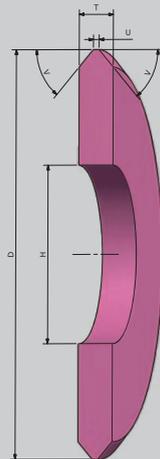
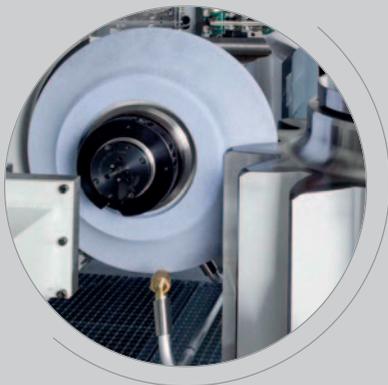
Extended profile retention

Long wheel life

Cooler grinding action

Good burn-free surface finish

Reduced cost per part



SP profile

- D = Diameter
- T = Thickness
- H = Bore
- V = Angle (face point to side)
- U = Flat face width



BEVEL GEAR GRINDING

Tailored to the requirements of the following machines: Kapp Niles, Liebherr, Klingelberg, Gleason, Samputensili, Mitsubishi and others.

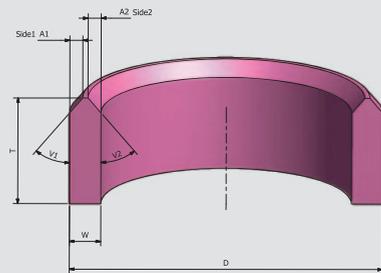
SPIR-BG

Standard Grains available:
3SQ 060 - 3SQ 120

Standard Bonds available:
V44 (63 m/s)

Available with or without mounting plates

High performance abrasives for bevel gear grinding are specially tailored to the requirements of gear grinding process



BG profile

- D = Diameter
- T = Thickness
- W = Rim thickness
- V1 = Face angle side 1
- V2 = Face angle side 2
- A1 = Distance to point (from side 1)
- A2 = Distance to point (from side 2)

CYLINDRICAL GRINDING AND PLUNGE GRINDING

Molemab offers a wide range of products for machining gear shafts: conventional ceramic wheels with a special bond, Easy Grind Line, and Vitrified and Electroplated CBN wheels.



EG LINE

The grinding wheels of the “EG” line are produced with high quality abrasives and latest generation bond systems that guarantee a “cold” cut.

Standard Grains available:
43A 080 e 120 - 48A 080 e 120

Standard Bonds available:
VK7 (50 m/s)

Innovative low temperature bonds

The high quality of the abrasive improves profile retention

The microporosity facilitates the action of the coolant and prevents the generation of burn on the shoulders



The continuous and growing demands of high-tech components and production difficulties require tools with increasingly efficient technology. Molemab faces this challenge in the field of OD grinding with a range of high-performance CBN grinding wheels and two different bond technologies: Vitrified “VIT” CBN and Metal-Ceramic “VITALIC” CBN.

VITRIFIED CBN AND VITALIC CBN

Vitrified Superabrasive (CBN) wheels

Applications

External grinding of the gear shaft

External gear grinding

Complete grinding of pump gears

Grinding of drive shafts

Advantages

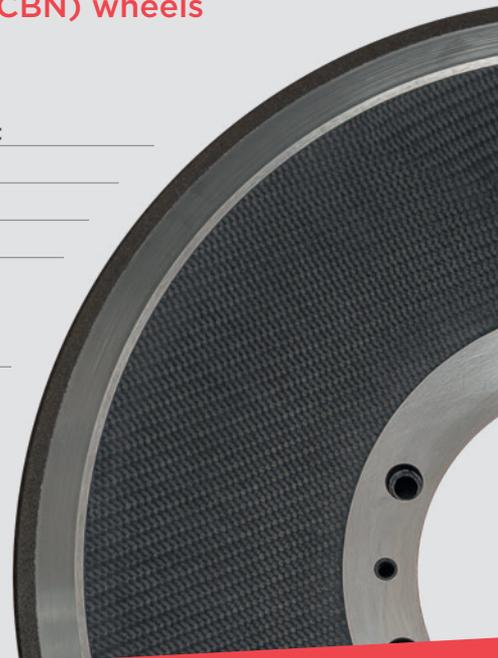
High profile retention

Reduction of dressing cycles

“Cold” cut without burn

Usable from 50 m/s

Very wide range of use



INTERNAL GEAR GRINDING

Molemab is able to produce a wide range of grinding wheels for bore grinding. Our customers can choose between different technologies: wheels in conventional abrasive, vitrified CBN or electroplated CBN.



ID BASIC Conventional wheels

Corundum or ceramic abrasive wheels are widely used for bore grinding. Ideal for grinding small batches, they are easily profiled and adapt to various types of materials. Molemab offers a wide range of wheels ready in stock in different grain sizes and dimensions.

ID PLUS Vitrified CBN and electroplated CBN wheels

Vitrified bonded CBN grinding wheels have made it possible to achieve significantly higher yields in grinding operations. Our wheels are designed to obtain the best performance during processing with significantly reduced dressing cycles. Extending the dressing and profiling intervals enhances the precision of the machine tool and increases its productivity. These innovative wheels find their ideal use in a wide range of processes. Among them we find the grinding of fuel injection nozzles, parts of pumps and gears, roller bearings, gears, constant velocity joints, valves and many others. All wheels must comply with strict precision standards and are pre-profiled with a contour very close to the final shape, so as to minimize abrasive waste and preserve the integrity of the abrasive layer.





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