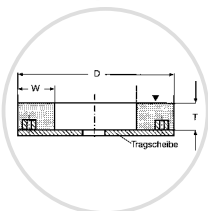


Grinding with portable grinding machines DIN shape no. 1, 4, 5, 6, 27, 41, 42

Application	Grinding wheel specification		
Material	up to 40 m ^s	50 m ^s (blue)	80 m ^s (red)
With straight grinders			
GG 18-24 and GG 40-70	81C 24-9 Q 3 V 80C 20-3 Q 4 B	80C 20-3 Q 4 B 92C 20-9 Q 3 B	80C 16-9 P 4 BF 92C 24-1 P 5 BF
Steel casting	10A 24-3 Q 4 V	32A 24-3 Q 5 B	10A 20-3 P 4 BF
With angular grinders (snagging)			
GG, GGG, GS	high cutting performance general use long wheel life		17A 24-9 P 4 BF 17A 30-9 Q 4 BF 17A 30-9 T 4 BF
With angular grinders (cut-off grinding)			
GG, GGG, GS Steel and iron Light/non-ferrous metals	Riser Profiles, tubes		17A 24-9 Q 4 BF 17A 30-9 Q 4 BF 85C 30-9 P 4 BF

Shape 37



Grinding on face/round parts deburring machines DIN shape no. 37

Application	Grinding wheel specification
Material	50 m ^s (blue), resin bond
Face deburring	
GG 18-24 GGG 40-70	61A 16-9 O 3 B 61A 16-9 P 4 B
Steel casting	61A 12-9 M 3 B
Round parts deburring	
GG 18-25 GGG 40-70	60A 12-9 R 1 B 71A 14-9 U 1 B

Please contact us!

Further information and product recommendations at www.leisse.org

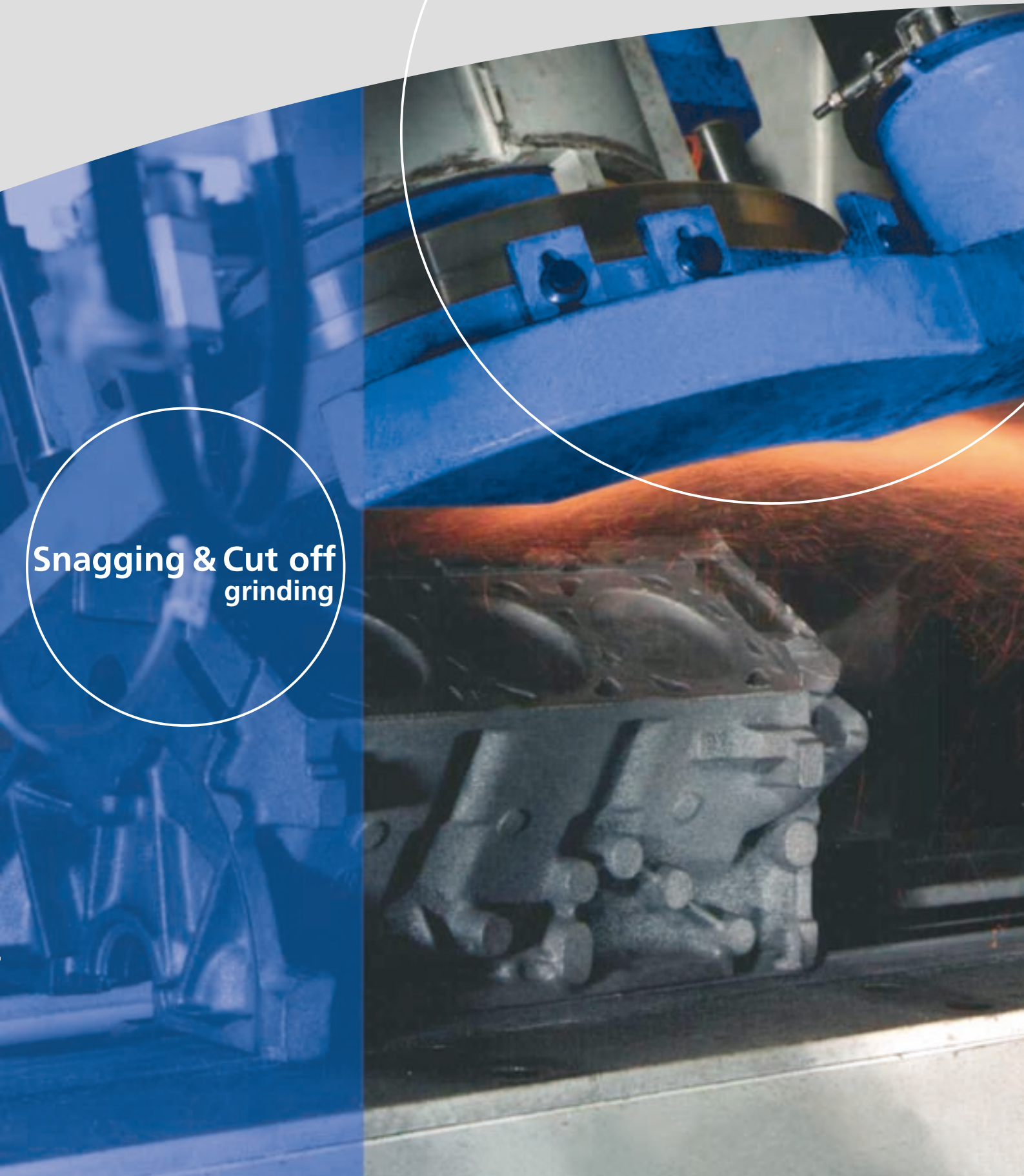


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Evolution in grinding.

Snagging & Cut off grinding



Efficient snagging and cut-off grinding using THELEICO

Snagging and cut-off grinding frequently also termed "fettling" is an important manufacturing step in the foundry and steel industry, when producing cast and steel parts.

The casted or forged workpieces have to be ground for deburring surfaces, and here, THELEICO products have set a standard for many decades with respect to product quality and profitability. Our products are mainly used in contract foundries, contract fettling industry and the forging and steel industry, where products are manufactured including the following branches of industry: automotive industry and automotive supplying industry, road construction, car, motor and aircraft construction.

Grinding methods and materials

During snagging and cut-off grinding by hand, use is made of portable grinding machines, table grinders, floor stand grinders and swing frame grinders. Semi- or fully automatic machining is carried out by grinding robots, most of them having an electro-hydraulic control.

The abrasive material to be used for the bonded abrasives is crucially dependent on the materials to be ground and workpiece geometries. It is possible to make the following classification:

- GG, GGG, GS, GT (cast group)
- ST37, ST52, 42CrO4 (steel group)
- Aluminium, aluminium alloys (light metal group)
- Brass, nickel (brass group)

Variations of THELEICO bonded abrasives

As a result of different material characteristics of workpieces, different combinations of abrasive materials and bonds are required. Hard and simultaneously tenacious materials require higher portions of high purity aluminium oxide. Soft and at the same time tenacious as well as hard and simultaneously brittle materials require a higher silicon carbide portion in the bonded abrasive, and in respective cases it is even indicated to do without the aluminium oxide portion as abrasive material.

In this context the resinoid bonding is preferred due to increased peripheral speeds at 50 m^{s} to 80 m^{s} and its resistance to stroke and impact.



THELEICO quality criteria

For the aforementioned applications, grinding products must also come up to the following quality criteria:

- high stock removal
- long wheel life
- high cutting performance at low physical power input
- cool grinding operation
- high surface finish (if required)

Snagging and cut-off grinding wheels made by THELEICO meet these criteria in a special way, as they are always individually adapted to the respective application, and here lies one of our strengths.



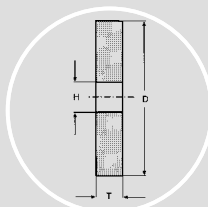
THELEICO prime quality grinding wheel product range

Applications

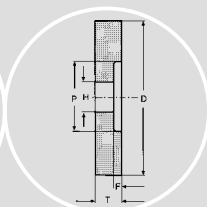




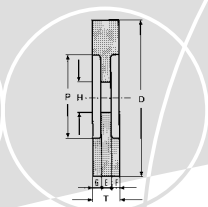
Shape 1



Shape 5



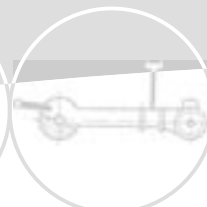
Shape 7



Floor stand grinder



Swing frame grinder



Grinding on high pressure grinding machines DIN shape no. 1

Application		Grinding wheel specification	
Material	Workpiece	63 m ⁻⁵ (yellow)	80 m ⁻⁵ (red)
Alloy Steel	Grinding billets and slabs	73A 20-1 X 1 B	73A 20-1 X 1 B
Steel	Grinding billets and slabs	63A 12-5 Z 1 B	63A 12-5 Z 1 B

Grinding on table and floor stand grinders DIN shape no. 1, 5, 7

Application	40 m ⁻⁵ peripheral speed			
Steel und steel casting	10A 24-3 Q 5 V 10A 36-3 P 5 V	10A 46-3 P 5 V 10A 60-3 M 5 V	10A 24-3 Q 5 V 10A 46-3 P 5 V	10A 36-3 P 5 V 81C 24-9 Q 2 V
Grey cast iron (GG) and spheroidal cast iron (GGG)	10A 24-3 Q 5 V 10A 46-3 P 5 V	10A 46-3 P 5 V 81C 24-9 Q 2 V	10A 24-3 Q 5 V 10A 46-3 P 5 V	10A 36-3 P 5 V 81C 24-9 Q 2 V
Aluminium alloys	40A 30-3 O 5 V	80C 20-2 O 4 V	40A 30-3 O 5 V	80C 20-2 O 4 V
Bronze and brass	81C 24-9 Q 2 V	81C 24-9 Q 2 V	81C 24-9 Q 2 V	81C 24-9 Q 2 V

Grinding on table and floor stand grinders DIN shape no. 1

Material	50 m ⁻⁵ (blue)	63 m ⁻⁵ (yellow)	80 m ⁻⁵ (red)
GG 18-24	90C 20-9 R 3 B	50A 16-9 P 3 B	33A 20-9 Q 4 BF 50A 20-9 R 5 BF
GG 18-24 and GGG 40-70	50A 16-1 O 3 B	70A 16-9 Q 3 B	45A 20-9 O 5 BF 50A 20-9 Q 5 BF
GTS	50A 20-9 Q 2 B	50A 16-9 R 3 B	45A 20-9 N 5 BF
GTW	60A 20-1 P 4 B	60A 16-9 Q 3 B	45A 20-9 N 5 BF
Steel casting	33A 16-9 P 4 B	33A 16-9 O 4 B	45A 20-9 M 5 BF

Grinding with swing frame grinders DIN shape no. 1

Material	50 m ⁻⁵ (blue)	63 m ⁻⁵ (yellow)	80 m ⁻⁵ (red)
Steel casting	33A 16-9 Q 4 B 60A 16-9 R 5 B	33A 16-9 Q 4 B 50A 14-9 P 4 B 60A 16-9 Q 5 B	32A 20-9 O 5 BF
GG 18-24 and GGG 40-70	60A 16-9 R 3 B 60A 16-9 Q 5 B	50A 14-9 P 4 B	32A 20-9 O 5 BF 50A 16-9 P 5 BF

