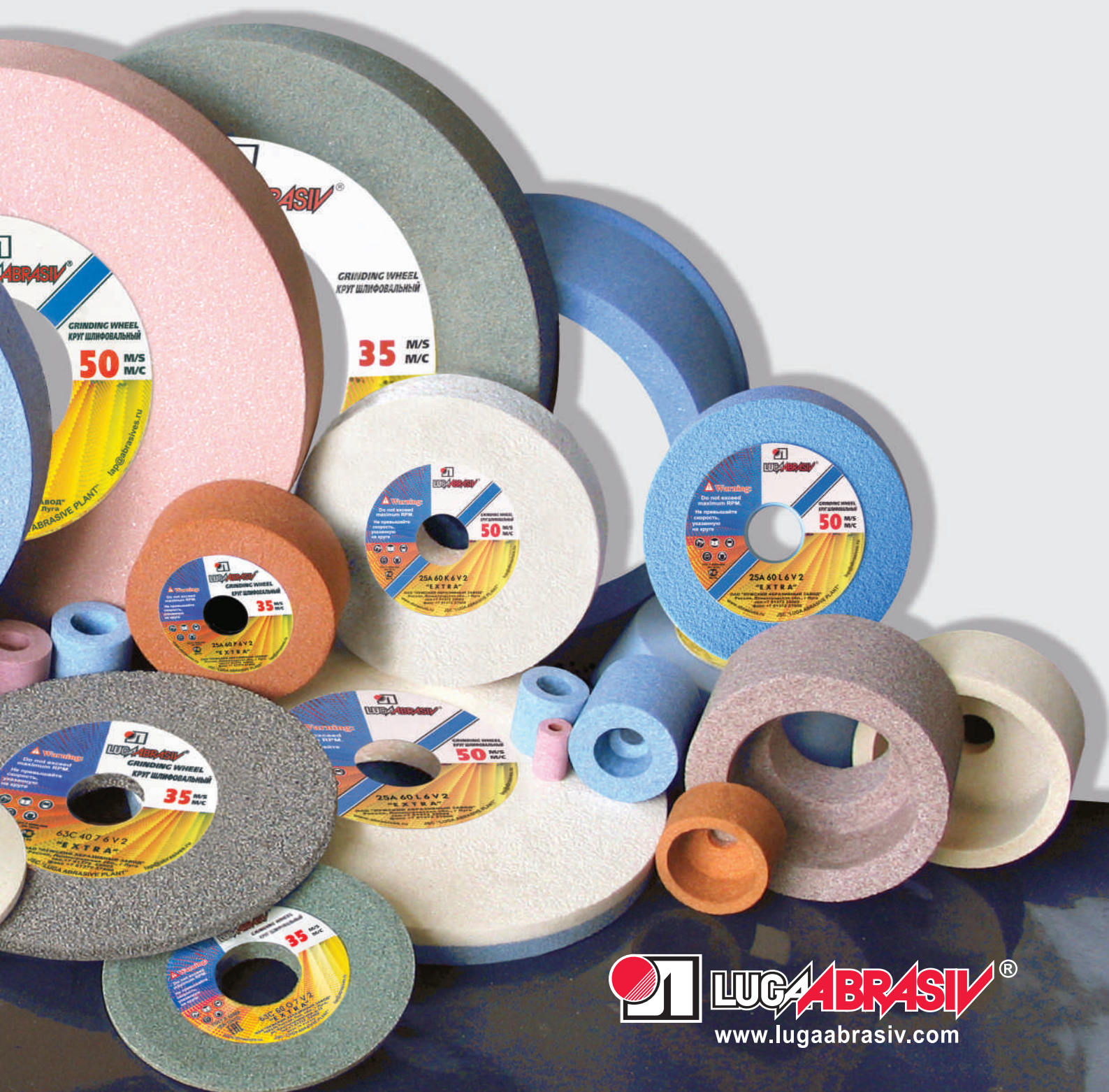


Abrasive tools on ceramic bond



LUGA ABRASIV®

www.lugaabrasiv.com

SYSTEM OF ABRASIVE TOOLS MARKING

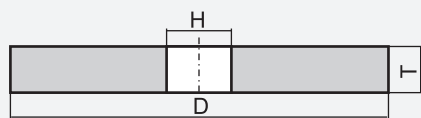
$\overset{D}{\underset{1}{3}} \overset{T}{\underset{2}{150 \times 16 \times 32}} \overset{H}{\underset{3}{25A}} \underset{4}{40} \underset{5}{K} \underset{6}{6} \underset{7}{V} \underset{8}{30} \underset{9}{2}$

1. TYPE	
WHEELS	
1 - straight profile wheel	
2 - annular wheel	
3 - conic profile wheel	
4 - double-sided conic profile wheel	
5 - recessed wheel	
6 - cup-cylindrical wheel	
7,8,9 - double-sided recessed wheel	
10 - double-sided recessed hub wheel	
11 - cup conic wheel	
12 - flat dish wheel	
14 - dish wheel	
20 - one-sided conic recessed wheel	
21 - double-sided conic recessed wheel	
23 - one-sided conic and cylindrical recessed wheel	
27 - depressed center wheel	
35 - straight profile butt-end wheel	
36,37,40 - wheel with pressed-in fastening components	
38 - hub butt-end wheel	
41 - cut-off wheels	
42 - cut-off wheels with depressed center	
SEGMENTS	
SP - rectangular	
1S - convex-concave	
2S - concave-convex	
3S - convex-flat	
4S - flat-convex	
5S - trapezoidal	
6S - for floor grinding	
7S - for surface grinding	
9S - for rail grinding	
STONES	
BP - rectangular	
BKv - square	
BT - triangular	
BKr - round	
BPs - special	
2. WHEEL SIZES	
D - outer diameter	
T - height	
H - hole diameter	
3. ABRASIVE MATERIAL	
14A (A)	BROWN FUSED ALUMINA
25A (WA)	FUSED ALUMINA
38A (ZK)	ZIRCONIA ALUMINA
53C, 54C (C)	BLACK SILICON CARBIDE
63C, 64C (GC)	GREEN SILICON CARBIDE

4. GRIT (FEPA)	
ABRASIVE GRAIN	
F10	F36
F12	F40
F14	F46
F16	F54
F20	F60
F22	F70
F24	F80
F30	F90
POWDERS	
F100	F180
F120	F220
F150	
MICROCRYSTALLINE POWDERS	
F230	F360
F240	F400
F280	F500
F320	F600
5. HARDNESS	
F, G	HIGHLY SOFT
H, I, J	SOFT
K, L	AVERAGE SOFT
M, N	AVERAGE
O, P, Q	AVERAGE HARD
R, S	HARD
T	HIGHLY HARD
V	EXTREMELY HARD
6. STRUCTURE	
1-2-3-4	closed
5-6-7	average
8-9-10	open
11-13	high-porous
7. BOND	
V	CERAMIC
B	RESINOID
BF	RESINOID WITH REINFORCEMENT
B4	RESINOID WITH GRAPHITE FILLER
8. OPERATING SPEED, MPS	
20; 25; 32; 35; 40; 50; 63; 80; 100	
9. DISBALANCE RATE	
1; 2	

GRINDING WHEELS

Type 1



D – 16mm ÷ 1060mm

T – 3mm ÷ 200mm

H – 6mm ÷ 400mm



35m/s

50m/s

60m/s

Characteristics	
Material	25A
Grit	F180-F16
Hardness	F-S
Structure	5-13
Unbalance class	1; 2

For all types of grinding of details and constructions from different kinds of steel and also for sharpening of cutting tools made from high-speed steel.

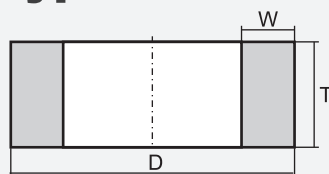


35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F180-F16
Hardness	H-V
Structure	6-8
Unbalance class	1; 2

For all types of grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, sharpening of hard-alloy cutting tools.

Type 2



D – 120mm ÷ 460mm

T – 11mm ÷ 150mm

W – 15mm ÷ 50mm



32m/s

35m/s

Characteristics	
Material	25A
Grit	F150-F24
Hardness	F-P
Structure	5-10
Unbalance class	2

For flat grinding by butt-end of the wheel of details and constructions from different types of steel and also for sharpening of cutting tools from high-speed steel.



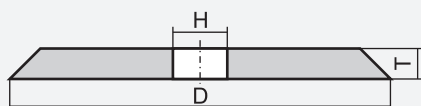
32m/s

35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F90-F24
Hardness	J-M
Structure	6-8
Unbalance class	2

For flat grinding by butt-end of the wheel of details and constructions made from cast iron, non-ferrous metals and mineral materials.

Type 3



D – 40mm ÷ 600mm

T – 6mm ÷ 70mm

H – 8mm ÷ 305mm



35m/s

50m/s

Characteristics	
Material	25A
Grit	F180-F16
Hardness	J-Q
Structure	5-8
Unbalance class	1; 2

For sharpening of rip-and disc saws teeth made from instrumental steel, spline grinding, gear-tooth grinding, sharpening of cutting tools made from high-speed steel.

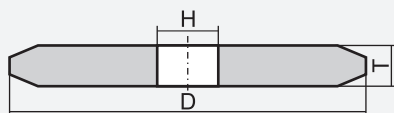


35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F90-F24
Hardness	J-Q
Structure	6-8
Unbalance class	1; 2

For gear-tooth grinding, spline grinding of details made from cast iron, non-ferrous metals and mineral materials, sharpening of hard-alloy cutting tools.

Type 4



D – 250mm ÷ 500mm
T – 8mm ÷ 36mm
H – 76mm ÷ 203mm

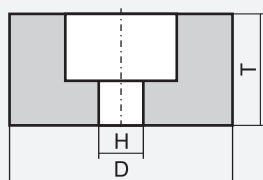
35m/s
50m/s

Characteristics	
Material	25A
Grit	F180-F24
Hardness	H-P
Structure	5-10
Unbalance class	1; 2

For gear-tooth grinding, thread grinding of details made from different types of steel, sharpening of cutting tools made from high-speed steel.



Type 5



D – 16mm ÷ 600mm
T – 8mm ÷ 100mm
H – 6mm ÷ 305mm

35m/s
50m/s

Characteristics	
Material	25A
Grit	F180-F16
Hardness	H-Q
Structure	5-10
Unbalance class	1; 2

For all types of grinding of details and constructions made from different kinds of steel, for sharpening of cutting tools made from high-speed steel.

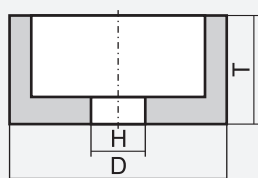


35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F120-F16
Hardness	J-Q
Structure	6-8
Unbalance class	1; 2

For all types of grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening of hard-alloy cutting tools.

Type 6

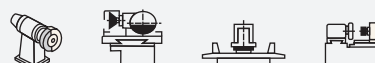


D – 40mm ÷ 250mm
T – 25mm ÷ 100mm
H – 13mm ÷ 150mm

32m/s
35m/s

Characteristics	
Material	25A
Grit	F180-F16
Hardness	F-Q
Structure	6-10
Unbalance class	1; 2

For flat, round inner grinding of details and constructions made from different types of steels, for sharpening of cutting tools made from high-speed steel.

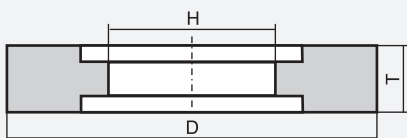


35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F150-F36
Hardness	F-P
Structure	6-8
Unbalance class	1; 2

For flat, round inner grinding of details and constructions from cast iron, non-ferrous metals, natural and artificial stone, glass, sharpening of hard-alloy cutting tools.

Type 7



D – 125mm ÷ 900mm

T – 20mm ÷ 180mm

H – 32mm ÷ 305mm

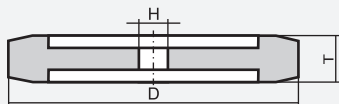
35m/s
50m/s

Characteristics	
Material	25A
Grit	F180-F16
Hardness	J-Q
Structure	5-10
Unbalance class	1; 2

For flat, round outer and inner grinding of details and constructions made from different types of steel, for sharpening of cutting tools made from high-speed steel, for grain peeling.



Type 7-S

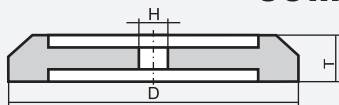


35m/s

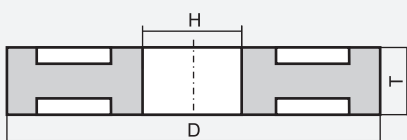
Characteristics	
Material	54C; 63C; 64C
Grit	F90-F16
Hardness	K-Q
Structure	6-8
Unbalance class	1; 2

For flat, round outer grinding of details and constructions made from different types of cast iron, non-ferrous metals, natural and artificial stone, for grain peeling.

Type 7-M



Type 8



35m/s
50m/s

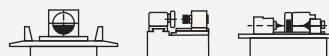
Characteristics	
Material	25A
Grit	F100-F16
Hardness	J-Q
Structure	5-10
Unbalance class	1; 2

D – 350mm ÷ 450mm

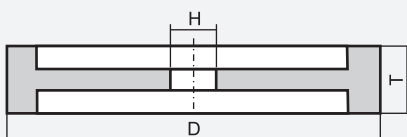
T – 40mm ÷ 50mm

H – 127mm ÷ 203mm

For flat, round outer and inner grinding of details and constructions made from different types of steel.



Type 9



35m/s
50m/s

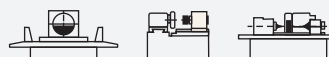
Characteristics	
Material	25A
Grit	F100-F16
Hardness	J-Q
Structure	5-10
Unbalance class	1; 2

D – 175mm ÷ 450mm

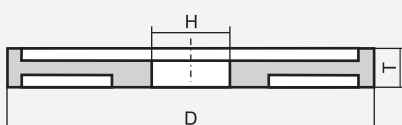
T – 25mm ÷ 50mm

H – 32mm ÷ 203mm

For flat, round outer and inner grinding of details and constructions made from different types of steel.



Type 10



35m/s
50m/s

Characteristics	
Material	25A
Grit	F100-F40
Hardness	K-P
Structure	6-8
Unbalance class	1; 2

D – 150mm ÷ 300mm

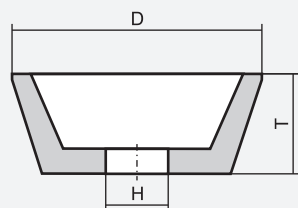
T – 10mm ÷ 20mm

H – 32mm ÷ 127mm

For grinding of snap gauges and sliding calipers.



Type 11



D – 50 mm ÷ 200 mm
T – 25 mm ÷ 63 mm
H – 13 mm ÷ 32 mm



32m/s
35m/s

Characteristics	
Material	25A
Grit	F150-F36
Hardness	I-Q
Structure	6-8
Unbalance class	1; 2

For flat grinding of details and constructions made from different kinds of steel, for spline grinding, sharpening of cutting tools made from high-speed steel.

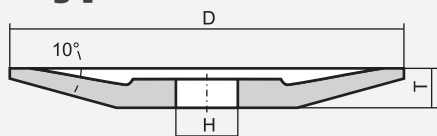


35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F180-F36
Hardness	I-Q
Structure	6-8
Unbalance class	1; 2

For flat grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening of hard-alloy cutting tools.

Type 12



D – 50 mm ÷ 762 mm
T – 8 mm ÷ 32 mm
H – 6 mm ÷ 406,4 mm



35m/s
50m/s

Characteristics	
Material	25A
Grit	F180-F36
Hardness	I-P
Structure	6-8
Unbalance class	1; 2

For recessing of details and constructions made from different kinds of steel, for sharpening of cutting tools made from high-speed steel.

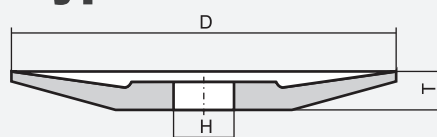


35m/s

Characteristics	
Material	54C; 63C; 64C
Grit	F180-F40
Hardness	J-Q
Structure	6-8
Unbalance class	1; 2

For recessing of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening of hard-alloy cutting tools.

Type 14



D – 100 mm ÷ 500 mm
T – 10 mm ÷ 33 mm
H – 20 mm ÷ 203 mm



35m/s
50m/s

Characteristics	
Material	25A
Grit	F180-F36
Hardness	I-P
Structure	6-8
Unbalance class	1; 2

For recessing of details and constructions made from different kinds of steel, for sharpening of cutting tools made from high-speed steel.

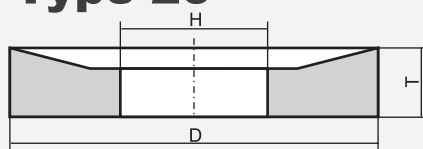


35m/s

Characteristics	
Material	54C; 63C
Grit	F120-F40
Hardness	K-M
Structure	6-8
Unbalance class	1; 2

For recessing of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening of hard-alloy tools.

Type 20



D – 100mm ÷ 500mm

T – 32mm ÷ 100mm

H – 20mm ÷ 203mm

35m/s

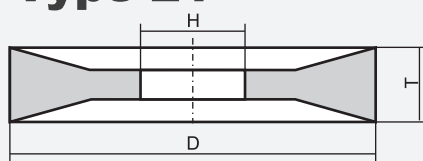
50m/s

Characteristics	
Material	25A
Grit	F60-F24
Hardness	K-P
Structure	6
Unbalance class	1; 2

For all kinds of grinding with the possibility of synchronous processing by butt-end and peripheral side of the details and constructions made from different types of steel, for sharpening of cutting tools made from high-speed steel.



Type 21



D – 200mm ÷ 600mm

T – 16mm ÷ 80mm

H – 32mm ÷ 305mm

35m/s

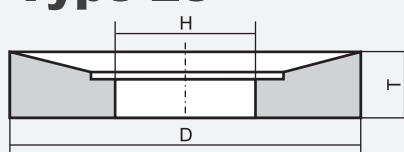
50m/s

Characteristics	
Material	25A
Grit	F120-F36
Hardness	K-P
Structure	6-8
Unbalance class	1; 2

For all kinds of grinding with the possibility of synchronous processing by butt-end and peripheral side of the details and constructions made from different types of steel, for sharpening of cutting tools made from high-speed steel.



Type 23



D – 300mm ÷ 750mm

T – 40mm ÷ 100mm

H – 127mm ÷ 305mm

35m/s

50m/s

Characteristics	
Material	25A
Grit	F100-F36
Hardness	J-Q
Structure	6-8
Unbalance class	1; 2

For all kinds of grinding with the possibility of synchronous processing by butt-end and peripheral side of the details and constructions made from different types of steel, for sharpening of cutting tools made from high-speed steel, for grain peeling.



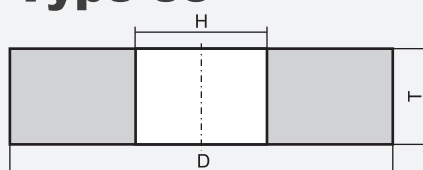
32m/s

35m/s

Characteristics	
Material	54C; 63C
Grit	F120-F36
Hardness	K-P
Structure	7-8
Unbalance class	1; 2

For all kinds of grinding with the possibility of synchronous processing by butt-end and peripheral side of the details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening of hard-alloy cutting tools.

Type 35



D – 300mm ÷ 400mm

T – 40mm ÷ 50mm

H – 76mm ÷ 203mm

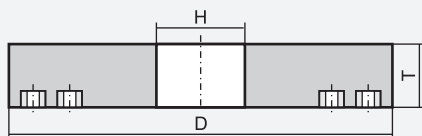
35m/s

Characteristics	
Material	25A
Grit	F60
Hardness	K-O
Structure	5-6
Unbalance class	1; 2

For flat grinding by butt-end of the details and constructions made from different types of steel.



Type 36



35m/s

D – 380mm ÷ 660mm

T – 55mm ÷ 100mm

H – 0mm ÷ 350mm

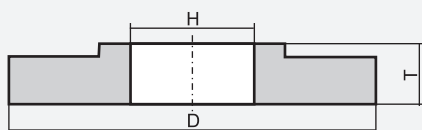
Characteristics	
Material	25A
Grit	F60-F22
Hardness	K-N
Structure	6-8



For flat grinding by butt-end of the details and constructions made from different types of steel.



Type 38



35m/s

D – 300mm ÷ 900mm

T – 25mm ÷ 40mm

H – 127mm ÷ 305mm

Characteristics	
Material	25A
Grit	F60
Hardness	K-O
Structure	6
Unbalance class	1; 2

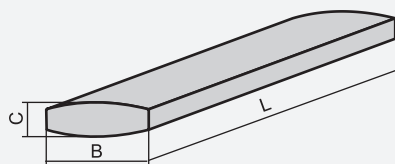


For flat grinding by butt-end of the details and constructions made from different types of steel.

The plant receives the orders for wheels manufacturing with the dimensions and characteristics not indicated in the given table.

SPECIAL GRINDING STONES

Type BPs



B – 15mm ÷ 20mm

C – 5mm ÷ 8mm

L – 125mm ÷ 140mm

Characteristics	
Material	25A
Grit	F150
Hardness	K-P
Structure	6-8

For final setting and sharpening of cutting tools, tapping cutters.

Type B



B – 35mm ÷ 40mm

C – 15mm ÷ 20mm

L – 225mm

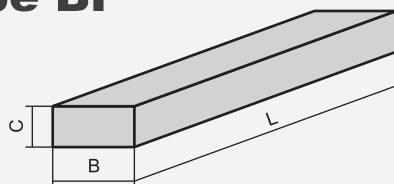


For setting, sharpening of scythes and cutting tools. The grinding stones are made from fused alumina and silicon carbide grinding materials.

The plant receives orders for grinding stones manufacturing with the dimensions and characteristics not indicated in the given table.

GRINDING STONES

Type BP



B – 9mm ÷ 200mm
C – 8mm ÷ 50mm
L – 100mm ÷ 300mm

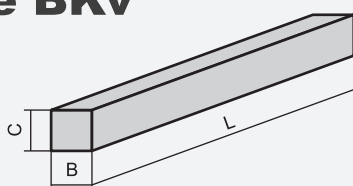
Characteristics	
Material	25A
Grit	F180-F40
Hardness	H-Q
Structure	6-8

For flat and round outer grinding, for honing of details made from different kinds of steel, sharpening and setting of cutting tools, including diamond cutting tools.

Characteristics	
Material	54C; 63C
Grit	F180-F16
Hardness	H-Q
Structure	7-8

For flat and round outer grinding, for honing of details made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening and setting of cutting tools, including diamond cutting tools.

Type BKv



B – 6mm ÷ 50mm
C – 6mm ÷ 50mm
L – 100mm ÷ 300mm

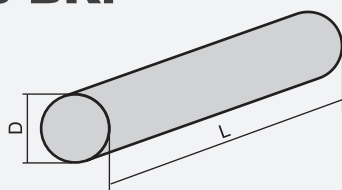
Characteristics	
Material	25A
Grit	F180-F36
Hardness	H-Q
Structure	6-8

For flat and round outer grinding, for honing of details made from different kinds of steel, sharpening and setting of cutting tools.

Characteristics	
Material	54C; 63C
Grit	F180-F40
Hardness	I-Q
Structure	7-8

For flat and round outer grinding, for honing of details made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening and setting of cutting tools.

Type BKr

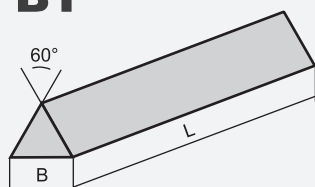


D – 10mm ÷ 85mm
L – 100mm ÷ 190mm

Characteristics	
Material	25A
Grit	F120-F40
Hardness	K-O
Structure	6-8

For sharpening and setting of cutting tools, for sharpening of combine knives.

Type BT



B – 13mm ÷ 20mm
L – 100mm ÷ 150mm

Characteristics	
Material	25A
Grit	F180-F60
Hardness	K-P
Structure	6-8

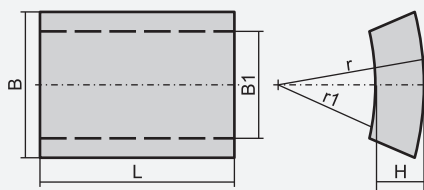
For flat grinding of details and constructions made from different kinds of steel, for sharpening and setting of cutting tools.

Characteristics	
Material	63C
Grit	F180-F100
Hardness	K-O
Structure	7-8

For flat grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain, for sharpening and setting of cutting tools.

SEGMENTS

Type 1C



B – 75mm ÷ 90mm
H – 20mm ÷ 55mm
L – 125mm ÷ 140mm

Characteristics	
Material	25A
Grit	F40-F36
Hardness	G-H
Structure	6-8

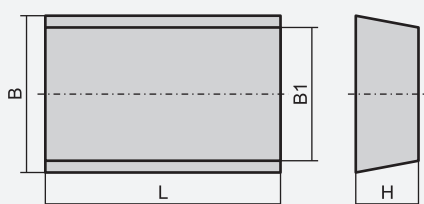
For flat grinding of details and constructions made from different kinds of steel.



Characteristics	
Material	63C
Grit	F40
Hardness	J
Structure	7

For flat grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone.

Type 5C



B – 56mm ÷ 150mm
H – 16mm ÷ 40mm
L – 100mm ÷ 150mm

Characteristics	
Material	25A
Grit	F90-F24
Hardness	H-P
Structure	6-10

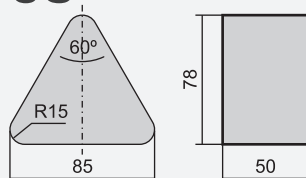
For flat grinding of details and constructions made from different kinds of steel.



Characteristics	
Material	63C
Grit	F60-F36
Hardness	J-P
Structure	7

For flat grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone.

Type 6C



Characteristics	
Material	25A; 54C
Grit	F60-F36
Hardness	K-P
Structure	6-7

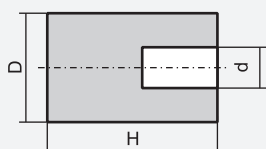
For high-performance grinding of concrete and marble floors.



The plant receives orders for segments manufacturing with the dimensions and characteristics not indicated in the given table.

CYLINDRICAL MOUNTED GRINDING POINTS

Type AW



D – 16mm ÷ 32mm
H – 20mm ÷ 40mm
d – 6mm

35m/s
50m/s

Characteristics	
Material	25A
Grit	F120-F40
Hardness	K-Q
Structure	6-8

For smoothing operations and inner grinding of details and constructions made from different kinds of steel.



35m/s

Characteristics	
Material	63C
Grit	F90-F40
Hardness	M-N
Structure	7-8

For smoothing operations and inner grinding of details and constructions made from cast iron, non-ferrous metals, natural and artificial stone, glass, porcelain.

The plant receives orders for cylindrical mounted grinding points manufacturing with the dimensions and characteristics not indicated in the given table.



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