

JSC "Luga Abrasive Plant" is a modern diversified enterprise situated in Luga Leningrad region. It is one of the greatest in the world producers of abrasive tool. The plant celebrated its centenary in the year 2006.

The production of the plant is well known to customer, probably, there is no Russian master hand, which hadn't work just for once with cut-off wheel of the brand "Luga Abrasiv". The tool of JSC "Luga Abrasive Plant" is manufactured of high-quality raw materials, on the modern equipment, with usage of high technology. Thanks to it it's possible to satisfy any demands of the consumers. Thus, all this guarantees to our buyer, both in Russia and abroad that he will receive at his disposal high-quality and reliable product.

Manufactured production has all necessary Sanitary Epidemiological Conclusions and certificates of conformity.

We offer you wide range of grinding and cut-off wheels, coated abrasives and products made of these materials as well as fireproof production for melting and dispensing of non-ferrous metals. Marketing services and technicians are always at the disposal of our clients. They will give you exhaustive trade and technical information which will help you to choose necessary tool.



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SYSTEM OF ABRASIVE TOOL MARKING

D **3**
 T **150x16x32**
 H **25A** **40** **K** **6** **V** **30**

1. TYPE		WHEELS		4. GRIT		ABRASIVE GRAIN	
1	- straight profile wheel			F10		F36	
2	- annular wheel			F12		F40	
3	- cone profile wheel			F14		F46	
4	- double-sided cone profile wheel			F16		F54	
5	- recessed wheel			F20		F60	
6	- cup cylinder wheel			F22		F70	
7,8,9	- double-sided recessed wheel			F24		F80	
10	- double-sided recessed hub wheel			F30		F90	
11	- cup cone wheel	SEGMENTS		POWDERS		MICROCRYSTALLINE POWDERS	
12	- flat dish wheel			F100		F180	
14	- dish wheel			F120		F220	
20	- cone recessed wheel			F150			
21	- double-sided cone recessed wheel			F230		F360	
23	- one-sided cone and cylinder recessed wheel			F240		F400	
27	- depressed center wheel			F280		F500	
35	- straight profile butt-end wheel			F320		F600	
36,37,40	- wheel with pressed-in fastening components			5. HARDNESS		6. STRUCTURE	
38	- hub butt-end wheel			F, G	HIGHLY SOFT	1-2-3-4	closed
41	- cut-off wheel			H, I, J	SOFT	5-6-7	average
42	- cut-off wheel with depressed center			K, L	AVERAGE SOFT	8-9-10	open
SEGMENTS				M, N	AVERAGE	11-13	high-porous
SP	- rectangular			O, P, Q	AVERAGE HARD	7. BOND	
1S	- convexo-concave			R, S	HARD	V	EXTREMELY HARD
2S	- concave-convexo			T	HIGHLY HARD	8. OPERATING SPEED, MPS	
3S	- convexo-flat			V	EXTREMELY HARD	20; 25; 30; 32; 35; 40; 50; 63; 80; 100	
4S	- flat-convex			1. WHEEL SIZES		1. WHEEL SIZES	
5S	- trapezoidal			D - outer diameter		D	- outer diameter
6S	- for floor grinding			T - height		T	- height
7S	- for surface grinding			H - hole diameter		H	- hole diameter
9S	- for rail grinding			3. ABRASIVE MATERIAL		3. ABRASIVE MATERIAL	
HONES				14A (A)	REGULAR ALUMINA	14A (A)	REGULAR ALUMINA
BP				25A (WA)	WHITE ALUMINA	25A (WA)	WHITE ALUMINA
BKw				38A (ZK)	ZIRCONIA ALUMINA	38A (ZK)	ZIRCONIA ALUMINA
BT				53C, 54C (C)	BLACK SILICON CARBIDE	53C, 54C (C)	BLACK SILICON CARBIDE
BKr				63C, 64C (GC)	GREEN SILICON CARBIDE	63C, 64C (GC)	GREEN SILICON CARBIDE

ABRASIVE TOOLS RECOMMENDATIONS OF CHOOSING AND APPLYING

Choosing of abrasive material

ABRASIVE MATERIAL QUALITY (FOCT; ISO)		APPLICATION
14A	A	Processing of materials with high rupture strength, snagging of steel castings, rolled stock, high-strength cast iron, processing of carbon and alloyed steel, bronze, nickel and aluminium alloys.
25A	WA	Processing of the hardened details of carbon, high-speed and stainless steel. Processing of the fine details and tools (teeth, knives, drills, chisels), sharpening.
38A	ZK	Power grinding of steel billets by snagging.
54C; 63C	C; GC	Processing of hard materials with low rupture strength (cast iron, bronze, brass, hard alloy, glass, precious stones, marble, granite, porcelain), and very tenacious materials (high-temperature steel, alloys, copper, aluminium).

Choosing of the wheel grit

GRIT (ISO)	TYPE OF PROCESSING
F10-F22	Snagging operations with a large cutting depth, billet and casting grinding. Treatment of materials, causing loading of wheel's surface (brass, copper, aluminium).
F22-F36	Surface grinding with the wheel face, chisel sharpening, abrasive tool dressing, cutting off.
F30-F60	Preliminary and combined grinding, cutting tool sharpening.
F40-F220	Flat surface grinding.
F54-F90	Fine grinding, profile surface processing, small tool sharpening, grinding of brittle materials.
F100-F180	Finish grinding, lapping of cutting tools and steel billets, thin edge sharpening, preliminary honing.
F180-F280	Finish grinding of metals, glass, marble and etc., thread grinding finish honing.
F230-F600	Superfinishing, finish honing, thin edge lapping, thread grinding of pieces with a fine pitch, polishing.

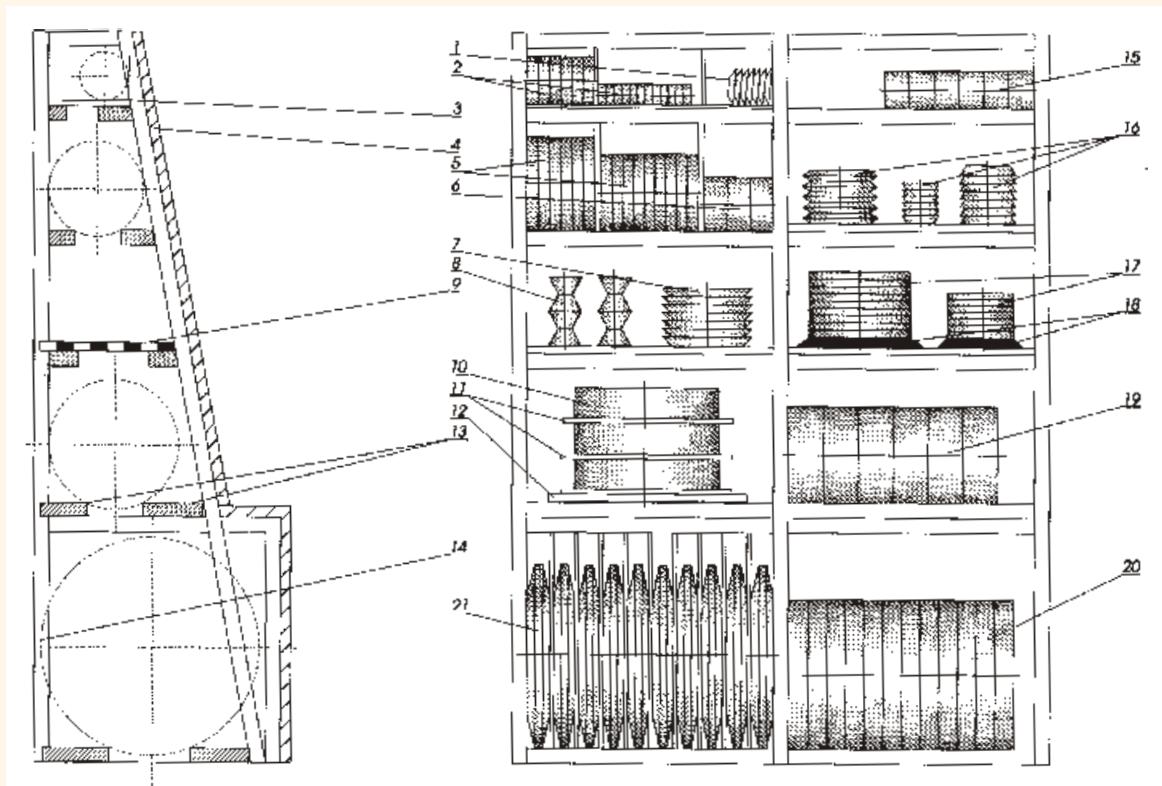
Choosing of the tool hardness

GRADE (ISO)	TYPE OF PROCESSING
W; T	Snagging operations, abrasive tool setting, ball-bearing ball grinding.
S; R; Q; P	Cutting off, slotting, hand snagging operations, circular external grinding, centreless grinding, uneven surface and profile grinding.
P; O; N	Preliminary circular external and centreless grinding of steel, malleable cast iron. Profile grinding, uneven surface processing, honing and thread grinding of parts with a coarse pitch.
O; N; M	Flat surface grinding with the segments and annular wheels, thread grinding with the resinoid bond wheels.
N; M; L; K	Fine and combined circular, external centreless and internal grinding of steel, flat surface grinding, thread grinding, cutting tools sharpening.
L; K; J	Sharpening and lapping of hard-faced cutting tools, grinding of special-property alloys, which are hard to process, polishing.

ABRASIVE TOOLS STORAGE RECOMMENDATIONS

Abrasive tools must be stored in dry covered well-aired places with stable temperature within the limits of 15-20°C. Organic bond wheels are perceptible to an alkaline condition and changes of temperature; thus they must not be stored together with chemicals and be subjected to unilateral heating. For example, they must not be near heating devices.

Grinding wheels are perceptible to strokes and flexural stresses. As a result they demand handling with care and certain conditions of storage for keeping their reliability and operational safety. At the picture one of versions of the right arrangement of abrasive tools on racks is shown depending on the sizes of wheels.



The example of the rack for putting abrasive wheels.

- 1 - small dish wheels,
- 2 - small straight wheels,
- 3 - shelves with slope for avoidance of fall of the wheels,
- 4 - back wall of a rack with a protective coating,
- 5 - straight wheels,
- 6 - small cylinder wheels,
- 7 - big dish wheels,
- 8 - cone wheels located a floor to a floor and edge to an edge,
- 9 - flat shelf for cut-off wheels,
- 10 - thin or soft cylinder wheels,

- 11 - corrugated cardboard,
- 12 - steel or ceramic flat bolstering table,
- 13 - point-to-point pedestal of wheels established on periphery,
- 14 - leading edge of a wheel,
- 15 - small cylinder and cup wheels,
- 16 - straight wheels with profile periphery,
- 17 - straight cut-off wheels,
- 18 - steel or ceramic flat bolstering table,
- 19 - cylinder hard or thick wheels,
- 20 - straight ceramic wheels of the average size,
- 21 - big cone wheels.

CERAMIC BOND ABRASIVE TOOLS



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RECOMMENDATIONS ON SAFE USE OF TOOLS ON CERAMIC BOND

Transportation and Storage

Instruments must be kept safe from the mechanical attack during transportation and in storage.

In case of ingress of moisture it is necessary to drain it off and then to check the disbalance of the wheels. If they are not dry enough than they have increased disbalance and can break during the work.

Recommendations on Safe Use of Tools

1. The wheels must be examined before their use. There mustn't be any visual damage. To check if there is a crack on the wheel it is necessary to knock at it with the help of wooden hammer (150-200 g). If there are no cracks than you'll hear pure sound.

2. Before work it is necessary to examine wheels with the rate of trial start.

3. If wheels have been affected by the additional machining work or penetration it is necessary to test their mechanical strength before use.

4. During the work an instrument and its attachment must be covered with security facilities that are applied (protective cover, metallic shield and others).

Don't take off the protective cover during the work.

5. Tools on ceramic bond should not test shock load and be used for the adaptation of the intermittent area (deseaming of joint weld and so on).

6. There must be gaskets between a wheel and flanges that are used for the fixation of a wheel. These gaskets cover the pressure plate and equally overhang throughout the full circumference.

7. The rotation speed of the wheel mustn't exceed the speed indicated on the wheel. The RPM can be increased according to the turning of the wheel but the linear speed mustn't be exceeded.

8. Use safety spectacles, respirator from dust, gloves, and special footwear for your own protection.



Protective
Gloves
are required



Consider safety
recommendations



Put on
a respirator

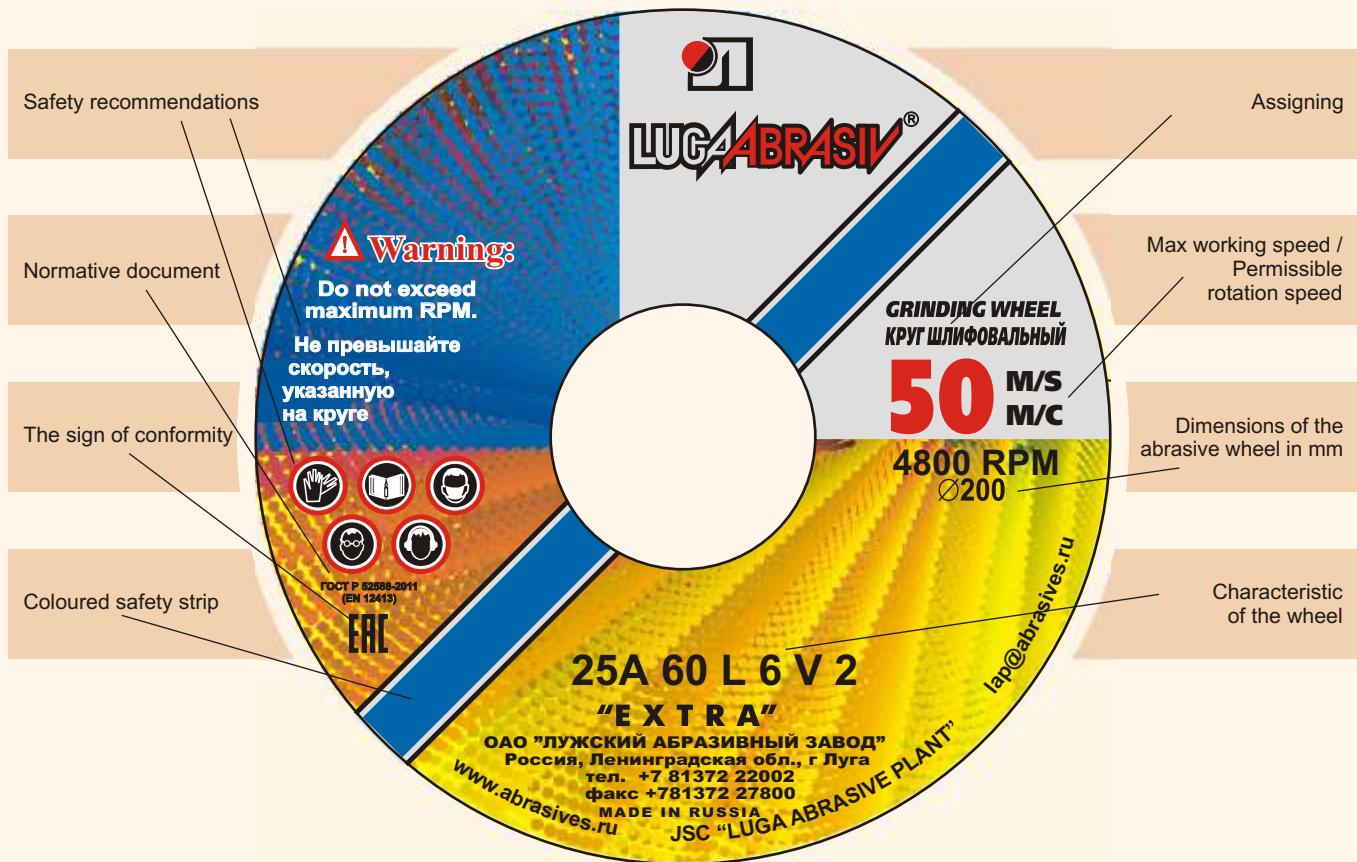


Protection of eyes
is required

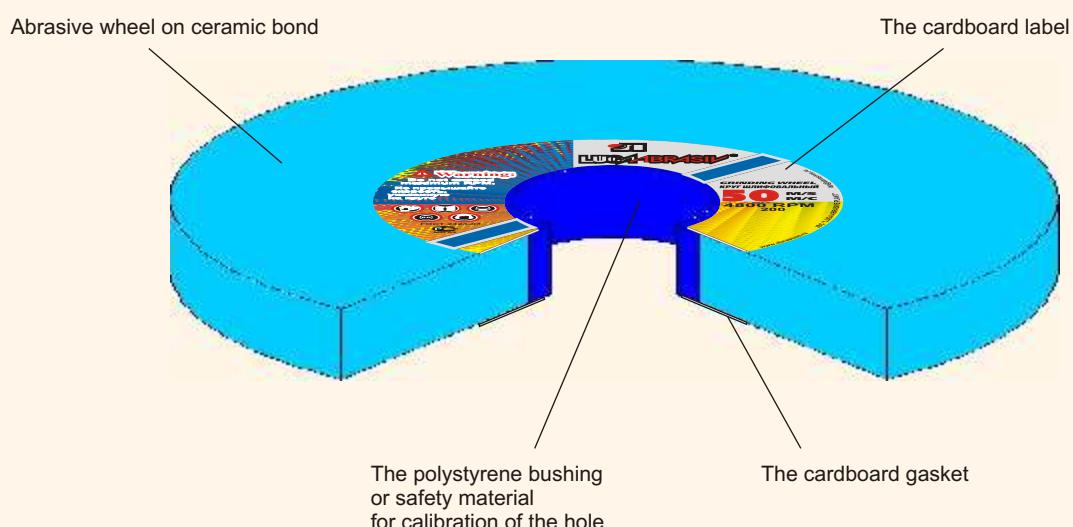


Anti-noise
Protection
is required

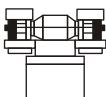
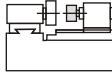
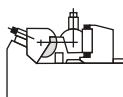
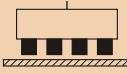
NOTATIONS ON TOOLS ON CERAMIC BOND



CONSTRUCTION



MACHINES ICONS

ICON	TYPE OF THE MACHINE
	Rough-grinding machine
	Frontal Rough-grinding machine
	Pedestal grinder
	Surface-grinding machine with long table and horizontal spindle of a grinding wheel
	Internal grinder
	Round-grinding machine
	Centerless grinding machine
	Surface-grinding machine with vertical spindle

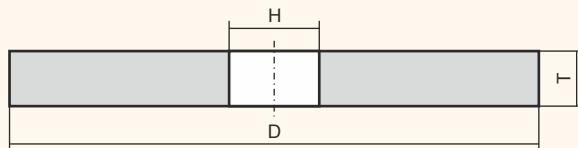
Warning:

Ceramic wheels of all types are produced with the working speed **35m/s (not 50m/s)** if they are characterized by at least one of the following parameters:

- grit 63 and more;
- hardness M2 and lower;
- structure 8 and more.

GRINDING WHEELS OF A DIRECT PROFILE

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic	
Material	A
Grit	F90-F36
Hardness	K-R
Structure	4-7



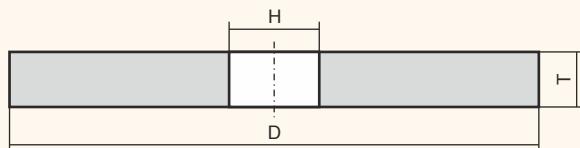
A

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
16	16	6	59700	0.006	384
20	20	6	47800	0.013	144
20	25	6	47800	0.016	144
25	20	6	38500	0.021	125
32	20	10	30000	0.033	80
32	32	10	30000	0.053	48
32	40	10	30000	0.066	32
40	25	10	23900	0.067	36
40	32	13	23900	0.082	27
40	40	13; 16	23900	0.102	18
50	20	20	19500	0.075	100
50	25	16	19500	0.100	75
50	32	16	19500	0.128	50
50	50	16	19500	0.200	48
60	20	20	15920	0.114	64
63	13	20	15200	0.083	99
63	20	20	15200	0.127	50
63	50	20	15200	0.318	27
65	13	8	14600	0.096	99
80	16	20	12000	0.166	45
80	20	20	12000	0.207	20
80	25	20	12000	0.259	27
80	32	20	12000	0.332	27

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

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic	
Material	A
Grit	F90-F36
Hardness	K-R
Structure	4-7



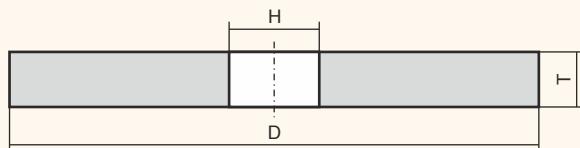
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50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
80	40	20	12000	0.415	8
80	63	20	12000	0.654	4
100	16	20	9550	0.269	40
100	20	20	9550	0.343	32
100	63	20	9550	1.046	8
125	16	12.7; 20	7650	0.440	32
125	20	20; 32	7650	0.510	24
125	25	32	7650	0.640	24
125	32	32	7650	0.820	16
125	50	32	7650	1.300	16
125	100	51	7650	2.251	2
150	16	12.7; 20; 32	6400	0.640	20
150	20	12.7; 20; 32	6400	0.780	16
150	25	32	6400	0.940	12
150	32	32	6400	1.210	8
150	50	32	6400	1.890	8
175	16	32	5450	0.850	14
175	20	20; 32	5450	1.070	12
175	25	32	5450	1.310	10
175	32	32	5450	1.670	8
175	40	32	5450	2.026	6
200	16	32	4800	1.100	10
200	20	32; 76	4800	1.410	8
200	25	32; 76	4800	1.730	6
200	32	32; 76	4800	2.210	4
200	40	32; 76	4800	2.810	4

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

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic	
Material	A
Grit	F90-F36
Hardness	K-R
Structure	4-7



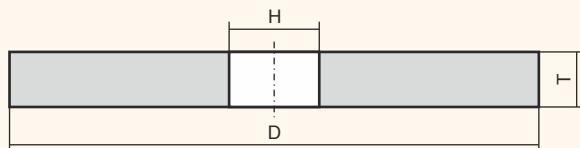
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50 m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
200	50	32	4800	3.666	4
250	20	32; 76	3850	2.180	6
250	25	32; 76	3850	2.730	6
250	32	32; 76	3850	3.490	4
250	40	32; 76; 127	3850	4.360	4
250	50	32; 76; 127	3850	4.953	4
250	60	127	3850	5.020	2
250	80	127	3850	6.412	2
250	100	127	3850	8.260	2
300	25	32; 76	3200	3.950	3
300	32	32; 76; 127	3200	5.060	2
300	40	32; 76; 127	3200	6.320	2
300	50	127	3200	6.441	2
300	63	76	3200	9.580	1
300	100	127	3200	13.160	1
300	125	127	3200	16.450	1
300	150	127	3200	19.153	1
350	25	127	2750	4.740	3
350	32	76; 127	2750	6.660	2
350	40	76; 127; 203	2750	8.320	2
350	50	203	2750	7.240	2
350	63	127	2750	12.100	1
350	80	127	2750	15.360	1
350	100	127; 203	2750	18.950	1
350	150	203	2750	22.210	1
400	32	127; 203	2400	8.200	2

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

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic	
Material	A
Grit	F90-F36
Hardness	K-R
Structure	4-7



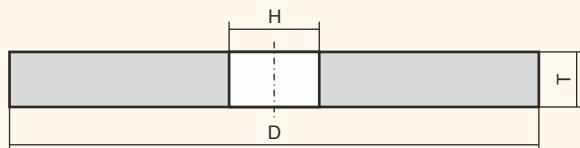
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50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
400	40	127; 203	2400	10.400	2
400	50	127; 203	2400	13.000	1
400	63	127; 203	2400	16.150	1
400	80	203	2400	16.930	1
400	100	203	2400	20.533	1
400	150	203	2400	31.750	1
450	40	127; 203	2150	13.280	1
450	50	127; 203	2150	18.360	1
450	63	127; 203; 305	2150	20.920	1
450	80	203	2150	23.000	1
450	150	127	2150	52.670	1
500	40	203; 305	1950	14.880	1
500	45	305	1950	12.590	1
500	50	203; 305	1950	18.600	1
500	55	203	1950	20.460	1
500	60	305	1950	16.780	1
500	63	203; 305	1950	23.440	1
500	80	305	1950	22.380	1
500	100	305	1950	27.970	1
500	105	305	1950	29.117	1
500	125	305	1950	34.970	1
500	150	305	1950	41.960	1
500	200	305	1950	55.940	1
600	50	305	1600	23.790	1
600	55	305	1600	26.170	1
600	63	203; 305	1600	35.790	1

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

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic	
Material	A
Grit	F90-F36
Hardness	K-R
Structure	4-7

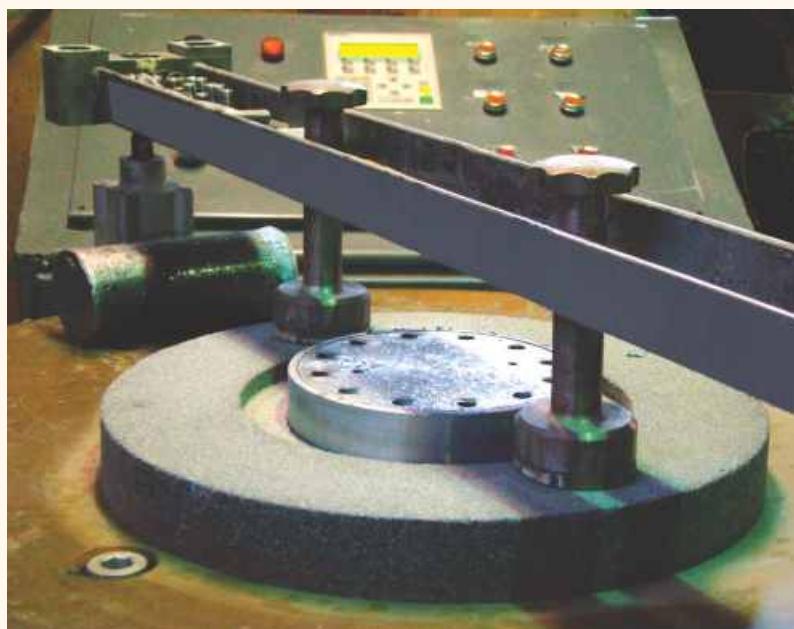


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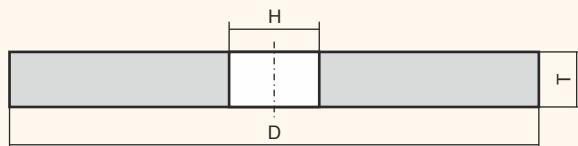
50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
600	75	305	1600	35.680	1
600	80	305	1600	38.060	1
600	100	305	1600	47.570	1
600	125	305	1600	59.470	1
600	150	305	1600	71.360	1
600	200	305	1600	95.150	1
750	80	305	1300	70.760	1
900	100	305	1100	131.026	1

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

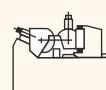
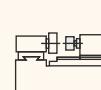


Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure	4-7	



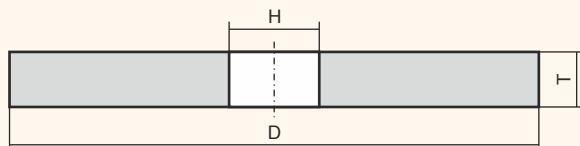
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
16	10	6	59700	0.004	640
16	16	6	59700	0.006	384
16	20	6	59700	0.008	320
16	25	6	59700	0.010	256
16	32	6	59700	0.013	192
16	40	6	59700	0.016	128
17	25	6	56200	0.011	196
18	20	6	53000	0.010	245
20	5	6	47800	0.003	576
20	6	6	47800	0.004	504
20	10	6	47800	0.006	288
20	13	6	47800	0.008	216
20	16	6	47800	0.010	180
20	18	6	47800	0.012	180
20	20	6	47800	0.013	144
20	25	6; 8	47800	0.016	144
20	32	6	47800	0.021	108
20	40	6	47800	0.026	72
25	10	6	38500	0.010	250
25	13	6	38500	0.014	150
25	16	6	38500	0.017	125
25	20	6; 8; 10	38500	0.021	125
25	25	6; 10	38500	0.027	100
25	32	6; 10	38500	0.034	75
25	40	6; 8	38500	0.042	50
25	50	10; 13	38500	0.050	50

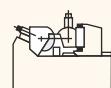
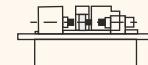
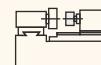
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



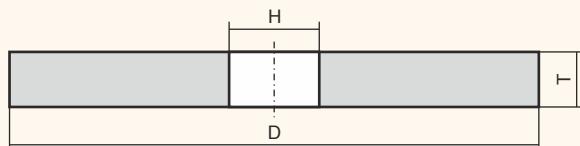
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
32	8	10	30000	0.013	208
32	10	6; 10	30000	0.018	160
32	16	10	30000	0.026	96
32	20	6; 10	30000	0.035	80
32	25	10; 13	30000	0.041	64
32	32	6; 10	30000	0.056	48
32	40	6; 10	30000	0.070	32
35	10	6	27290	0.021	72
35	16	10	27290	0.032	54
35	20	10	27290	0.039	45
35	25	10	27290	0.050	36
35	32	10	27290	0.064	27
35	40	10	27290	0.080	18
35	50	16	27290	0.083	72
40	6	10	23900	0.016	126
40	7	13	23900	0.018	108
40	8	6; 13	23900	0.022	90
40	10	10; 13	23900	0.029	72
40	13	13	23900	0.033	54
40	16	13	23900	0.042	54
40	20	10; 13; 16; 20	23900	0.053	45
40	25	10; 13	23900	0.067	36
40	32	6; 8; 13; 16	23900	0.089	27
40	40	10; 13; 16	23900	0.105	18
40	50	13; 16	23900	0.127	18
40	63	20	23900	0.135	9

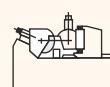
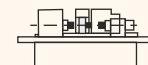
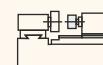
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



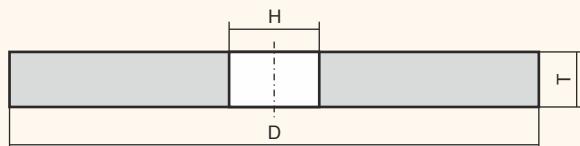
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
45	20	16	21230	0.061	45
45	32	16	21230	0.098	27
45	40	16	21230	0.122	18
45	50	16	21230	0.153	18
50	5	10	19500	0.021	425
50	6	10; 13	19500	0.026	350
50	8	13	19500	0.032	250
50	10	6	19500	0.043	200
50	10	13; 16; 20	19500	0.041	200
50	13	13; 16	19500	0.054	150
50	16	16	19500	0.064	125
50	20	16; 20	19500	0.080	100
50	25	13; 16	19500	0.104	75
50	32	16	19500	0.128	50
50	40	13; 16; 20	19500	0.166	50
50	50	13; 16	19500	0.208	48
50	63	16	19500	0.252	25
52	15	13	18300	0.067	80
55	20	16	17300	0.096	64
55	32	16	17300	0.153	48
57	50	20	16700	0.246	27
60	10	20	15920	0.057	144
60	20	20	15920	0.114	64
63	6	10; 20	15200	0.041	234
63	8	20	15200	0.051	180
63	10	10; 20	15200	0.070	100

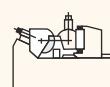
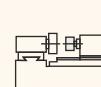
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure	4-7	



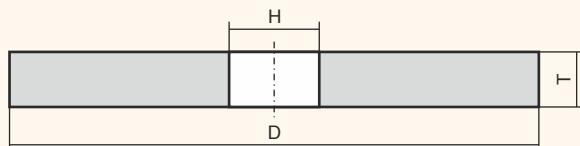
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
63	13	20	15200	0.084	99
63	16	20	15200	0.102	81
63	20	20	15200	0.130	50
63	25	20	15200	0.160	54
63	32	20	15200	0.204	30
63	40	20	15200	0.254	27
63	50	20	15200	0.318	27
63	63	20	15200	0.401	18
65	13	8	14600	0.096	99
70	7	17	13650	0.058	84
70	8	7	13650	0.069	76
70	10	10	13650	0.087	64
70	25	13	13650	0.205	24
70	32	20	13650	0.249	20
70	40	20	13650	0.311	16
70	70	20	13650	0.544	8
75	40	20	12740	0.361	16
80	4	20	12000	0.045	100
80	5	20	12000	0.055	80
80	6	10	12000	0.067	60
80	8	20	12000	0.083	40
80	10	20; 32	12000	0.106	40
80	13	20; 32	12000	0.135	63
80	16	20	12000	0.169	45
80	20	20; 32	12000	0.212	20
80	25	20	12000	0.259	27

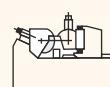
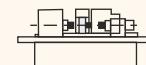
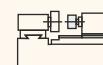
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



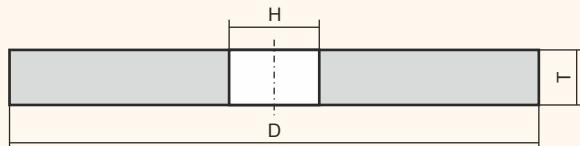
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
80	32	20	12000	0.332	27
80	40	20	12000	0.415	8
80	50	20	12000	0.535	18
80	63	20; 32	12000	0.674	4
80	80	20	12000	0.855	9
80	100	20	12000	1.090	4
90	32	20	10610	0.416	16
90	40	20	10610	0.520	12
90	50	20	10610	0.665	12
100	4	20; 32	9550	0.072	160
100	6	20; 32	9550	0.105	96
100	8	20; 32; 40	9550	0.137	80
100	10	20; 32	9550	0.171	64
100	13	20; 32	9550	0.223	48
100	16	20; 32	9550	0.274	40
100	20	20; 32	9550	0.343	32
100	25	20; 32	9550	0.429	24
100	32	20; 32	9550	0.537	16
100	40	20; 32	9550	0.671	16
100	50	20; 32	9550	0.839	16
100	63	20; 32	9550	1.078	8
100	80	20; 32	9550	1.370	8
100	100	20	9550	1.711	8
108	16	45	8800	0.267	20
110	8	51	8680	0.131	40
110	35	20	8680	0.705	8

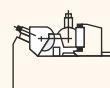
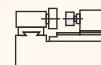
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



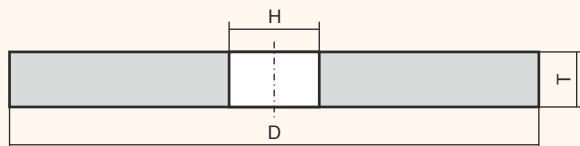
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
110	40	20	8680	0.651	8
110	50	20	8680	1.011	8
110	75	32	8680	1.436	8
120	4	20	7900	0.103	20
125	4	32	7650	0.110	41
125	5	32	7650	0.140	120
125	6	32	7650	0.160	80
125	8	32	7650	0.210	64
125	10	20; 32	7650	0.260	64
125	13	20; 32	7650	0.340	40
125	16	12.7; 20; 32	7650	0.440	32
125	20	12.7; 20; 32; 60	7650	0.550	24
125	25	20; 32	7650	0.670	24
125	32	32	7650	0.830	16
125	40	32	7650	1.020	8
125	50	20; 32	7650	1.300	16
125	63	32	7650	1.640	8
125	100	32	7650	2.600	2
130	50	65	7300	1.095	3
140	63	65	6800	1.674	2
140	75	32	6800	2.409	2
150	3	32	6400	0.120	34
150	4	32	6400	0.160	60
150	5	32	6400	0.200	60
150	6	20; 32; 51	6400	0.240	40
150	8	32; 51	6400	0.310	36

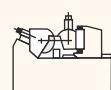
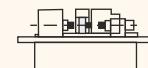
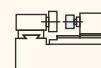
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



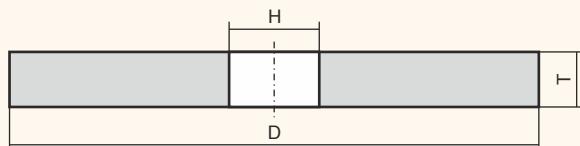
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
150	10	20; 32; 51	6400	0.390	28
150	13	32; 51	6400	0.500	20
150	16	12.7; 20; 32; 51	6400	0.640	20
150	20	12.7; 20; 32; 51	6400	0.800	16
150	25	32; 51	6400	0.970	12
150	32	32	6400	1.240	8
150	40	32	6400	1.540	8
150	50	32; 51	6400	1.890	8
150	63	51; 65	6400	2.280	4
150	80	32; 51	6400	3.060	4
150	100	32; 51	6400	3.830	4
175	4	32	5450	0.220	60
175	5	32	5450	0.280	50
175	6	32	5450	0.320	38
175	8	32	5450	0.430	28
175	10	32	5450	0.530	22
175	13	32	5450	0.690	20
175	16	32	5450	0.850	14
175	20	32; 51	5450	1.070	12
175	25	32	5450	1.330	10
175	32	32	5450	1.710	8
175	40	32	5450	2.140	6
175	50	32; 76	5450	2.640	6
200	4	32	4800	0.280	19
200	5	32	4800	0.350	16
200	6	32; 76	4800	0.430	26

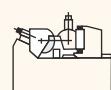
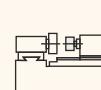
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



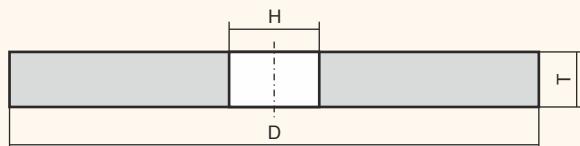
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
200	8	32; 51; 76	4800	0.560	18
200	10	32; 51; 76	4800	0.700	16
200	13	32; 51; 76	4800	0.920	12
200	16	32; 51; 76	4800	1.130	10
200	20	16; 20; 32; 51; 76	4800	1.420	8
200	25	32; 51; 76	4800	1.760	6
200	32	16; 32; 76	4800	2.260	4
200	40	32; 76; 127	4800	2.780	4
200	50	32; 76	4800	3.050	4
200	51.5	76	4800	3.047	2
200	63	32; 51; 76	4800	4.470	2
200	80	76	4800	4.880	2
200	100	76	4800	5.916	1
225	5	60	4250	0.410	30
225	6	60	4250	0.530	20
225	10	60	4250	0.890	9
230	8	32	4200	0.780	18
230	10	32	4200	0.970	14
230	32	32	4200	3.079	3
250	4	76	3850	0.410	10
250	5	32; 76	3850	0.580	12
250	6	32; 76; 127	3850	0.670	12
250	8	32; 76; 127	3850	0.890	14
250	10	32; 51; 76; 127	3850	1.110	10
250	13	32; 51; 76	3850	1.450	8
250	16	25.4; 32; 76; 127	3850	1.760	8

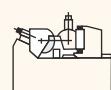
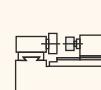
Завод принимает заказы на изготовление кругов с размерами и характеристиками, не указанными в данной таблице.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



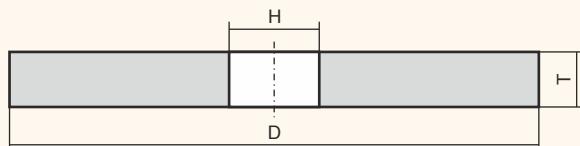
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
250	20	32; 76	3850	2.230	6
250	25	25.4; 32; 51; 76; 127	3850	2.790	6
250	30	76	3850	3.030	4
250	32	32; 76; 127	3850	3.570	4
250	40	25.4; 32; 76; 127	3850	4.360	4
250	50	76; 127	3850	5.050	4
250	63	32; 76 ;127	3850	6.370	2
250	70	76	3850	6.864	2
250	80	32; 76; 127	3850	8.760	2
250	100	76; 127	3850	10.110	2
250	125	127	3850	10.330	1
300	6	32; 76; 127	3200	0.910	12
300	8	32; 76; 127	3200	1.290	9
300	9	127	3200	1.175	7
300	10	32; 76; 127	3200	1.670	7
300	13	32; 76; 127	3200	2.170	3
300	16	76; 127	3200	2.450	3
300	20	32; 76; 127	3200	3.160	4
300	25	32; 76; 127	3200	3.950	3
300	30	127	3200	4.000	3
300	32	32; 76; 127	3200	5.060	2
300	40	32; 76; 127	3200	6.320	2
300	50	76; 127	3200	7.500	2
300	60	150	3200	7.220	1
300	63	76; 127	3200	9.580	1
300	80	76; 127	3200	12.010	1

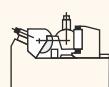
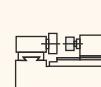
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



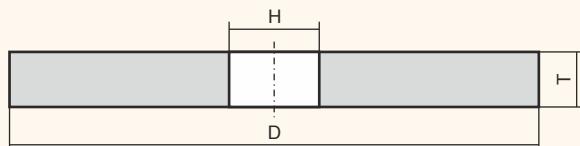
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
300	100	76; 127; 203	3200	15.340	1
300	125	76; 127	3200	19.170	1
300	150	127	3200	20.250	1
300	160	127	3200	21.060	1
350	8	127; 160	2750	1.550	9
350	10	127; 203	2750	1.940	7
350	13	127	2750	2.520	5
350	16	127	2750	3.100	4
350	20	76; 127; 203	2750	4.160	4
350	25	76; 127	2750	5.200	3
350	30	127	2750	5.810	2
350	32	76; 127; 203	2750	6.660	2
350	40	76; 127; 203	2750	8.500	2
350	50	127; 203	2750	9.480	2
350	63	127; 203	2750	11.940	1
350	80	127; 203	2750	15.160	1
350	84	160	2750	14.214	1
350	100	127; 203	2750	19.370	1
350	104	160	2750	17.599	1
350	150	127; 203	2750	28.430	1
400	6	203	2400	1.300	6
400	8	203	2400	1.730	7
400	10	127; 203	2400	2.710	6
400	12	127; 203	2400	2.518	6
400	13	127; 203	2400	3.410	6
400	16	127; 203	2400	4.190	5

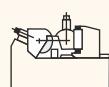
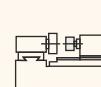
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



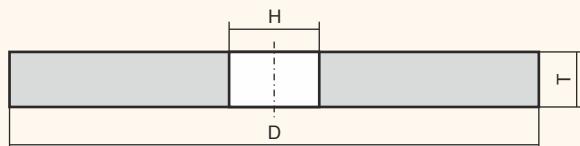
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
400	20	127; 203	2400	5.240	3
400	25	127; 203	2400	6.410	2
400	28	203	2400	5.428	2
400	32	76; 127; 203	2400	8.790	2
400	40	76; 127; 203	2400	10.990	2
400	50	127; 203	2400	12.820	1
400	55	127	2400	13.677	1
400	60	76	2400	16.850	1
400	63	127; 203	2400	16.150	1
400	80	127; 203	2400	20.510	1
400	100	127; 203	2400	25.640	1
400	105	203	2400	21.559	1
400	125	203	2400	27.040	1
400	150	203	2400	32.450	1
400	160	203	2400	33.870	1
400	200	203	2400	41.066	1
450	8	127	2150	2.491	4
450	10	203	2150	2.849	4
450	16	203	2150	4.765	2
450	20	127; 203	2150	7.020	2
450	25	127; 203	2150	8.300	2
450	30	127	2150	10.840	2
450	32	127; 203	2150	10.630	1
450	40	127; 203	2150	13.280	1
450	45	203	2150	13.100	1
450	50	127; 203	2150	16.820	1

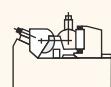
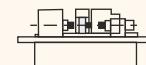
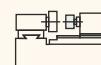
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



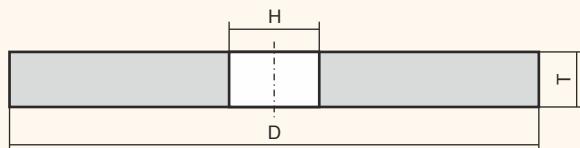
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
450	63	127; 203; 305	2150	20.920	1
450	80	127; 203; 305	2150	23.500	1
450	100	203	2150	28.740	1
450	110	305	2150	20.632	1
450	150	127	2150	49.820	1
455	100	228.7	2150	27.333	1
500	10	170; 254; 305	1950	2.960	4
500	13	203; 305	1950	5.110	3
500	14	305	1950	4.016	2
500	15	305	1950	4.440	2
500	16	203; 305	1950	6.080	2
500	20	203; 305	1950	7.610	2
500	25	203; 305	1950	9.830	2
500	28	305	1950	8.280	1
500	30	305	1950	8.390	1
500	32	203; 305	1950	11.910	1
500	40	203; 305	1950	15.210	1
500	50	203; 305	1950	19.010	1
500	56	203	1950	16.131	1
500	63	203; 305	1950	23.440	1
500	75	305	1950	20.980	1
500	80	203; 305	1950	29.760	1
500	100	203; 305	1950	37.210	1
500	125	305	1950	35.740	1
500	150	203; 305	1950	55.810	1
500	160	305	1950	46.899	1

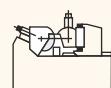
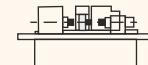
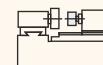
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure	4-7	



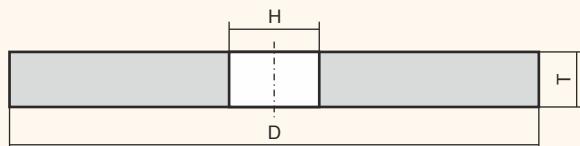
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
500	180	305	1950	49.343	1
500	200	305	1950	57.180	1
600	10	305	1600	5.030	3
600	13	305	1600	6.540	3
600	15	203	1600	8.739	3
600	16	305	1600	8.050	3
600	18	305	1600	9.050	2
600	20	305	1600	9.720	2
600	22	305	1600	11.070	2
600	25	305	1600	12.160	2
600	28	305	1600	14.080	1
600	29	305	1600	14.294	1
600	30	305	1600	15.090	1
600	32	203; 305	1600	19.220	1
600	34	305	1600	17.100	1
600	35	305	1600	16.151	1
600	40	203; 305	1600	22.720	1
600	43	305	1600	19.843	1
600	45	305	1600	21.410	1
600	50	203; 305	1600	29.030	1
600	55	305	1600	26.170	1
600	63	203; 305	1600	35.790	1
600	70	250	1600	36.000	1
600	75	305	1600	35.680	1
600	80	203; 305	1600	45.450	1
600	86	305	1600	40.095	1

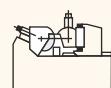
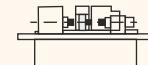
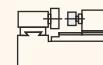
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



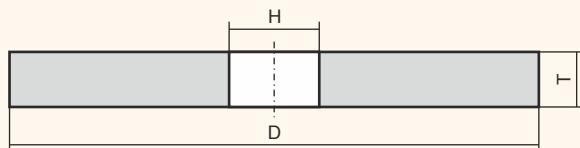
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
600	100	305	1600	47.570	1
600	125	305	1600	60.780	1
600	136	305	1600	63.406	1
600	140	305	1600	65.271	1
600	150	305	1600	72.930	1
600	180	305	1600	85.630	1
600	200	305	1600	95.150	1
750	15	305	1300	14.287	2
750	16	305	1300	13.727	2
750	20	203; 305	1300	17.159	2
750	22	305	1300	19.460	1
750	25	203; 305	1300	21.449	1
750	28	305	1300	24.770	1
750	32	203; 305	1300	27.455	1
750	33	305	1300	31.380	1
750	35	305	1300	30.960	1
750	40	203; 305	1300	39.280	1
750	50	305	1300	42.898	1
750	60	305	1300	46.425	1
750	63	305	1300	54.051	1
750	75	305	1300	66.340	1
750	80	305	1300	68.636	1
750	90	305	1300	77.216	1
750	100	305	1300	85.796	1
750	113	305	1300	99.950	1
750	125	305	1300	110.560	1

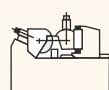
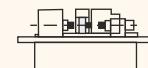
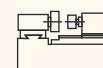
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure	4-7	



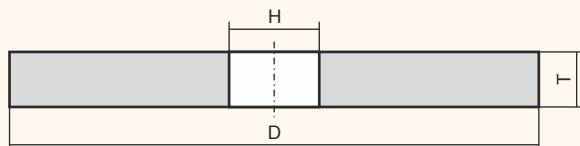
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
750	130	305	1300	114.980	1
750	150	305	1300	132.670	1
750	175	305	1300	150.020	1
900	19	305	1100	25.660	1
900	20	305	1100	26.120	1
900	22	203; 305	1100	31.860	1
900	24	305	1100	32.420	1
900	25	305	1100	33.770	1
900	26	305	1100	35.120	1
900	27	305	1100	36.470	1
900	28	305	1100	37.820	1
900	29	305	1100	39.170	1
900	30	305	1100	40.520	1
900	31	305	1100	41.870	1
900	32	305	1100	43.220	1
900	33	305; 350	1100	44.580	1
900	34	305	1100	45.930	1
900	35	305	1100	47.280	1
900	36	305	1100	48.630	1
900	38	203; 305	1100	55.040	1
900	39	305	1100	51.630	1
900	40	305	1100	54.030	1
900	40.5	305	1100	53.066	1
900	43	305	1100	58.080	1
900	45	305	1100	60.790	1
900	48	305	1100	64.840	1

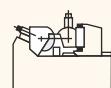
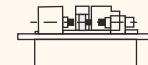
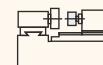
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure	4-7	



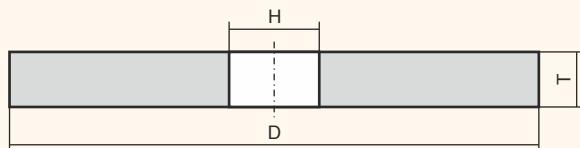
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
900	50	305	1100	67.540	1
900	52	305	1100	70.240	1
900	55	305	1100	72.807	1
900	56	305	1100	75.640	1
900	58	305	1100	78.350	1
900	61	305	1100	82.400	1
900	63	305	1100	85.100	1
900	64	305	1100	86.450	1
900	75	305	1100	99.280	1
900	78	305	1100	105.360	1
900	80	305	1100	108.060	1
900	84	305	1100	113.470	1
900	90	305	1100	121.570	1
900	100	305	1100	131.026	1
1060	22	305	910	41.434	1
1060	25	305	910	47.570	1
1060	28	305	910	54.360	1
1060	29	305	910	56.310	1
1060	32	305	910	62.130	1
1060	33	305	910	64.070	1
1060	37	305	910	70.400	1
1060	40	305	910	77.660	1
1060	50	305	910	97.080	1
1060	52	305	910	100.960	1
1060	55	305	910	106.790	1
1060	56	305	910	108.730	1

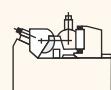
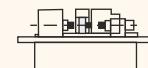
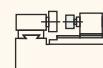
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



For all types of grinding the details and constructions of different kinds of steels and also for cutting tools sharpening made of high speed steels.

Characteristic		
Material	WA	
Grit	F230-F36	F30-F16
Hardness	J-S	O-S
Structure		4-7



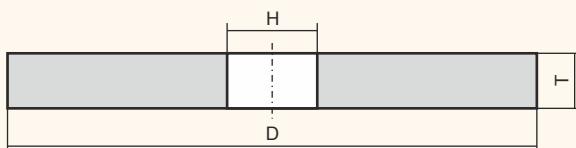
WA

50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
1060	58	305	910	112.610	1
1060	63	305	910	122.320	1
1060	65	305	910	126.200	1
1060	72	305	910	139.800	1
1060	78	305	910	151.450	1
1060	80	305	910	150.668	1
1060	85	305	910	165.040	1
1060	86	305	910	166.980	1
1060	90	305	910	174.740	1

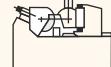
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8

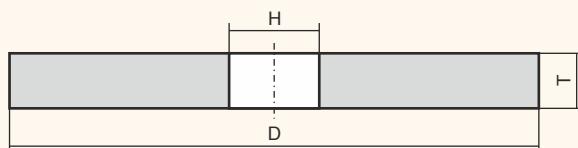


35 m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
16	3.2	6	41800	0.001	400
16	16	6	41800	0.006	384
16	20	6	41800	0.007	320
16	25	6	41800	0.009	256
20	16	6	33500	0.009	180
20	20	6	33500	0.011	144
20	25	6	33500	0.014	144
20	32	6; 8	33500	0.018	108
25	10	6	26800	0.009	250
25	25	6	26800	0.023	100
25	32	6	26800	0.030	75
32	20	10	20900	0.029	80
32	25	10	20900	0.036	64
32	32	10	20900	0.046	48
32	40	10	20900	0.058	32
35	32	10	19500	0.056	27
40	3	6	16750	0.008	252
40	10	8	16750	0.024	72
40	16	13	16750	0.036	54
40	20	16; 20	16750	0.042	45
40	25	13	16750	0.070	36
40	30	10	16750	0.071	27
40	32	13; 16	16750	0.072	27
40	40	13; 16	16750	0.090	18
50	4.5	10	13400	0.017	475
50	5	10	13400	0.019	425

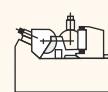
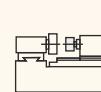
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8

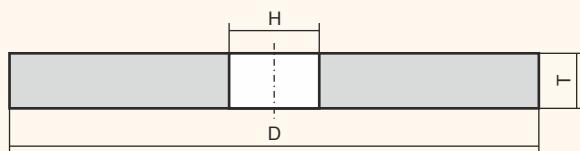


35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
50	10	13	13400	0.037	200
50	20	13; 16; 20	13400	0.073	100
50	25	16	13400	0.088	75
50	32	13	13400	0.117	50
50	40	16; 20	13400	0.141	50
50	50	16	13400	0.175	48
56	40	20	11940	0.202	32
60	10	20	11140	0.050	144
60	20	20	11140	0.100	64
63	5	6	10650	0.029	234
63	10	20	10650	0.055	100
63	13	20	10650	0.073	99
63	16	20	10650	0.090	81
63	20	20	10650	0.112	50
63	32	20	10650	0.179	30
63	50	20	10650	0.280	27
75	25	12.7	9550	0.059	60
80	10	20	8400	0.093	40
80	16	20	8400	0.146	45
80	20	20	8400	0.187	20
80	22	20	8400	0.207	36
80	32	20	8400	0.293	27
80	40	20	8400	0.366	8
80	50	20	8400	0.471	18

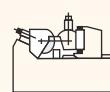
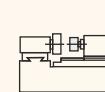
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8

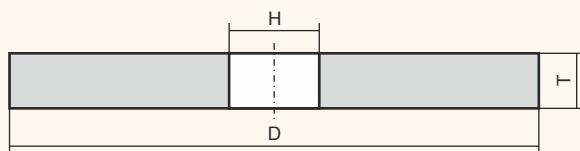


35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
80	63	20	8400	0.593	4
80	100	20	8400	0.913	4
100	6	32	6700	0.085	96
100	10	20; 32	6700	0.149	64
100	13	20	6700	0.192	48
100	16	20; 32	6700	0.237	40
100	20	20; 32	6700	0.298	32
100	25	20	6700	0.370	24
100	32	20	6700	0.474	16
100	40	20	6700	0.592	16
100	50	20	6700	0.753	16
100	80	20	6700	1.346	8
100	100	20	6700	1.507	8
125	6	32	5350	0.140	80
125	8	32	5350	0.180	64
125	10	32	5350	0.230	64
125	13	20; 32	5350	0.290	40
125	16	12.7; 20; 32	5350	0.390	32
125	20	12.7; 20; 32; 60	5350	0.490	24
125	25	20; 32	5350	0.590	16
125	32	32; 51	5350	0.720	16
125	40	32	5350	0.900	8
125	50	32	5350	1.150	8
135	50	51	4950	1.220	3
150	6	32	4500	0.201	40
150	8	32	4500	0.270	36

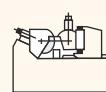
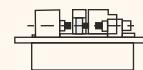
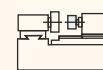
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8

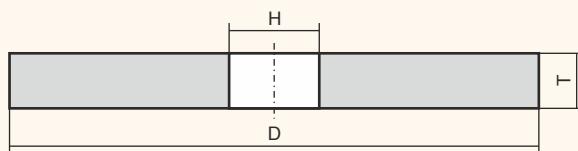


35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
150	10	20; 32	4500	0.340	28
150	13	32	4500	0.430	20
150	16	12.7; 32	4500	0.560	20
150	20	12.7; 20; 32	4500	0.700	16
150	25	32; 76	4500	0.830	12
150	32	32; 51	4500	1.070	8
150	40	32	4500	1.330	8
150	50	32	4500	1.690	8
150	63	51	4500	1.970	4
175	6	32	3810	0.269	38
175	8	32	3810	0.370	28
175	10	32	3810	0.460	22
175	13	32	3810	0.600	20
175	16	32	3810	0.730	14
175	20	32	3810	0.920	12
175	25	32; 60	3810	1.140	10
175	32	32	3810	1.460	8
175	40	32	3810	1.840	6
200	8	32	3350	0.480	18
200	10	32; 76	3350	0.600	16
200	13	32	3350	0.790	12
200	16	32	3350	0.970	10
200	20	16; 20; 32; 51; 76	3350	1.250	8
200	25	32; 76	3350	1.520	6
200	32	32; 76	3350	1.940	4
200	40	32; 76	3350	2.430	4

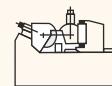
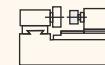
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8

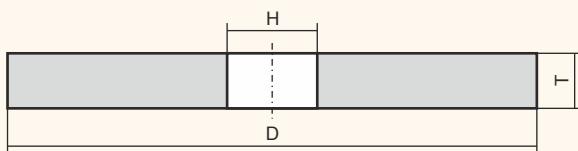


35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
200	63	76	3350	3.380	2
200	80	32; 76	3350	4.300	2
225	5	60	2970	0.351	30
230	20	32	2950	1.620	6
250	8	32	2700	0.780	10
250	10	32; 76	2700	0.960	10
250	13	32; 76	2700	1.240	8
250	16	32; 76	2700	1.540	8
250	20	32; 76	2700	1.920	6
250	25	32; 76	2700	2.400	6
250	32	32; 76	2700	3.070	4
250	40	32; 76; 127	2700	3.840	4
250	50	76; 127	2700	4.580	4
250	63	76	2700	6.262	2
250	80	127	2700	5.809	2
250	100	127	2700	7.490	2
300	10	32; 76; 127	2250	1.390	7
300	13	76; 127	2250	1.710	3
300	16	76; 127	2250	2.100	3
300	20	32; 76; 127	2250	2.870	4
300	25	32; 76; 127	2250	3.580	3
300	30	32	2250	4.390	3
300	32	32; 76; 127	2250	4.590	2
300	40	32; 76; 127	2250	5.730	2
300	50	32; 76; 127	2250	7.170	2
300	63	127	2250	7.520	1

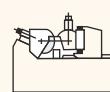
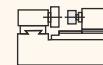
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8

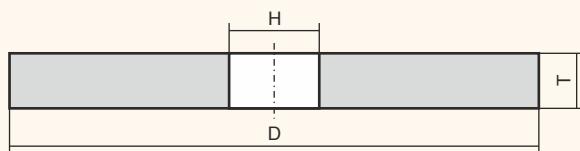


35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
300	100	127	2250	11.930	1
350	13	127	1950	2.160	5
350	16	127	1950	2.576	4
350	20	76; 127	1950	3.770	4
350	25	76; 127	1950	4.710	3
350	32	76; 127	1950	6.030	2
350	40	76; 127; 203	1950	7.540	2
350	50	76; 127; 203	1950	9.140	2
350	100	127; 203	1950	17.180	1
350	150	203	1950	19.096	1
400	10	203	1700	1.842	6
400	16	127	1700	3.600	5
400	20	127; 203	1700	4.490	3
400	25	127; 203	1700	5.810	2
400	32	127; 203	1700	7.440	2
400	40	76; 127; 203	1700	9.970	2
400	50	127; 203	1700	11.620	1
400	63	127; 203	1700	14.640	1
400	80	203	1700	15.350	1
400	100	203	1700	19.190	1
400	150	203	1700	28.790	1
450	20	127	1500	5.820	2
450	25	203	1500	6.114	2
450	32	127; 203	1500	9.630	1
450	40	127; 203	1500	12.040	1
450	50	127; 203	1500	15.050	1

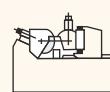
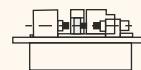
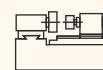
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 1



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	H-R
Structure	0-8



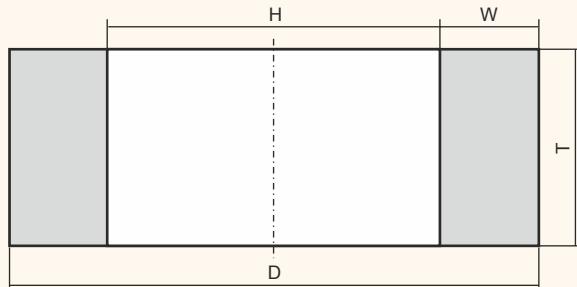
35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
450	63	127; 203; 305	1500	18.970	1
450	80	203	1500	20.850	1
450	100	203	1500	29.750	1
500	25	127	1350	9.156	2
500	32	203	1350	10.790	1
500	40	203	1350	12.980	1
500	50	203; 305	1350	16.870	1
500	63	203; 305	1350	21.250	1
500	80	203; 305	1350	26.980	1
500	100	203; 305	1350	32.780	1
500	125	305	1350	31.700	1
500	150	305	1350	38.040	1
600	25	305	1150	10.420	2
600	32	305	1150	13.340	1
600	40	203; 305	1150	19.820	1
600	50	203; 305	1150	26.280	1
600	63	203; 305	1150	32.450	1
600	75	305	1150	32.350	1
600	80	305	1150	34.500	1
600	100	305	1150	43.130	1
600	125	305	1150	52.263	1
600	150	305	1150	64.700	1
600	160	305	1150	69.010	1

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

GRINDING ANNULAR WHEELS

Type 2



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

Characteristic	
Material	A; WA
Grit	F150-F20
Hardness	F-P
Structure	4-10

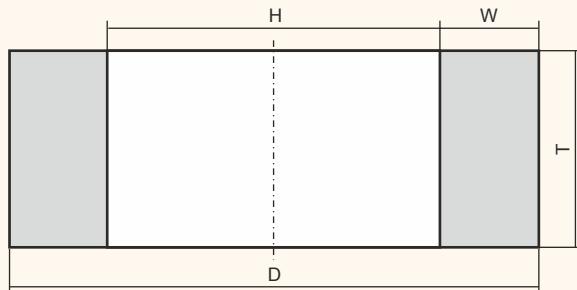


32m/s

D, mm	T, mm	H, mm	W, mm	Working speed, RPM	Weight, kg	
200	60	160	20	3100	1.494	2
200	75	125	37	3100	3.192	2
200	80	125	37	3100	3.405	2
200	90	160	20	3100	2.263	2
200	100	127	36	3100	4.260	2
200	100	160	20	3100	2.515	2
250	100	200	25	2450	3.929	2
300	100	250	25	2050	4.640	1
350	125	280	35	1750	9.839	1
450	125	380	35	1400	12.683	1

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

Type 2



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

Characteristic	
Material	A; WA
Grit	F150-F20
Hardness	F-P
Structure	4-10



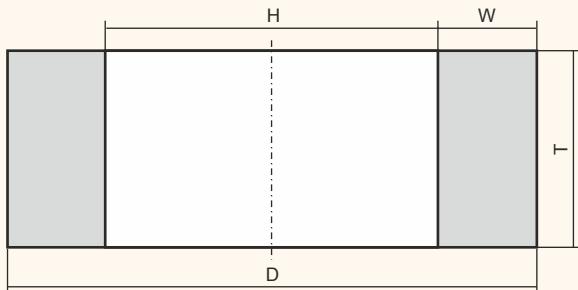
35 m/s

D, mm	T, mm	H, mm	W, mm	Working speed, RPM	Weight, kg	
175	11	152	11	3810	0.144	20
185	15	150	17	3610	0.370	6
200	75	125	37	3350	3.160	2
200	80	76	62	3350	4.781	2
200	80	125	37	3350	3.405	2
200	90	160	20	3350	2.263	2
200	100	127	36	3350	4.169	2
200	100	150	25	3350	3.056	2
200	100	160	20	3350	2.515	2
209	100	157.5	25.75	3350	2.672	1
250	100	200	25	3350	3.929	2
300	80	203	48	2250	6.816	1
400	100	305	47	1700	12.726	1

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



Type 2



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

Characteristic	
Material	C; GC
Grit	F230-F20
Hardness	I-M
Structure	4-8



32 m/s

D, mm	T, mm	H, mm	W, mm	Working speed, RPM	Weight, kg	
200	80	125	37	3100	2.827	2
200	100	150	25	3100	2.827	2
200	100	160	20	3100	2.326	2
250	100	200	25	3100	3.442	2

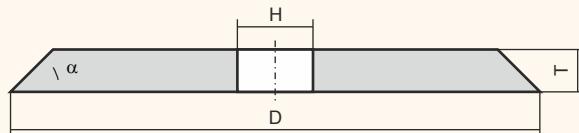
35 m/s

D, mm	T, mm	H, mm	W, mm	Working speed, RPM	Weight, kg	
200	100	150	25	3350	2.827	2

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

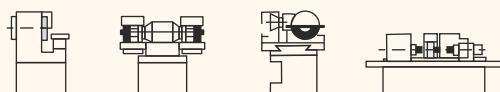
GRINDING CONIC-PROFILE WHEELS

Type 3



For sharpening of rip- and disc-saws teeth made of instrumental tools, spline-grinding, tooth-grinding, sharpening operations with cutting tools made of high speed steels.

Characteristic	
Material	A
Grit	F180-F36
Hardness	K-Q
Structure	4-7

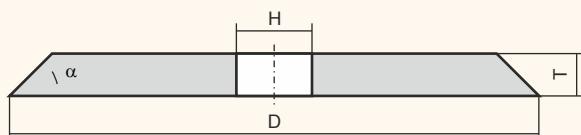


50m/s

D, mm	T, mm	H, mm	$\alpha, {}^\circ$	Working speed, RPM	Weight, kg	
65	12	8	83	14600	0.088	108
80	8	20	20	12000	0.048	99
80	10	20	30	12000	0.070	81
80	13	20	35	12000	0.098	63
100	6	20	10	9550	0.073	96
100	8	20	20	9550	0.109	80
100	10	20	30	9550	0.134	64
125	16	32	30	7650	0.350	32
150	16	32	25	6400	0.420	20
150	20	32	18	6400	0.550	16
175	16	32	20	5450	0.780	8
180	60	32	30	5350	2.060	4
200	20	32; 51	30	4800	0.850	8
250	16	32; 76	15	3850	1.350	8
250	20	32; 51; 76	20	3850	1.540	6
250	25	76	60	3850	2.100	4
250	40	127	40	3850	2.600	2
250	65	76	75	3850	4.850	2
300	25	76	20	3200	2.320	3
300	32	76	20	3200	2.580	2
350	25	127	30	2750	3.820	3
350	35	51	15	2750	3.930	1
350	40	76	20	2750	4.550	1

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

Type 3



For sharpening of rip- and disc-saws teeth made of instrumental tools, spline-grinding, tooth-grinding, sharpening operations with cutting tools made of high speed steels.

Characteristic	
Material	A
Grit	F180-F36
Hardness	K-Q
Structure	4-7



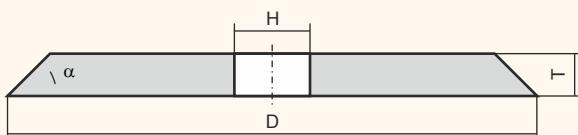
50m/s

D, mm	T, mm	H, mm	$\alpha, {}^\circ$	Working speed, RPM	Weight, kg	
400	35	127	20	2400	6.230	2
400	40	127	15	2400	7.250	2
600	65	305	80	1600	24.270	1
600	70	305	80	1600	26.130	1

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



Type 3



For sharpening of rip- and disc-saws teeth made of instrumental tools, spline-grinding, tooth-grinding, sharpening operations with cutting tools made of high speed steels.

Characteristic	
Material	WA
Grit	F180-F36
Hardness	J-Q
Structure	4-7

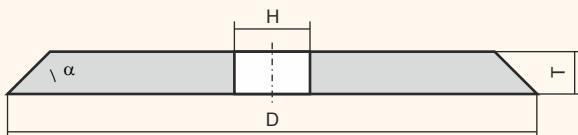


50m/s

D, mm	T, mm	H, mm	$\alpha, {}^\circ$	Working speed, RPM	Weight, kg	
65	12	8	83	14600	0.088	108
80	8	20	20	12000	0.048	99
80	10	20	30	12000	0.070	81
80	13	20	35	12000	0.098	63
100	6	20	10	9550	0.073	96
100	8	20	20	9550	0.109	80
100	10	20	30	9550	0.134	64
125	8	32	10	7650	0.140	64
125	10	32	25	7650	0.170	64
125	16	32	30	7650	0.350	32
150	6	20	45	6400	0.220	40
150	8	32	10	6400	0.220	36
150	10	32	35	6400	0.340	28
150	13	32	20	6400	0.400	20
150	16	32	25	6400	0.420	20
150	20	32	18	6400	0.550	16
175	10	32	10	5450	0.360	22
175	13	32	60	5450	0.635	20
175	16	32	20	5450	0.780	8
180	60	32	30	5350	2.060	4
200	8	32	45	4800	0.336	20
200	10	32	10	4800	0.500	16
200	13	32; 51	10	4800	0.600	12
200	16	32; 51	25	4800	0.890	10
200	20	32; 51	30	4800	0.850	8
250	6	32; 76	45	3850	0.644	12

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

Type 3



For sharpening of rip- and disc-saws teeth made of instrumental tools, spline-grinding, tooth-grinding, sharpening operations with cutting tools made of high speed steels.

Characteristic	
Material	WA
Grit	F180-F36
Hardness	J-Q
Structure	4-7

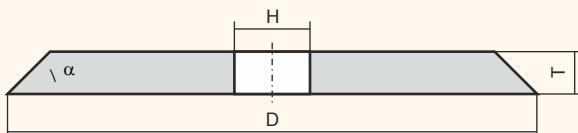


50m/s

D, mm	T, mm	H, mm	$\alpha, {}^\circ$	Working speed, RPM	Weight, kg	
250	8	32; 76	45	3850	0.846	10
250	10	32; 76	45	3850	0.930	10
250	13	32; 76	45	3850	1.296	10
250	16	32; 76	15	3850	1.350	8
250	20	32; 51; 76	20	3850	1.540	6
250	25	76	60	3850	2.100	4
250	40	127	40	3850	2.600	2
250	65	76	75	3850	4.850	2
300	6	76	45	3200	0.780	12
300	8	76; 127	45	3200	1.190	9
300	10	76; 127	45	3200	1.480	7
300	13	76; 127	45	3200	1.800	6
300	16	127	45	3200	2.040	5
300	20	127	30	3200	2.230	3
300	25	76	20	3200	2.320	3
300	32	76	20	3200	2.580	2
350	20	127	20	2750	3.200	4
350	25	127	30	2750	3.820	3
350	35	51	15	2750	3.930	1
350	40	76	20	2750	4.550	1
400	35	127	20	2400	6.230	2
400	40	127	15	2400	7.250	2
450	32	127	15	2150	6.977	1
500	32	203	30	1950	9.580	1
600	65	305	80	1600	24.270	1
600	70	305	80	1600	26.130	1

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

Type 3



For tooth-grinding, spline-grinding the details made of cast iron, non-ferrous metals, mineral materials, sharpening solid-alloy cutting tools.



Characteristic	
Material	GC
Grit	F120-F40
Hardness	J-P
Structure	4-8

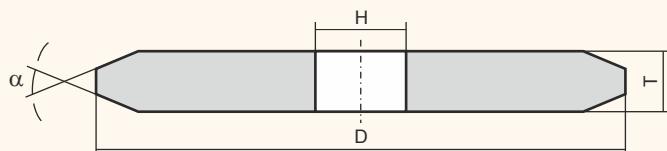
35 m/s

D, mm	T, mm	H, mm	$\alpha, {}^\circ$	Working speed, RPM	Weight, kg	
65	12	8	83	10290	0.073	108
125	8	32	10	5350	0.120	64
125	16	32	30	5350	0.310	32
150	8	32	10	4500	0.190	36
150	10	32	35	4500	0.290	28
150	16	32	25	4500	0.360	20
175	10	32	10	3810	0.310	22
200	10	32	10	3350	0.430	16
200	13	32	10	3350	0.520	12
200	16	32	25	3350	0.785	10
200	20	32	30	3350	0.730	8
250	10	32; 76	45	2700	0.880	10
250	16	32	15	2700	1.200	8
250	20	76	20	2700	1.200	6
250	25	76	60	2700	1.800	4
300	10	76	45	2250	1.270	7
300	13	127	45	2250	1.160	6
300	20	127	30	2250	1.910	3
400	40	127	15	1700	6.640	2

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

DOUBLE-SIDED CONIC-PROFILE GRINDING WHEELS

Type 4



For tooth-grinding, thread-grinding the details made of different types of steels, sharpening of cutting tools made of high speed steels.

Characteristic	
Material	WA
Grit	F180-F36
Hardness	J-P
Structure	4-7

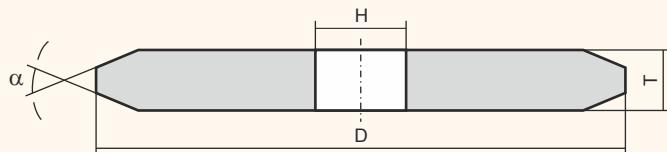


50 m/s

D, mm	T, mm	H, mm	α°	Working speed, RPM	Weight, kg	
250	10	76	40	3850	1.000	5
250	13	76	40	3850	1.260	10
250	16	76	40	3850	1.500	8
250	20	76; 127	40	3850	1.790	6
250	25	76	40	3850	2.030	4
300	20	127	40	3200	2.400	3
300	25	127	40	3200	2.890	3
300	25	127	60	3200	3.080	3
300	32	76	60	3200	4.167	2
350	8	160	60	2750	1.360	9
350	16	127	40	2750	2.930	4
350	20	127	40	2750	3.380	4
350	25	90	40	2750	4.186	3
350	25	127	40	2750	4.240	3
350	32	127	40	2750	5.330	2
400	8	203	60	2400	1.670	7
400	10	203	60	2400	2.060	6
400	13	203	60	2400	2.726	6
400	20	127	40	2400	4.910	3
400	25	127	40	2400	5.870	2
400	32	127; 203	40	2400	7.110	2
400	36	127	60	2400	7.580	2
400	40	127	60	2400	8.087	2
450	32	127	60	2150	8.841	2

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

Type 4



For tooth-grinding, thread-grinding the details made of different types of steels, sharpening of cutting tools made of high speed steels.

Characteristic	
Material	WA
Grit	F180-F36
Hardness	J-P
Structure	4-7



50 m/s

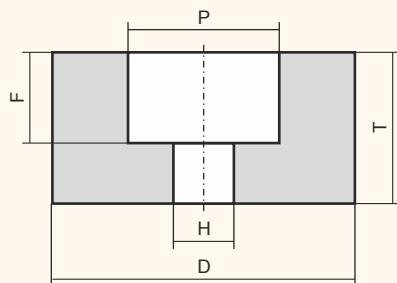
D, mm	T, mm	H, mm	α°	Working speed, RPM	Weight, kg	
500	25	203	40	1950	8.580	2
500	32	203	40	1950	10.940	2
500	36	203	40	1950	12.660	2
500	41	203	60	1950	13.554	1
500	50	305	40	1950	9.376	1

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



GRINDING RECESSED WHEELS

Type 5



For all types of grinding operations the details and constructions made of different kinds of steels, for sharpening the cutting tools made of high speed steels.

Characteristic		
Material	A	WA
Grit	F90-F36	F150-F36
Hardness	K-Q	J-Q
Structure	4-7	

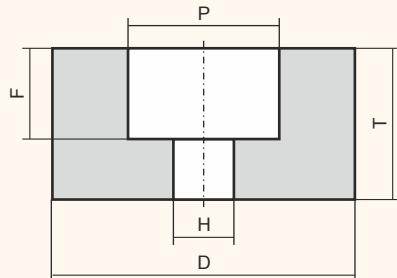


50 m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
16	20	6	8	10	59700	0.007	320
20	20	6	10	10	47800	0.012	144
20	25	6	10	13	47800	0.014	108
20	40	6	10	20	47800	0.023	72
22	10	6	13	3	43400	0.007	324
25	20	6	13	10	38500	0.018	100
25	25	6	13	13	38500	0.023	75
25	32	6	13	16	38500	0.029	75
32	8	6	16	4	30000	0.011	192
32	25	10	16	13	30000	0.037	64
32	32	6; 10	16	16	30000	0.048	48
40	20	13	20	13	23900	0.037	45
40	25	13	20	13	23900	0.057	36
40	32	10; 13	20	16	23900	0.078	27
40	40	13	20	20	23900	0.092	18
40	50	13	20	30	23900	0.115	18
50	25	13; 16	25	13	19100	0.091	150
50	40	13	25	20	19100	0.147	100
50	50	13; 16	32	16	19100	0.180	50
60	25	13	40	15	15920	0.112	72

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

Type 5



For all types of grinding operations the details and constructions made of different kinds of steels, for sharpening the cutting tools made of high speed steels.

Characteristic		
Material	A	WA
Grit	F90-F36	F150-F36
Hardness	K-Q	J-Q
Structure	4-7	

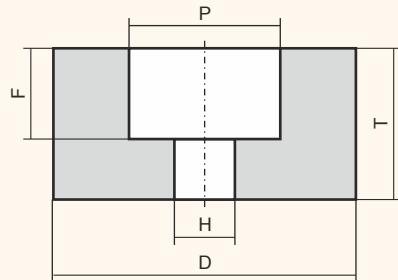


50m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
62	40	20	33	25	15400	0.210	36
63	16	32	40	8	15200	0.074	72
63	32	20	32	16	15200	0.182	36
63	50	20	30	20	15200	0.294	18
63	63	20	32	32	15200	0.358	18
80	20	20	50	7	12000	0.191	36
80	25	20	50	16	12000	0.210	54
80	32	20	50	16	12000	0.297	54
80	40	20	50	20	12000	0.371	36
80	50	20	40	25	12000	0.472	36
80	63	20	50	30	12000	0.597	18
80	80	20	40	30	12000	0.775	18
100	25	20	50	13	9550	0.367	24
100	32	20	50	16	9550	0.473	16
100	50	20	50	30	9550	0.728	16
100	63	20	50	30	9550	0.946	8
115	50	40	80	37	8400	0.705	4
125	25	20	62	13	7650	0.582	16
125	32	32	65	16	7650	0.719	16
125	50	32	65	30	7650	1.100	8
150	25	32	82	13	6400	0.790	6
150	32	32	65	16	6400	0.940	8

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

Type 5



For all types of grinding operations the details and constructions made of different kinds of steels, for sharpening the cutting tools made of high speed steels.

Characteristic		
Material	A	WA
Grit	F90-F36	F150-F36
Hardness	K-Q	J-Q
Structure	4-7	

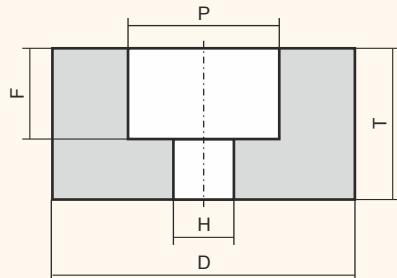


50m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
150	50	32	65	20	6400	1.749	8
175	32	32	100	16	5450	1.390	8
175	50	32	110	20	5450	2.198	2
200	25	32	100	13	4800	1.491	6
200	32	32	125	16	4800	1.749	4
200	32	76	125	16	4800	1.637	4
200	40	76	125	20	4800	2.050	4
200	50	80	110	35	4800	2.642	2
200	63	76	125	30	4800	3.321	2
200	80	76	125	30	4800	4.265	2
250	40	76; 127	120; 200	20	3850	3.380	2
250	80	127	150	60	3850	5.760	2
250	100	76	125	48	3850	9.090	2
300	40	127	200	20	3200	4.618	2
300	50	127	180	30	3200	5.616	2
300	75	120	177	25	3200	9.056	1
300	100	150	200	20	3200	11.275	1
350	32	76	200	13	2750	6.026	3
350	40	127	200	13	2750	6.597	2
350	50	127	200	20	2750	8.454	2
350	100	170	206	20	2750	15.727	1

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

Type 5



For all types of grinding operations the details and constructions made of different kinds of steels, for sharpening the cutting tools made of high speed steels.

Characteristic		
Material	A	WA
Grit	F90-F36	F150-F36
Hardness	K-Q	J-Q
Structure	4-7	



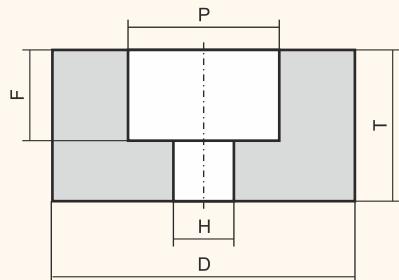
50 m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
400	40	127	180	25	2400	8.526	2
400	40	203	265	20	2400	7.284	2
400	50	127; 203	265	25	2400	11.852	1
450	80	203	270	20	2150	21.502	1
500	80	305	375	30	1950	19.261	1
600	50	305	375	30	1600	20.605	1
600	63	305	375	30	1600	26.878	1
600	80	305	375	30	1600	34.804	1
600	200	305	380	10	1600	90.524	1

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



Type 5



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

Characteristic	
Material	C; GC
Grit	F180-F20
Hardness	J-Q
Structure	4-8



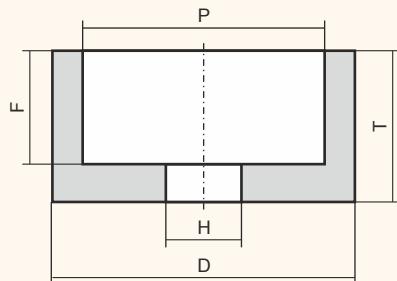
35m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
25	20	6	13	10	26800	0.016	100
32	25	10	16	13	20900	0.033	64
32	32	10	16	16	20900	0.043	48
40	40	13	20	20	16750	0.083	18
50	50	16	32	16	13400	0.165	50
63	32	20	32	16	10650	0.164	36
63	50	20	30	20	10650	0.264	18
80	20	20	50	7	8400	0.171	72
80	32	20	50	16	8400	0.267	54
80	50	20	40	25	8400	0.424	36
80	63	20	50	30	8400	0.537	18
100	25	20	50	13	6700	0.330	24
100	50	20	50	30	6700	0.651	16
125	50	32	65	30	5350	0.995	8
150	25	32	82	13	4500	0.711	6
150	32	32	65	16	4500	0.847	8
150	32	32	100	16	4500	0.824	8
200	40	76	125	20	3350	1.839	4
200	80	76	125	30	3350	3.833	2
250	40	76	120	20	2700	3.036	2
250	40	76	150	13	2700	3.112	2
300	40	127	200	20	2250	4.272	2
300	50	127	200	20	2250	5.196	2
350	40	127	200	20	1950	6.015	2
350	50	127	200	20	1950	7.289	2
400	40	203	265	20	1700	6.739	2
400	50	127; 203	265	25	1700	10.964	1
450	80	203	270	20	1500	21.502	1

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

GRINDING WHEELS - CYLINDRICAL CUPS

Type 6



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

Characteristic	
Material	A; WA
Grit	F180-F22
Hardness	F-Q
Structure	6-8

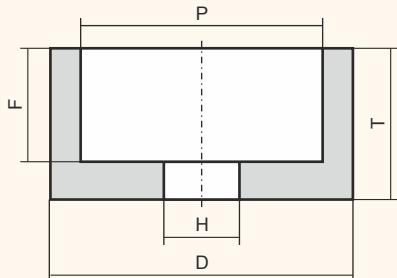


35m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
40	25	13	32	20	16750	0.033	36
50	32	13	40	25	13400	0.061	64
60	40	20	42	32	11150	0.147	36
76	40	20	65	32	8790	0.158	36
80	40	20	65	32	8400	0.205	36
80	40	20	70	32	8400	0.205	36
80	40	20	50	32	8400	0.271	36
80	50	25	48	35	8400	0.405	36
91	60	16	75	48	7340	0.380	8
100	40	20	80	30	6700	0.356	16
100	50	20	50	30	6700	0.420	16
100	50	20	80	40	6700	0.372	16
100	50	20	86	40	6700	0.349	16
114	63	51	76	32	5850	0.957	8
125	50	32	107	38	5350	0.582	8
125	50	32	85	38	5350	0.969	8
125	63	32; 51; 76	100	50	5350	0.824	8
150	50	32	130	38	4500	0.822	8
150	50	63.5	125	35	4500	0.869	8
150	63	65	100	38	4500	1.642	4
150	70	32	125	55	4500	1.217	4
150	75	25.4	100	50	4500	2.064	4
150	80	25.4	100	55	4500	2.174	4

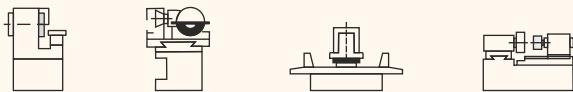
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 6



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

Characteristic	
Material	A; WA
Grit	F180-F22
Hardness	F-Q
Structure	6-8

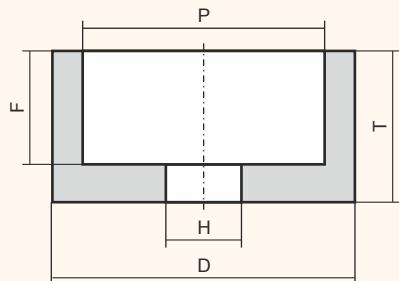


35m/s

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
150	80	32	118	65	4500	1.347	4
150	80	32; 51; 76	125	65	4500	1.313	4
150	80	55	130	65	4500	1.104	4
150	80	65	90	58	4500	2.180	4
170	50	50	100	36	3930	1.820	6
175	30	65	132	16	3810	1.019	8
175	75	76	139	57	3810	1.928	8
200	60	50	120	48	3350	2.622	2
200	60	50	120	45	3350	2.850	2
200	63	32; 51	165	50	3350	2.012	2
200	63	32	140	33	3350	2.120	2
200	80	30	165	60	3350	2.696	2
200	80	32	120	55	3350	3.634	2
200	80	50	150	40	3350	3.250	2
200	80	32; 76	170	65	3350	2.175	2
200	85	51	150	55	3350	3.570	2
200	100	32	140	70	3350	4.576	2
200	100	51; 90	150	70	3350	4.135	2
200	100	76	170	85	3350	2.567	2
250	100	76	180; 125	60; 75	2700	7.330	2
250	100	127	195	75	2700	5.276	2
250	100	150	200	75	2700	4.735	2

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

Тип 6



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

Characteristic	
Material	C; GC
Grit	F150-F36
Hardness	F-P
Structure	6-8



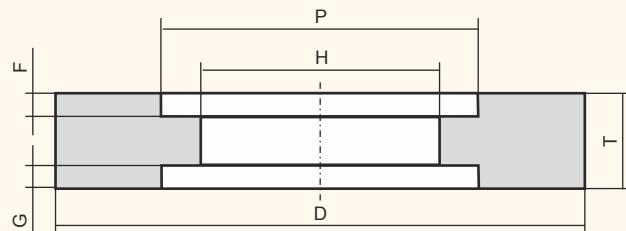
35 м/с

D, mm	T, mm	H, mm	P, mm	F, mm	Working speed, RPM	Weight, kg	
40	25	13	32	20	16750	0.029	36
50	32	13	40	25	13400	0.061	64
80	40	20	65	32	8400	0.182	36
100	50	20	86	40	6700	0.370	36
100	50	20	50	30	6700	0.398	16
100	50	20	80	40	6700	0.372	16
125	50	32	107	38	5350	0.516	16
125	63	32; 51; 76	100	50	5350	0.731	8
150	50	32	130	38	4500	0.729	8
150	80	32	118	65	4500	1.194	4
150	80	32; 51; 76	125	65	4500	1.164	4
200	60	50	120	48	3350	2.622	2
200	63	32; 51	165	50	3350	1.757	2
200	63	32	140	33	3350	1.784	2
200	80	32	120	55	3350	3.634	2
200	80	76	170	65	3350	1.928	2
200	100	32	140	70	3350	4.056	2
200	100	51	150	70	3350	3.665	2
200	100	76	170	85	3350	2.850	2
250	100	127	195	75	2700	4.677	2
250	100	150	200	75	2700	4.197	2

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

DOUBLE-SIDED RECESSED GRINDING WHEELS

Type 7



For flat, round outer and inner grinding the details and constructions made of different types of steels, for cutting tools sharpening made of high speed steels, for groats peeling.

Characteristic		
Material	A	WA
Grit	F90-F36	F150-F36
Hardness	K-Q	J-Q
Structure	4-7	

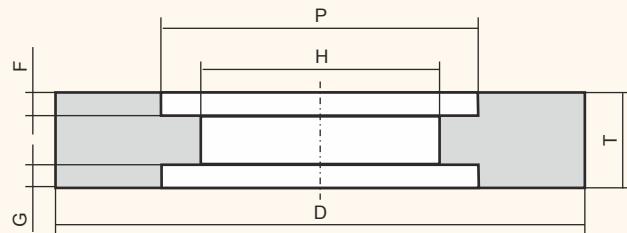


50m/s

D, mm	T, mm	H, mm	P, mm	F, mm	G, mm	Working speed, RPM	Weight, kg	
175	25	32	163	5	5	5450	0.850	10
200	20	32	170	5	5	4800	0.887	8
200	25	32	184	8	8	4800	0.810	6
200	25	32	170	7.5	7.5	4800	0.984	6
200	40	32	184	16	16	4800	0.920	4
250	20	32	220	5	5	3850	1.674	2
250	25	32	220	7.5	7.5	3850	1.967	2
250	40	76	150	5	5	3850	3.683	2
250	63	127	170	13	13	3850	4.820	2
300	50	76	160	10	10	3200	6.677	2
300	50	127	200	13	13	3200	5.480	2
300	100	127	200	13	13	3200	12.320	1
300	125	127	200	25	25	3200	14.040	1
300	127	175	208	22	22	3200	12.219	1
300	150	127	200	40	35	3200	16.560	1
300	160	127	200	15	15	3200	20.050	1
340	94	230	295	13	13	2810	9.200	1
350	50	127	200	13	13	2750	8.139	1
350	67	203	290	13	13	2750	7.940	1
350	100	127	200	15	15	2750	18.263	1

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

Type 7



For flat, round outer and inner grinding the details and constructions made of different types of steels, for cutting tools sharpening made of high speed steels, for groats peeling.

Characteristic		
Material	A	WA
Grit	F90-F36	F150-F36
Hardness	K-Q	J-Q
Structure	4-7	

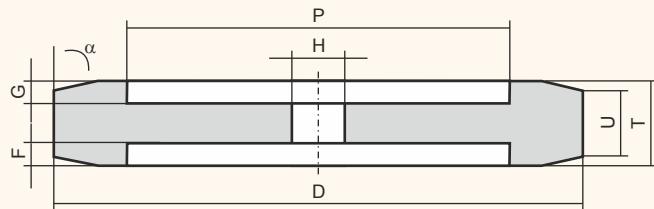


50m/s

D, mm	T, mm	H, mm	P, mm	F, mm	G, mm	Working speed, RPM	Weight, kg	
350	150	127	200	40	20	2750	26.220	1
400	50	203	265	13	13	2400	8.986	1
400	80	127	200	15	15	2400	19.490	1
400	100	127	197	20	20	2400	23.237	1
400	140	203	280	20	20	2400	27.709	1
450	50	203	265	13	13	2150	13.200	1
450	80	203	270	20	20	2150	21.000	1
600	63	305	375	16	16	1600	27.600	1
600	80	305	375	16	16	1600	35.050	1
600	100	305	375	25	25	1600	43.330	1
600	150	305	365	25	25	1600	63.313	1
600	180	305	375	25	25	1600	79.760	1
750	80	305	375	16	16	1300	65.050	1
750	100	305	375	25	25	1300	83.970	1
900	80	305	375	16	16	1100	101.840	1
900	100	305	375	25	25	1100	125.150	1

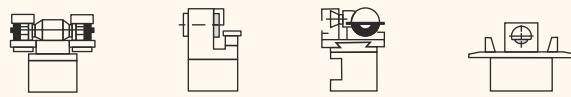
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 7-S



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

Characteristic	
Material	WA
Grit	F150-F100
Hardness	K-L
Structure	4-7

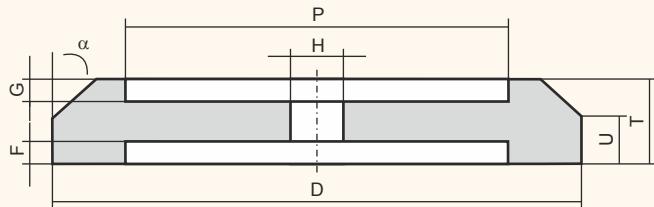


50m/s

D, mm	T, mm	H, mm	P, mm	F=G, mm	U, mm	α° ,	Working speed, RPM	Weight, kg	
200	32	20	144	8.5	25	83	4800	1.550	3
200	42	20	144	13	30	78	4800	1.800	4

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

Type 7-M



For flat, round outer and inner grinding the details and constructions made of different types of steels, for sharpening the cutting tools made of high speed steels, for groats peeling.

Characteristic	
Material	A; WA
Grit	F30-F16
Hardness	O-Q
Structure	4-6

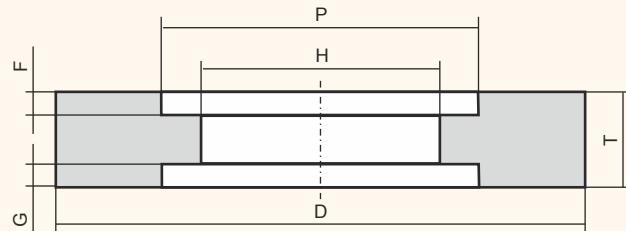


35m/s

D, mm	T, mm	H, mm	P, mm	F=G, mm	U, mm	α° ,	Working speed, RPM	Weight, kg	
250	63	127	170	13	15...20	30	2700	4.600	1
450	50	203	265	12	15...20	30	1500	11.520	1
450	50	203	265	12	15...20	55	1500	12.330	1

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

Type 7



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

Characteristic	
Material	C; GC
Grit	F90-F16
Hardness	K-Q
Structure	4-8



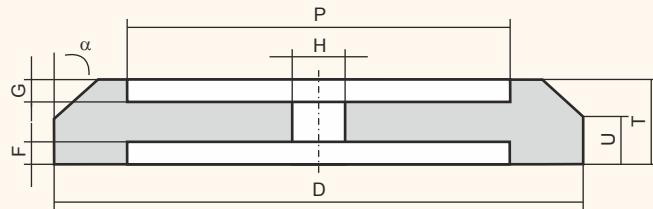
35m/s

D, mm	T, mm	H, mm	P, mm	F, mm	G, mm	Working speed, RPM	Weight, kg	Box
125	40	32	109	16	16	5350	0.374	24
250	50	110	180	13	13	2700	3.800	2
250	63	127	170	13	13	2700	4.200	2
250	63	127	180	10	10	2700	4.565	2
300	50	127	200	5	5	2250	6.042	2
300	50	127	200	13	13	2250	5.420	2
400	50	203	265	13	13	1700	8.142	1
450	50	203	265	13	13	1500	11.480	1
600	63	305	375	16	16	1150	25.100	1
600	80	305	375	16	16	1150	36.590	1

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



Type 7-M



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

Characteristic	
Material	C
Grit	F30-F16
Hardness	N-Q
Structure	4-7

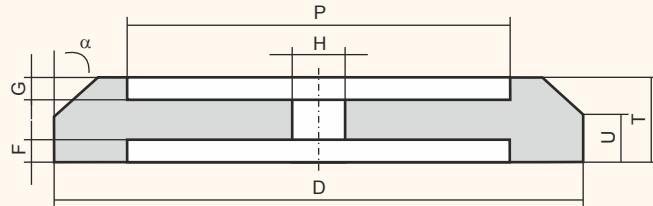


35m/s

D, mm	T, mm	H, mm	P, mm	F=G, mm	U, mm	α°	Working speed, RPM	Weight, kg	
250	50	110	180	13	15...20	30	2700	3.109	1
250	63	127	180	10	15...20	30	2700	3.509	1
250	63	127	170	13	15...20	30	2700	4.000	1
450	50	203	265	12	15...20	30	1500	11.455	1
450	50	203	265	12	15...20	55	1500	12.330	1

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

Type 7-C



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

Characteristic	
Material	C
Grit	F30-F16
Hardness	N-Q
Structure	4-7



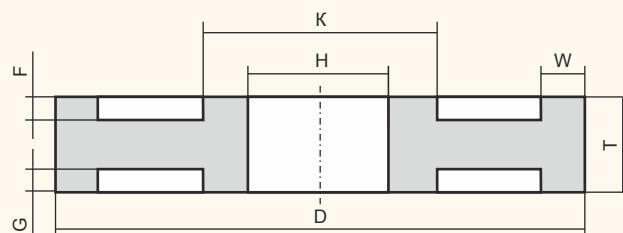
35m/s

D, mm	T, mm	H, mm	P, mm	F=G, mm	U, mm	α°	Working speed, RPM	Weight, kg	
250	63	127	180	10	15...20	45	2700	3.839	1
450	50	203	265	12	15...20	45	1500	12.430	1

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

DOUBLE-SIDED RECESSED GRINDING WHEELS

Type 8



For flat, round outer grinding the details and constructions made of different types of steels.

Characteristic	
Material	WA
Grit	F100-F36
Hardness	J-Q
Structure	4-7

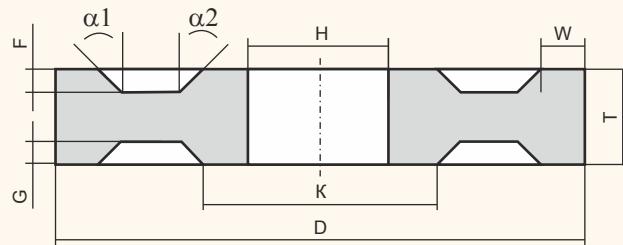


50m/s

D, mm	T, mm	H, mm	K, mm	W, mm	F, mm	G, mm	Working speed, RPM	Weight, kg	
350	40	127	230	10	10	10	2750	5.590	1
450	50	203	310	20	12.5	12.5	2150	10.946	1

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

Type 8-S



For flat, round outer grinding the details and constructions made of different types of steels.

Characteristic	
Material	WA
Grit	F100-F36
Hardness	J-Q
Structure	4-7

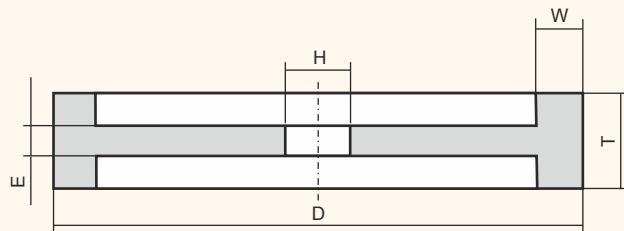


50m/s

D, mm	T, mm	H, mm	K, mm	W, mm	F, mm	G, mm	$\alpha 1^\circ$	$\alpha 2^\circ$	Working speed, RPM	Weight, kg	
450	50	203	290	7.5	15	15	45	45	2150	9.030	1
450	55	203	240	20.0	17.5	17.5	90	30	2150	9.627	1

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

Type 9



For flat, round outer grinding the details and constructions made of different types of steels.

Characteristic	
Material	WA
Grit	F100-F36
Hardness	J-Q
Structure	4-7



50m/s

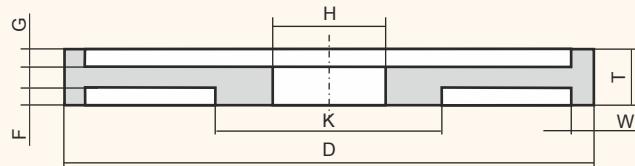
D, mm	T, mm	H, mm	E, mm	W, mm	Working speed, RPM	Weight, kg	
200	25	32	17	10	4800	1.263	6

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



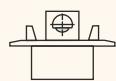
DOUBLE-SIDED RECESSED HUB GRINDING WHEEL

Type 10



For grinding the gauge cramps and sliding calipers.

Characteristic	
Material	WA
Grit	F100-F40
Hardness	K-P
Structure	6-7



50m/s

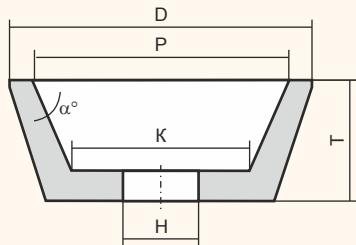
D, mm	T, mm	H, mm	K, mm	F=G, mm	W, mm	Working speed, RPM	Weight, kg	Box
150	8	32	65	2	6	6400	0.189	36
150	10	32	65	3	6	6400	0.203	28
150	16	32	65	5	6	6400	0.308	16
175	16	32	65	5	6	5450	0.403	14
200	16	32	65	5	6	4800	0.512	6
200	20	32	65	5	8	4800	0.808	8
250	10	76	125	3	8	3850	0.529	10
250	20	32	125	5	8	3850	1.328	6
250	20	76	125	6	8	3850	1.058	6
300	20	76; 127	180	5	10	3200	1.935	3

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



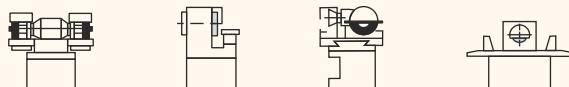
GRINDING WHEELS - CONIC CUPS

Type 11



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

Characteristic	
Material	A; WA
Grit	F150-F36
Hardness	I-Q
Structure	6-8

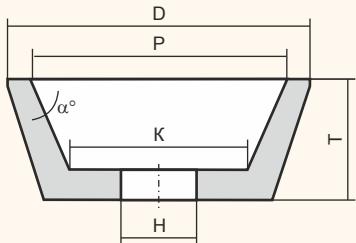


35 m/s

D, mm	T, mm	H, mm	P, mm	K, mm	α°,	Working speed, RPM	Weight, kg	
50	25	13	40	25	70	13400	0.046	48
80	32	20	65	45	70	8400	0.147	18
80	40	20	65	38	70	8400	0.163	18
100	25	20	80	50	50	6700	0.170	24
100	40	20	84	55	70	6700	0.290	16
125	32	20	120	45	45	5350	0.274	16
125	40	32	100	76	70	5350	0.509	16
125	45	32	100	70	70	5350	0.510	12
125	50	16	100	70	70	5350	0.568	12
125	50	32	100	70	70	5350	0.570	12
125	50	32	88	56	77	5350	0.753	12
150	40	32	120	70	50	4500	0.583	12
150	50	32	130	97	70	4500	0.745	12
175	63	32	140	88	60	3810	0.758	4
200	32	32	168	90	28	3350	0.638	4

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

Type 11



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

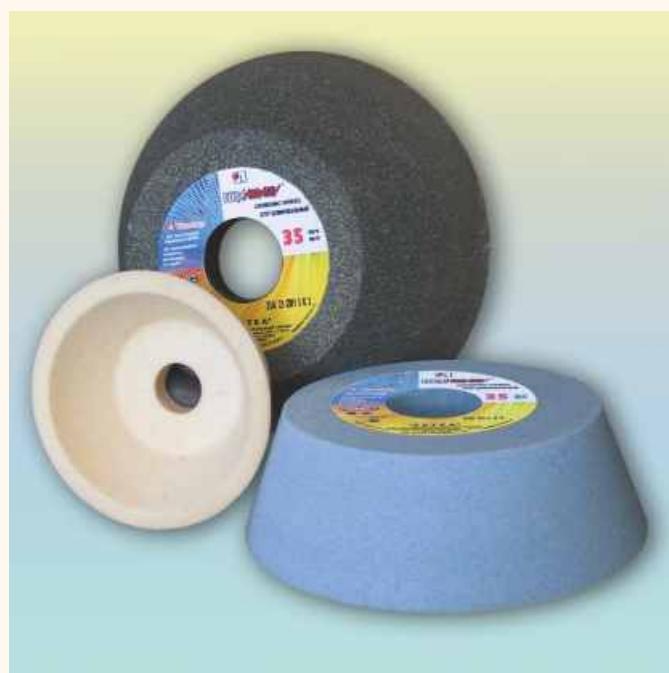
Characteristic	
Material	C; GC
Grit	F180-F36
Hardness	I-Q
Structure	6-8



35m/s

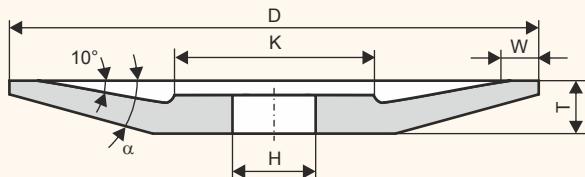
D, mm	T, mm	H, mm	P, mm	K, mm	α°	Working speed, RPM	Weight, kg	Box
50	25	13	40	25	70	13400	0.041	48
80	32	20	65	45	70	8400	0.131	18
80	40	20	65	38	70	8400	0.145	18
100	25	20	80	50	50	6700	0.151	24
100	40	20	84	55	70	6700	0.259	16
125	40	32	100	76	70	5350	0.454	16
125	45	32	100	70	70	5350	0.455	12
125	50	32	100	70	70	5350	0.508	12
125	50	32	88	56	77	5350	0.671	12
150	40	32	120	70	50	4500	0.520	12
150	50	32	130	97	70	4500	0.664	12
175	63	32	140	88	60	3810	0.675	4

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



FLAT DISH GRINDING WHEELS

Type 12



For slotting the details and constructions made of different types of steels, for sharpening the cutting tools made of high-speed steels.

Characteristic	
Material	WA
Grit	F180-F36
Hardness	J-P
Structure	5-7

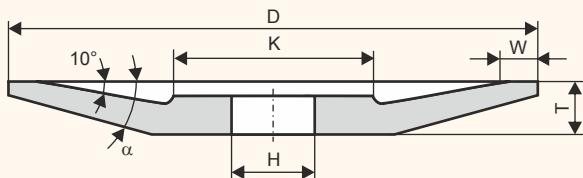


50m/s

D, mm	T, mm	H, mm	K, mm	W, mm	α,°	Working speed, RPM	Weight, kg	✉
50	10	6	16	1.5	22	19100	0.025	200
80	8	13	30	4	15	12000	0.043	99
100	10	20	40	6	15	9550	0.060	80
125	13	32	50	6	15	7650	0.140	20
150	16	32	60	8	15	6400	0.280	28
175	16	32	75	16	25	5450	0.570	20
175	20	32	75	16	25	5450	0.630	20
200	16	32	80	10	15	4800	0.530	12
200	20	32	80	10	15	4800	0.590	10
250	20	32	100	13	15	3850	0.970	8
250	25	32	100	13	15	3850	1.260	6
762	32	406.4	525	16	15	1250	14.960	1

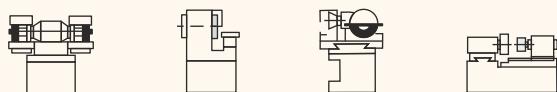
The plant receives the orders of wheels manufacturing with dimensions and characteristics not indicated in the given table.

Type 12



For slotting the details and constructions made of different types of steels, for sharpening the cutting tools made of high-speed steels.

Characteristic	
Material	A
Grit	F180-F36
Hardness	J-P
Structure	5-7



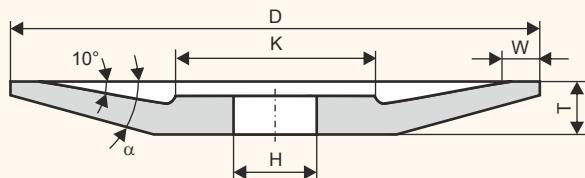
35m/s

D, mm	T, mm	H, mm	K, mm	W, mm	α,°	Working speed, RPM	Weight, kg	Box
50	10	6	16	1.5	22	13400	0.025	200
80	8	13	30	4	15	8400	0.043	99
100	10	20	40	6	15	6700	0.060	80
125	13	32	50	6	15	5350	0.140	20
150	16	32	60	8	15	4500	0.280	28
175	16	32	75	16	25	3820	0.570	20
175	20	32	75	16	25	3820	0.630	20
200	16	32	80	10	15	3350	0.530	12
200	20	32	80	10	15	3350	0.590	10
250	20	32	100	13	15	2700	0.970	8
250	25	32	100	13	15	2700	1.260	6
762	32	406.4	525	16	15	895	14.960	1

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



Type 12



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

Characteristic	
Material	C; GC
Grit	F180-F40
Hardness	J-Q
Structure	6-8



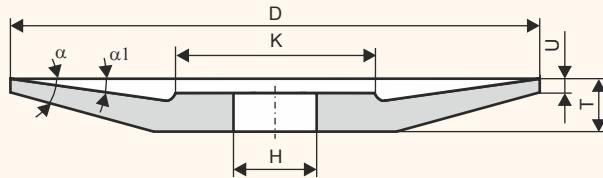
35m/s

D, mm	T, mm	H, mm	K, mm	W, mm	α,°	Working speed, RPM	Weight, kg	Box
80	8	13	30	4	15	8400	0.039	99
100	10	20	40	6	15	6700	0.054	80
125	13	32	50	6	15	5350	0.130	20
150	16	32	60	8	15	4500	0.250	28
175	16	32	75	16	25	3820	0.510	20
175	20	32	75	16	25	3820	0.570	20
200	16	32	80	10	15	3350	0.480	12
200	20	32	80	10	15	3350	0.520	10
250	20	32	100	13	15	2700	0.870	8
250	25	32	100	13	15	2700	1.130	6

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

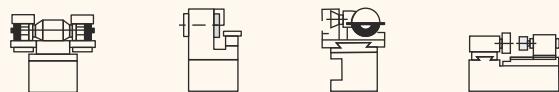
DISH GRINDING WHEELS

Type 14



For slotting the details and constructions made of different types of steels, for sharpening the cutting tools made of fast-cutting steels.

Characteristic	
Material	WA
Grit	F180-F36
Hardness	I-P
Structure	6-8

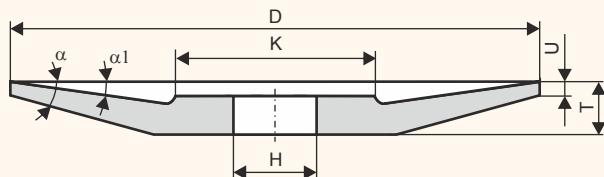


50m/s

D, mm	T, mm	H, mm	K, mm	U, mm	$\alpha, ^\circ$	$\alpha_1, ^\circ$	Working speed, RPM	Weight, kg	
100	10	20	40	2	15	10	9550	0.067	80
150	10	32	80	2	30	7	6400	0.261	32
150	16	32	60	4	15	10	6400	0.257	32
200	20	32	80	4	15	10	4800	0.542	10
220	20	90	140	2	29	20	4340	0.517	5
225	18	40	105	2	16	5	4240	0.890	10
225	18	40	105	4	14	5	4240	0.960	10
225	18	40	105	6	12	5	4240	1.029	10
250	25	32	100	6	15	10	3850	1.172	6
275	20	40	105	4	12	4	3470	1.379	2
280	33	90	110	4	23	13	3400	1.060	8
300	19	101.6	185	2	30	10	3200	1.363	3
300	20	127	185	2	30	10	3200	1.581	3
300	25	127	185	2	30	10	3200	1.892	2
350	40	127	200	2	45	7	2750	5.190	2
500	32	203	280	5	21	9	1950	6.731	1

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

Type 14



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

Characteristic	
Material	C; GC
Grit	F120-F40
Hardness	K-M
Structure	6-8



35 m/s

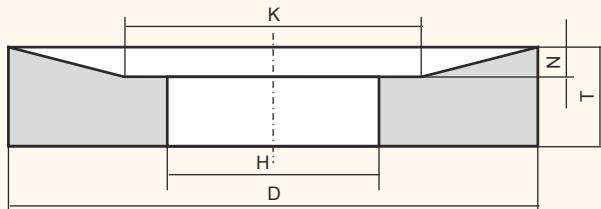
D, mm	T, mm	H, mm	K, mm	U, mm	$\alpha, ^\circ$	$\alpha_1, ^\circ$	Working speed, RPM	Weight, kg	Box
150	16	32	60	4	15	10	4500	0.230	32
200	20	32	80	4	15	10	3350	0.485	10
225	18	40	105	4	14	5	2970	0.858	10
225	18	40	105	6	12	5	2970	0.920	10

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



ONE-SIDED CONIC RECESSED GRINDING WHEELS

Type 20



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

Characteristic	
Material	WA
Grit	F40-F30
Hardness	O-P
Structure	5-6



50 m/s

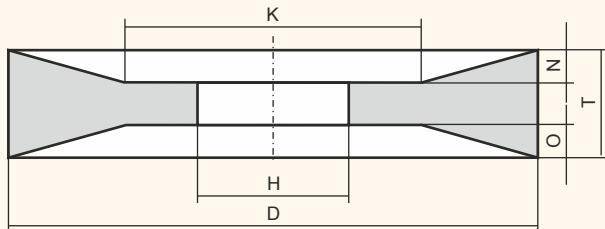
D, mm	T, mm	H, mm	K, mm	N, mm	Working speed, RPM	Weight, kg	
125	25	50	90	7	7650	0.460	8
175	20	50	-	9.3	5450	0.887	6
400	40	127	180	8	2400	9.048	1

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



DOUBLE-SIDED CONIC RECESSED GRINDING WHEELS

Type 21



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

Characteristic	
Material	WA
Grit	F120-F36
Hardness	K-P
Structure	6-7



50m/s

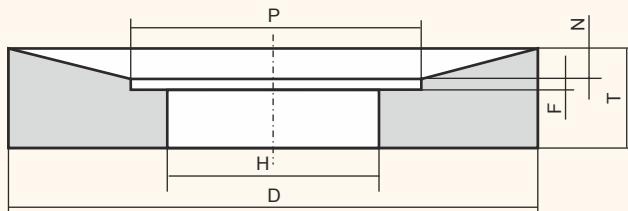
D, mm	T, mm	H, mm	K, mm	N, mm	O, mm	Working speed, RPM	Weight, kg	
200	30	32	45	10	10	4800	1.510	3

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



ONE-SIDED CONIC AND CYLINDRICAL RECESSED GRINDING WHEELS

Type 23



For all types of grinding with a possibility of simultaneous processing by a butt-end and a peripheral the details and constructions of different types of steels, sharpening of the cutting tools of high speed steels.

Characteristic		
Material	A	WA
Grit	F90-F36	F100-F36
Hardness	K-Q	J-Q
Structure	4-7	

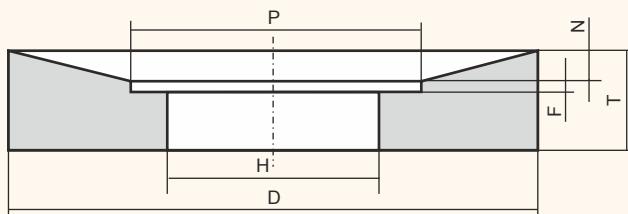


50m/s

D, mm	T, mm	H, mm	P, mm	N, mm	F, mm	Working speed, RPM	Weight, kg	Box
300	50	127	200	15	10	2220	4.870	1
300	50	127	200	18	7	3200	4.760	1
350	50	127	265	15	10	2750	6.360	1
400	50	127	154	12	14	2400	12.097	1
600	80	305	375	20	15	1600	31.030	1
600	80	305	375	22	13	1600	30.700	1
600	100	305	375	40	15	1600	35.340	1

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

Тип 23



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

Characteristic	
Material	C; GC
Grit	F120-F22
Hardness	K-P
Structure	6-8



35 m/s

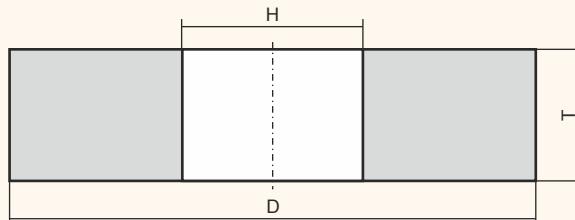
D, mm	T, mm	H, mm	P, mm	N, mm	F, mm	Working speed, RPM	Weight, kg	Box
300	50	127	200	18	7	2250	4.250	1
300	50	127	200	15	10	2250	4.400	1
350	50	127	265	15	10	1950	5.880	1
400	50	127	154	12	14	1700	12.840	1

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



WHEELS FOR GRINDING BY BUTT-ENDS

Type 35



For flat grinding by a butt-end of the details and constructions made of different types of steels, sharpening of the cutting tools of high speed steels.

Characteristic	
Material	WA
Grit	F60
Hardness	K-O
Structure	5-6



50 m/s

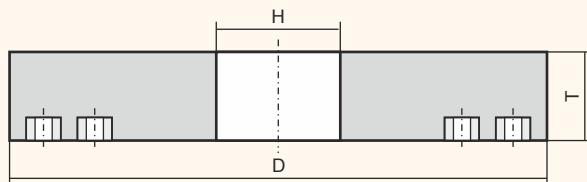
D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
200	40	without any hole	4800	2.765	4
200	50	without any hole	4800	3.457	2
300	40	76 drawing	3200	5.823	1
380	40	200 drawing	2500	7.218	1

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



GRINDING WHEELS WITH PRESSED-IN FASTENING COMPONENTS

Type 36



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

Characteristic	
Material	WA
Grit	F36-F22
Hardness	K-O
Structure	4-8



35 m/s

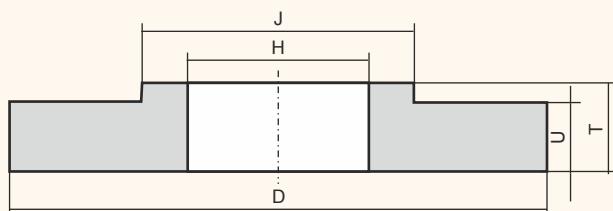
D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
455	75	without any hole	1470	26.676	1
455	75	105	1470	26.315	1
600	80	305	1150	40.310	1
650	80	350	1020	41.880	1
660	100	150	1010	71.391	1

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



ONE-SIDED HUB GRINDING WHEELS

Type 38



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

Characteristic	
Material	WA
Grit	F90-F36
Hardness	K-M
Structure	5-6



50 m/s

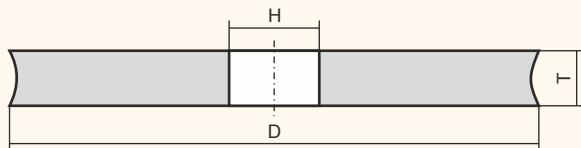
D, mm	T, mm	H, mm	J, mm	U, mm	Working speed, RPM	Weight, kg	Box
900	28	305	450	25.5	1100	32.406	1
900	33	305	390	25.0	1100	33.984	1

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



GRINDING WHEELS OF SPECIAL PROFILE

Type 1-J



For grinding of needles.

Characteristic	
Material	WA
Grit	F90-F36
Hardness	O-R
Structure	5-7

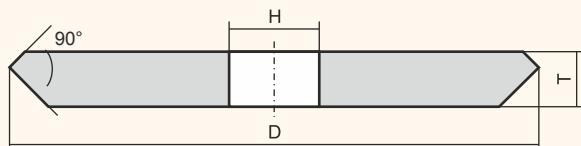


35m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
400	100	127	1700	27.600	1
400	150	100	1700	33.147	1
450	200	150	1500	51.580	1

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

Type 1-N



For grinding of the details and constructions made of different types of steels.

Characteristic	
Material	WA
Grit	F60-F40
Hardness	K-Q
Structure	4-7

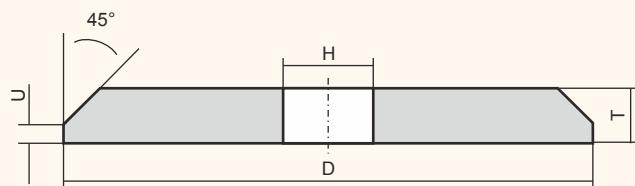


50m/s

D, mm	T, mm	H, mm	Working speed, RPM	Weight, kg	
500	32	203	1950	8.890	1
750	50	305	1300	38.859	1
750	75	305	1300	58.970	1
750	100	305	1300	75.200	1
900	55	305	1100	67.736	1
900	100	305	1100	116.605	1

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

Type 1-C



For flaking of the grain, for grinding of the details and constructions made of different types of steels.

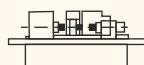
Characteristic	
Material	A
Grit	F24-F16
Hardness	O-Q
Structure	4-8



35 m/s

D, mm	T, mm	H, mm	U, mm	Working speed, RPM	Weight, kg	
250	40	127	8-12	2700	2.740	1
450	50	203	5	1500	11.158	1
450	53	203	28	1500	14.039	1
750	80	305	10	895	56.069	1

For flaking of the grain, for grinding of the details and constructions made of cast iron.



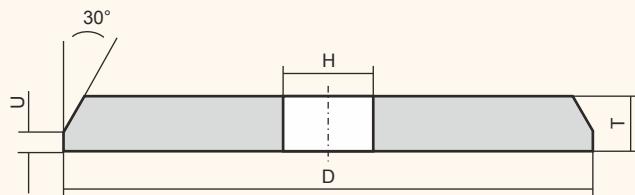
Characteristic	
Material	C
Grit	F24-F16
Hardness	O-Q
Structure	4-8

35 m/s

D, mm	T, mm	H, mm	U, mm	Working speed, RPM	Weight, kg	
450	50	203	5	1500	11.158	1
450	53	203	28	1500	14.039	1
750	80	305	10	895	56.069	1

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

Type 1-M



For flaking of the grain, for grinding of the details and constructions made of different types of steels.

Characteristic	
Material	A
Grit	F24-F16
Hardness	O-Q
Structure	4-8



35 m/s

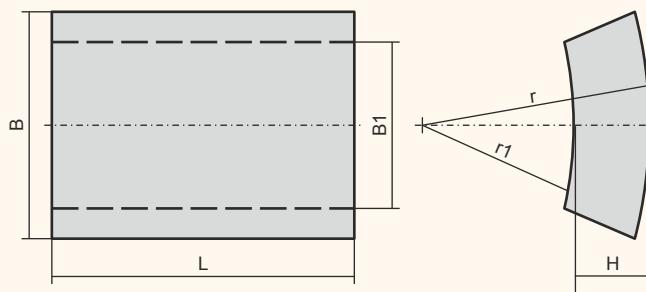
D, mm	T, mm	H, mm	U, mm	Working speed, RPM	Weight, kg	
200	40	32	15-20	3350	2.260	4
200	50	32	15-20	3350	3.171	2
250	40	127	15-20	2700	2.484	1
300	40	127	15-20	2250	3.500	1
400	40	127	6-15	1700	9.205	1
450	50	127	6-12	1500	12.000	1

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



CONVEX-CONCAVE SEGMENTS

Type 1S



For flat grinding of the details and constructions made of different types of steels.



Characteristic	
Material	WA
Grit	F36-F40
Hardness	G-J
Structure	4-9

B, mm	H, mm	L, mm	B1, mm	r, mm	r1, mm	Weight, kg	Box
75	20	140	54	150	130	0.415	16

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

For flat grinding of the details and constructions made of cast iron.



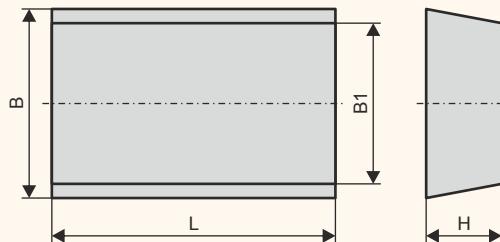
Characteristic	
Material	GC
Grit	F36-F40
Hardness	G-J
Structure	7

B, mm	H, mm	L, mm	B1, mm	r, mm	r1, mm	Weight, kg	Box
75	20	140	54	150	130	0.415	16

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

TRAPEZOIDAL GRINDING SEGMENTS

Type 5S



For flat grinding of the details and constructions made of different types of steels.

Characteristic	
Material	A; WA
Grit	F90-F36
Hardness	H-P
Structure	4-9

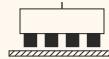


B, mm	H, mm	L, mm	B1, mm	Weight, kg	
60	16	125	50	0.212	24
60	22	110	46	0.271	24
70	25	150	64	0.600	12
100	40	150	85	1.230	8

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

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

Characteristic	
Material	GC
Grit	M63-F36
Hardness	J-P
Structure	7-8

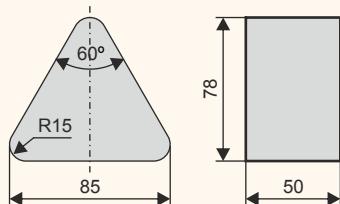


B, mm	H, mm	L, mm	B1, mm	Weight, kg	
100	40	150	85	1.060	8

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

SPECIAL SEGMENTS

Type 6S



For high-performance grinding of concrete and marble floors.



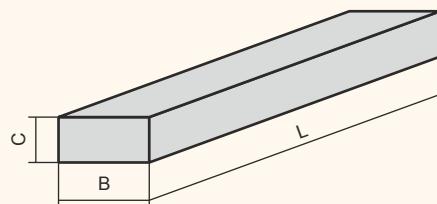
Characteristic	
Material	A; WA; C
Grit	F60-F16
Hardness	K-Q
Structure	5-7
Weight, kg	0.510
	18

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



RECTANGULAR GRINDING STONES

Type BP



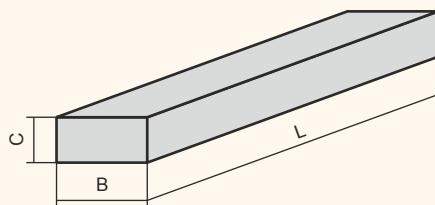
For flat and round outer grinding, for honing the details made of different types of steels, sharpening and setting the cutting tools.

Characteristic	
Material	A; WA
Grit	F230-F40
Hardness	H-Q
Structure	6-9

B, mm	C, mm	L, mm	Weight, kg	
9	6	63	0.008	540
11	9	100	0.022	165
11	9	125	0.028	132
13	10	100	0.029	130
15	14	150	0.070	110
19	8	65	0.021	156
20	6	150	0.040	182
20	10	100	0.044	78
20	10	150	0.068	105
20	13	150	0.089	84
20	13	200	0.116	80
20	16	150	0.109	63
20	16	200	0.146	60
25	4	70	0.016	160
25	16	150	0.136	54
25	16	200	0.178	48
25	20	150	0.167	42
25	20	200	0.227	40
30	20	80	0.108	60
30	40	60	0.158	50
32	20	200	0.291	30
40	16	200	0.285	30
40	20	200	0.364	25
40	20	250	0.445	24
40	25	200	0.445	20
40	100	300	2.642	3

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

Type BP



For flat and round outer grinding, for honing the details made of different types of steels, sharpening and setting the cutting tools.

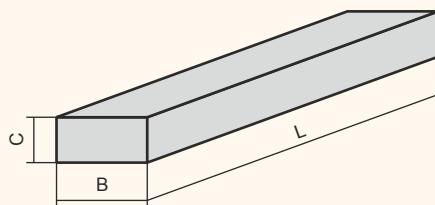
Characteristic	
Material	A; WA
Grit	F230-F40
Hardness	H-Q
Structure	6-9

B, mm	C, mm	L, mm	Weight, kg	
50	20	200	0.450	20
50	25	200	0.568	16
50	30	200	0.667	12
60	15	160	0.327	15
60	25	125	0.417	16
60	25	200	0.682	12
90	20	150	0.608	10
90	50	90	0.970	8
100	25	125	0.703	5
100	40	150	1.321	6
100	40	300	2.642	3

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



Type BP



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

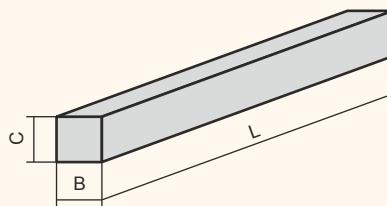
Characteristic	
Material	C; GC
Grit	F230-F16
Hardness	H-Q
Structure	2-9

B, mm	C, mm	L, mm	Weight, kg	
10	8	100	0.016	224
11	9	75	0.014	165
11	9	100	0.020	165
16	13	125	0.052	130
15	14	150	0.065	110
20	10	150	0.060	105
20	13	150	0.078	84
20	13	200	0.107	80
20	16	46	0.029	189
20	16	150	0.095	63
20	16	200	0.127	60
25	10	200	0.099	80
25	13	80	0.054	190
25	16	150	0.119	54
25	20	200	0.206	40
30	12	150	0.107	65
32	20	200	0.263	30
40	16	200	0.263	30
40	20	200	0.318	25
40	25	200	0.412	20
50	15	200	0.298	26
50	25	150	0.432	18
50	25	200	0.515	16
50	30	250	0.746	10
60	25	200	0.597	10

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

SQUARE GRINDING STONES

Type BKv



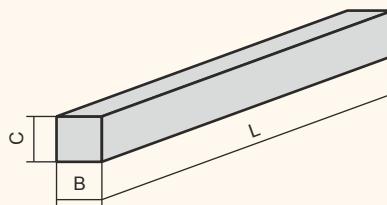
For flat and round outer grinding, for honing the details made of different types of steels, for sharpening and setting the cutting tools.

Characteristic	
Material	A; WA
Grit	F230-F36
Hardness	H-Q
Structure	6-9

B, mm	C, mm	L, mm	Weight, kg	
6	6	75	0.006	400
6	6	100	0.008	483
8	8	75	0.011	608
8	8	100	0.015	272
10	10	100	0.023	156
10	10	120	0.027	130
10	10	150	0.035	225
13	13	100	0.038	90
13	13	120	0.045	144
13	13	125	0.048	144
13	13	150	0.058	132
16	16	100	0.058	56
16	16	150	0.087	81
16	16	200	0.113	60
20	20	150	0.136	56
20	20	200	0.182	50
25	25	150	0.213	36
25	25	200	0.284	32
25	25	300	0.413	18
40	40	50	0.182	50
40	40	75	0.272	25
40	40	200	0.726	10

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

Type BKv



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

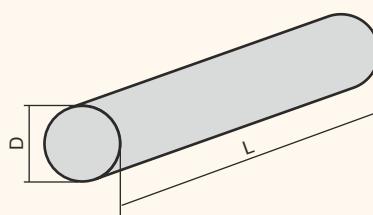
Characteristic	
Material	C; GC
Grit	F230-F40
Hardness	I-Q
Structure	6-9

B, mm	C, mm	L, mm	Weight, kg	
8	8	100	0.013	272
8	8	150	0.018	304
10	10	100	0.020	156
10	10	150	0.032	225
13	13	100	0.033	90
13	13	125	0.044	144
13	13	150	0.053	132
15	15	100	0.044	72
15	15	200	0.095	91
16	16	100	0.051	56
16	16	150	0.076	81
16	16	200	0.101	60
20	20	150	0.119	56
20	20	200	0.168	50
25	25	150	0.197	36
25	25	200	0.263	32
40	40	200	0.672	10
50	50	200	0.965	8

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

ROUND GRINDING STONES

Type BKr



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

Characteristic	
Material	A; WA
Grit	F120-F40
Hardness	K-O
Structure	6-8

D, mm	L, mm	Weight, kg	
10	100	0.017	189
13	150	0.043	147
16	150	0.067	94
40	130	0.363	6
40	150	0.419	12
40	180	0.520	10

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

Characteristic	
Material	GC
Grit	F180-F100
Hardness	K-O
Structure	6-7

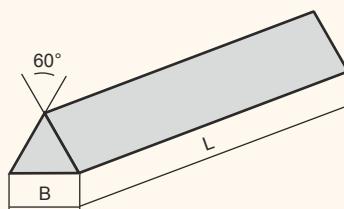
D, mm	L, mm	Weight, kg	
12	32	0.007	378

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



THREE-EDGED GRINDING STONES

Type BT



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

Characteristic	
Material	A; WA
Grit	F230-F100
Hardness	K-P
Structure	6-8

B, mm	L, mm	Weight, kg	
13	150	0.025	294
16	150	0.038	187

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

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

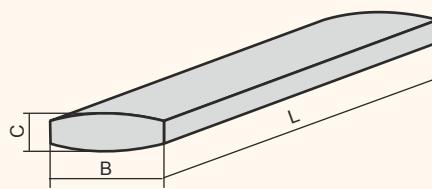
Characteristic	
Material	GC
Grit	F180-F100
Hardness	K-O
Structure	6-8

B, mm	L, mm	Weight, kg	
13	150	0.022	294
16	150	0.033	187

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

SPECIAL GRINDING STONES

Type BPc



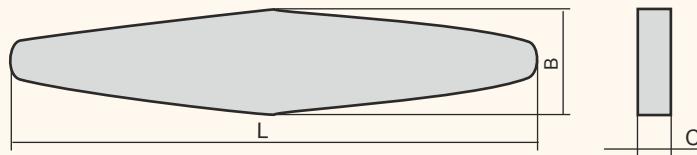
For final setting and sharpening the cutting tools, tapping cutters.

Characteristic	
Material	WA
Grit	F150
Hardness	K-P
Structure	6-8

B, mm	C, mm	L, mm	Weight, kg	
15	5	125	0.020	300
20	8	140	0.040	112

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

Type B



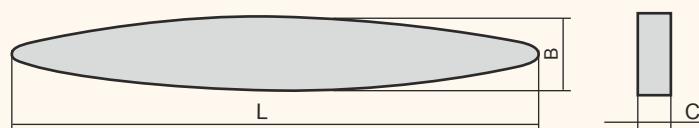
For setting, sharpening the scythes and cutting tools.

Characteristic	
Material	A
Grit	F100-F60
Hardness	K-M
Structure	7

L, mm	B, mm	C, mm	Weight, kg	
200	40	13	0.150	50

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

Type B



For setting, sharpening the scythes and cutting tools.

Characteristic	
Material	A
Grit	F100-F60
Hardness	K-M
Structure	7

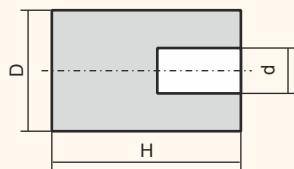
L, mm	B, mm	C, mm	Weight, kg	
225	35	15	0.200	60
225	35	18	0.240	50
225	40	20	0.290	45

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



CYLINDRICAL MOUNTED POINTS

Type AW



For smoothing operations and inner grinding the details and constructions made of different types of steels.

Points are produced without mountings.

Characteristic	
Material	WA
Grit	F220-F40
Hardness	K-Q
Structure	5-7



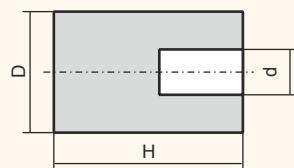
50 m/s

D, mm	H, mm	d, mm	Working speed, RPM	Weight, kg	
16	16	6	59700	0.007	384
16	20	6	59700	0.009	320
16	25	6	59700	0.011	256
17	40	6	56200	0.017	128
20	25	6	47800	0.018	144
20	32	6	47800	0.023	108
25	25	6	38200	0.028	100
25	30	6	38200	0.030	75
25	32	6	38200	0.036	75
32	32	6	30000	0.058	48
32	40	6	30000	0.073	32
40	40	8	23900	0.114	18

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



Type AW



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

Points are produced without mountings.

Characteristic	
Material	GC
Grit	F60-F40
Hardness	M-N
Structure	6-8



35 m/s

D, mm	H, mm	d, mm	Working speed, RPM	Weight, kg	
16	16	6	41780	0.006	384
16	20	6	41780	0.008	320

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





Dear partners, we invite to cooperation everybody who is interested in our production. We hope that this catalogue will help you to select the tools, you are interested in, easy and quickly.

When you compile the order, please, indicate the most complete characteristics of products. It will help to the fastest processing and fulfilment of the order. You also should pay attention to quantity of items in a packing, as the production is shipped in multiples of the package.

In addition to dimensions and characteristics given in this catalogue our plant fulfills the orders for manufacture of items according to individual demands of the customer, including replacement of import analogues.

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