



Catalogue stock items for universal grinding

English | 2024

Premium grinding solutions since 1919
www.tyrolit.com

TYROLIT

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Factors behind our success

TYROLIT today

TYROLIT, a company within the Swarovski Group, is positioned as one of the world's largest manufacturers of grinding, cut-off, sawing, drilling and dressing tools and as a supplier of tool and machine systems for the construction and natural stone industry.

Since it was founded in 1919, business at TYROLIT has been backed by one single OBJECTIVE: to produce the best tools and machines in the world.

Factors behind our success

Quality

The high quality standards applying to our products, our dealings within and outside of the company and the services we provide to our business partners are embodied in the company's strategic position.

Ongoing internal and external testing and inspection in accordance with the international standards ISO 9001:2000 and VDA6.4 provide for a sustained process of optimization. Aim: To continually increase the level of quality.

Innovation and technology

An essential factor in our success is the continuous development of new technologies suited to the needs of our customers, end users, our different markets and the environment. Our employees are constantly at work in the field of research, development and applications technology to ensure that TYROLIT remains what it has become: the market leader in innovation and technology. Worldwide.

People

The quality of our products and services starts with the quality of our employees.

We are fully aware of this, which is why we create a motivating, social environment that attracts the best, trains and develops them and makes them want to stay for the long term.



Logistics

On the basis of our central location in Europe, our global network of regional sites in Europe, Asia, and North and South America guarantees timely deliveries and individually tailored on-site services.

Expanding Tyrolit

The quality requirements on us and our 80,000 products and the resulting demands that creates have an impact.

Company Tyrolit and its workforce of 4655 employees are represented worldwide, with 29 production locations in 12 countries and a global network of sales organisations and distributors that is constantly expanding.



Customer relations

We value and foster dialogue with our customers. We keep them informed and provide training for new products and services, for applications and processes.

And we ask them about their experiences of using our product innovations so that we can continuously improve and develop our products.

At the TechCenter in Schwaz, at all distribution centres, and by providing on-site training related to individual customer's needs.

The environment

Millions euro we have invested in recent years in environmental activities, which are continuously monitored by ISO 14001-certification. This guarantees that all our products comply with maximum requirements regarding environmental sustainability, not only at manufacturing stage but also in their application and disposal.

And we are making further investments so that TYROLIT can retain its leading role in environmental protection.



How to order

Deliveries provides:

TYROLIT CEE k.s.
Tovární 363
294 71 Benátky nad Jizerou
Tel.: +420 326 766 111
Fax: +420 326 766 105
E-mail: cz.info@tyrolit.com

And wide net of business partners

For general terms and conditions of business,
visit: www.tyrolit.cz

Online ordering

www.partner.tyrolit.com

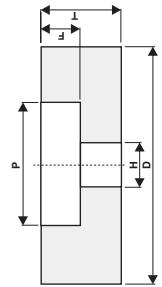
For more information please contact your Tyrolit dealer.

The benefits for you:

- Confirmation of price before ordering
- Confirmation of availability before ordering
- Prompt dispatch of your order plus confirmation of delivery date
- Instant up-date on the status of your order
- Secure payment site

MARKING SYSTEM

Shape according to EN 12413



Dimensions in mm

Specification

Maximum operating speed

Peripheral

Angular

2540 rpm

40

Vitrified bonded wheels
speed 32; 40 ms ⁻¹
increased speed 50 ms ⁻¹
high speed 63 ms ⁻¹
Resinoid bonded wheels
speed 40; 50 ms ⁻¹
increased speed 63 ms ⁻¹
higher speed 80 ms ⁻¹
high speed 100 ms ⁻¹

Structure

Recommended for OD, ID, sharpening, bench grinder

Very closed
1
2

Closed
3
4

Semi-closed
5
6

Open
7
8

surface grinding
Porous
11
12
13

Hardness grade

Recommended for surface grinding
OD, ID, sharpening, bench grinder

F, G	very soft	K, L, M, N, O	medium
H, I, J	soft	P, Q, R, S	hard
		T, U, V, W, X, Z	very hard

Abrasive grain type

- 96A – brown aluminium oxide
- 98A – pink aluminium oxide
- 99A – white aluminium oxide colored
- 99BA – white aluminium oxide
- 98RA – ruby aluminium oxide
- 99SA – micro-crystal corundum
- 90MA – mono-crystal corundum
- 97PA – semi-friable aluminium oxide
- 97EA – zirconium aluminium oxide
- 48C – black silicon carbide
- 49C – green silicon carbide

Grit size No. by FEPA

	Coarse	Medium	Fine	Very fine
8	30	70	220	
10	36	80	240	
12	40	90	280	
14	46	100	320	
16	54	120	400	
20	60	150		
22		180		
24				

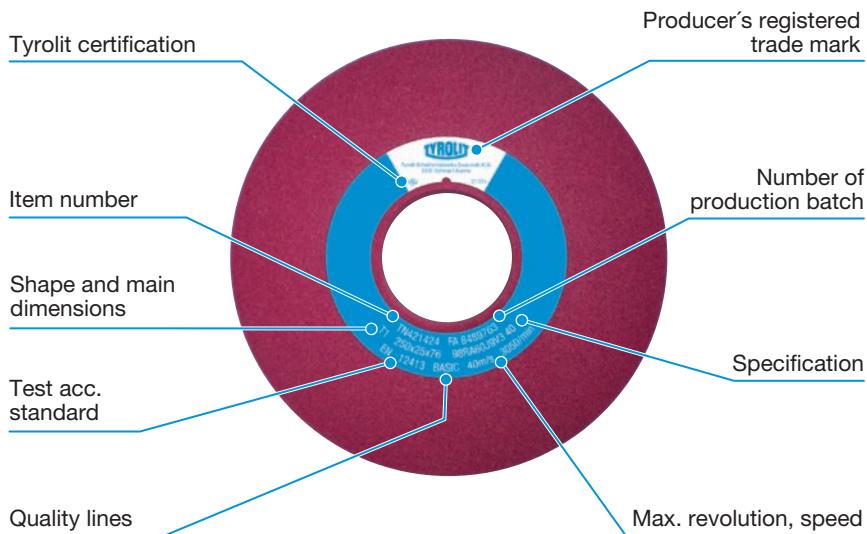
List of mixtures:

- 3ENA – mixture of aluminium oxides 97EA/96A
- 5RNA – mixture of aluminium oxides 98A/96A
- 5RTNA – mixture of aluminium oxides 98RA/96A
- 5BNA – mixture of aluminium oxides 99BA/96A

1	2	3	4	5	6	7	8	9
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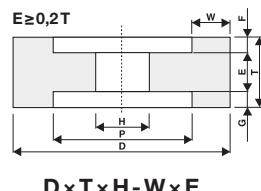
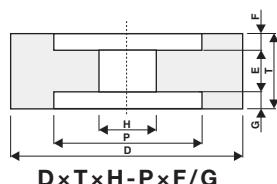
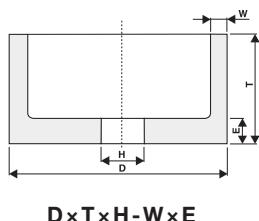
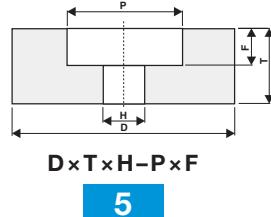
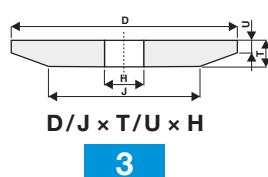
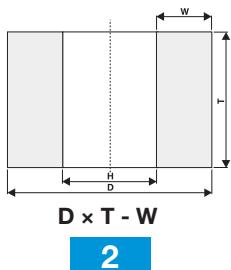
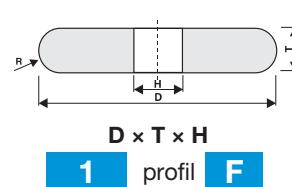
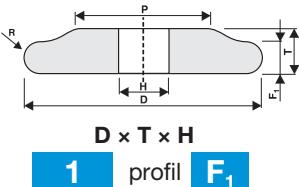
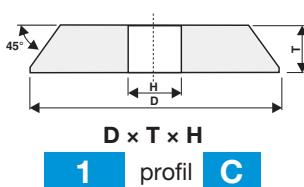
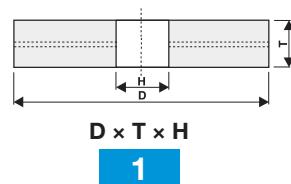
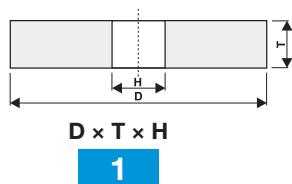
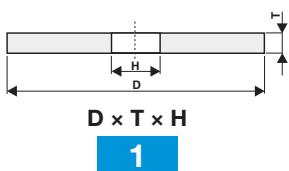
V	vitrified
Mg	magnesite
R	rubber
B	resinoid
BF	resinoid reinforced

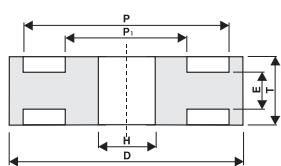
Standard marking of grinding tools



TYROLIT	
Item No. (TN): Obj. čís. (TN):	421424
Shape/Dimensions (mm) Tvar/Rozměry (mm)	T1 250x25x76
Specification	98RA60J9V3 40
Production batch (FA): Výrobni šárze (FA):	8489763
SAFE OPERATING SPEED NOT TO EXCEED MAXIMálnI PRACOVNí RYCHLOST	
Revolution per minute (rpm) Otáčky za minutu (ot/min)	Peripheral speed (m/s) Obrívodová rychlosť (m/s)
Hand off Ruční	Machine Strojní
3050	40
Quantity: Množství:	Pcs / Ks.
Produced acc. standard Vyrobeno dle normy	EN 12413

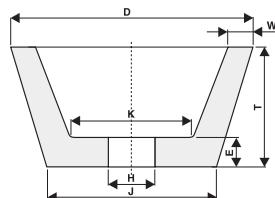
Standard shapes





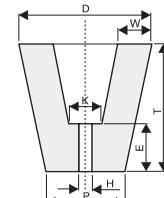
$D/P_1 \times T/E \times P/H - W \times E$

902



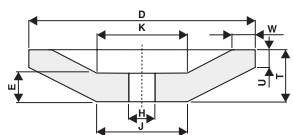
$D/J \times T \times H - W \times E \times K$

11



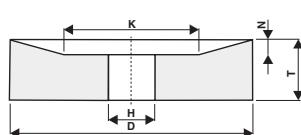
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11



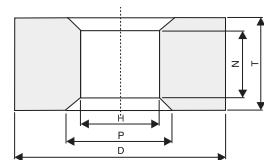
$D/J \times T/U \times H - W \times E \times K$

12



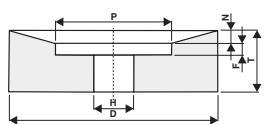
$D/K \times T/N \times H$

20



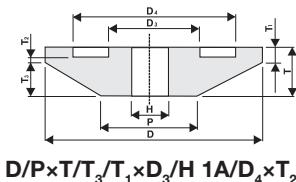
$D \times T/N \times P/H$

21



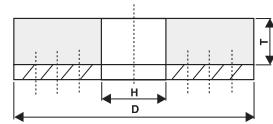
$D \times T/N \times H - P \times F$

23



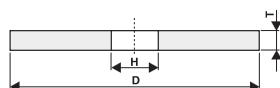
$D/P \times T/T_3/T_1 \times D_3/H \ 1A/D_4 \times T_2$

3WM2



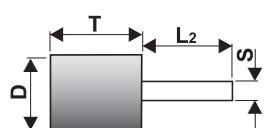
$D \times T \times H$

36

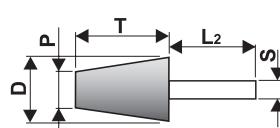


$D \times T \times H$

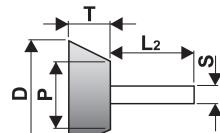
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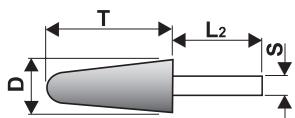
$D \times T - S \times L_2$
52ZY



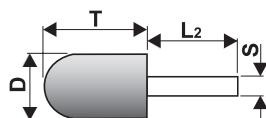
$D/P \times T - S \times L_2$
52WK



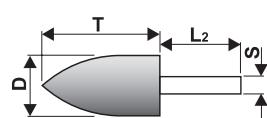
$D/P \times T - S \times L_2$
52A



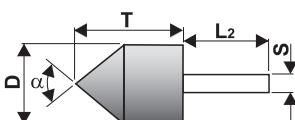
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52KE



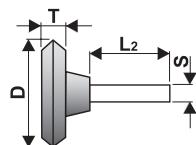
$D \times T - S \times L_2$
52WR



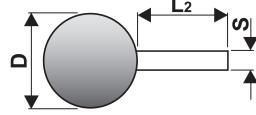
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52SP



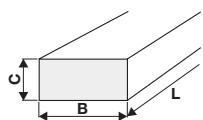
$D \times T - S \times L_2$ ^a
52ZE



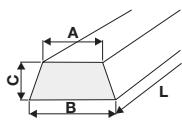
$D \times T - S \times L_2$
52A



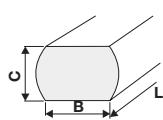
$D - S \times L_2$
52KU



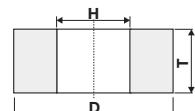
$B \times C \times L$
3101



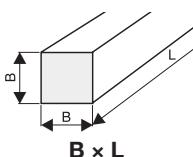
$B/A \times C \times L$
3109



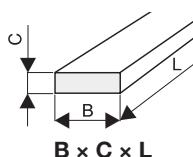
$B \times C \times L$
31S



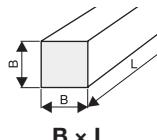
$D \times T \times H$
5420



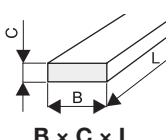
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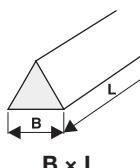
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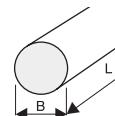
9011



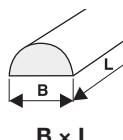
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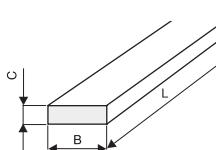
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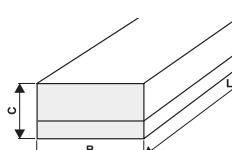
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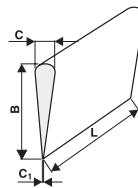
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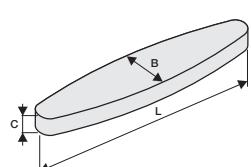
$B \times C \times L$
90AS



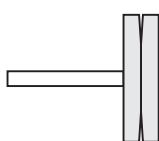
$B \times C \times L$
90K



$C/C_1 \times B \times L$
90HM



$B \times C \times L$
90W



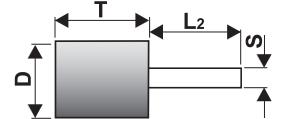
Mounted points



Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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321

Mounted points – shape 52ZY

Shape **52ZY**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>			<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
D × T – S × L₂										black silicon carbide, vitrified bond
413259	321 31 - 1055.00	52ZY	10×25-6×40					48C 40 O 6 V 40		50
413264	321 31 - 1637.00	52ZY	16×25-6×40					48C 40 O 6 V 40		20
514479	321 31 - 2063.00	52ZY	20×40-6×40					48C 24 P 5 V 40		20
413272	321 31 - 2560.00	52ZY	25×40-6×40					48C 40 O 6 V 40		20
413275	321 31 - 3235.00	52ZY	32×40-6×40					48C 24 P 5 V 40		10
413281	321 31 - 4055.00	52ZY	40×40-6×40					48C 40 O 6 V 40		10
413282	321 31 - 5039.00	52ZY	50×25-6×40					48C 40 O 6 V 40		10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D × T – S × L₂										green silicon carbide, vitrified bond
413314	321 36 - 1225.00	52ZY	12×16-3×40					49C 80 K 8 V 40		20

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	□	□		□				
D × T – S × L_z								white aluminium oxide, vitrified bond		
413331	321 51 - 0211.00	52ZY	2×6-3×40						99BA	100 M 7 V 40
413332	321 51 - 0225.00	52ZY	2×8-3×40						99BA	100 L 8 V 40
413333	321 51 - 0315.00	52ZY	3×6-3×40						99BA	100 M 7 V 40
413336	321 51 - 0335.00	52ZY	3×10-3×40						99BA	100 M 7 V 40
413342	321 51 - 0411.00	52ZY	4×6-3×40						99BA	100 M 7 V 40
413345	321 51 - 0435.00	52ZY	4×10-3×40						99BA	100 M 7 V 40
413355	321 51 - 0545.00	52ZY	5×10-3×40						99BA	100 M 7 V 40
413359	321 51 - 0611.00	52ZY	6×6-3×40						99BA	100 M 7 V 40
413360	321 51 - 0641.00	52ZY	6×10-3×40						99BA	100 M 7 V 40
413364	321 51 - 0669.00	52ZY	6×16-3×40						99BA	80 M 7 V 40
413374	321 51 - 0770.00	52ZY	7×18-6×40						99BA	80 M 8 V 40
413375	321 51 - 0823.00	52ZY	8×10-3×40						99BA	80 M 7 V 40
413377	321 51 - 0835.00	52ZY	8×16-3×40						99BA	80 M 7 V 40
413381	321 51 - 0861.00	52ZY	8×25-6×40						99BA	80 M 7 V 40
413391	321 51 - 1023.00	52ZY	10×10-3×40						99BA	80 M 8 V 40
413399	321 51 - 1045.00	52ZY	10×16-3×40						99BA	80 M 8 V 40
413404	321 51 - 1061.00	52ZY	10×25-6×40						99BA	60 M 8 V 40
413405	321 51 - 1081.00	52ZY	10×40-6×40						99BA	60 M 7 V 40
413413	321 51 - 1140.00	52ZY	10×25-6×40						99BA	80 M 7 V 40
413425	321 51 - 1241.00	52ZY	12×25-6×40						99BA	60 M 7 V 40
413426	321 51 - 1261.00	52ZY	12×40-6×40						99BA	60 M 7 V 40
413444	321 51 - 1644.00	52ZY	16×25-6×40						99BA	60 M 7 V 40
413448	321 51 - 1669.00	52ZY	16×40-6×40						99BA	60 M 7 V 40
413450	321 51 - 1681.00	52ZY	16×63-6×40						99BA	60 M 7 V 40
413461	321 51 - 2025.00	52ZY	20×16-6×40						99BA	60 M 7 V 40
413463	321 51 - 2043.00	52ZY	20×25-6×40						99BA	60 M 7 V 40
413469	321 51 - 2071.00	52ZY	20×40-6×40						99BA	60 M 7 V 40
413473	321 51 - 2086.00	52ZY	20×63-6×40						99BA	60 M 7 V 40
413485	321 51 - 2536.00	52ZY	25×25-6×40						99BA	60 M 7 V 40
413490	321 51 - 2565.00	52ZY	25×40-6×40						99BA	60 M 7 V 40
413492	321 51 - 2581.10	52ZY	25×63-6×40						99BA	60 M 7 V 40
413509	321 51 - 3212.00	52ZY	32×16-6×40						99BA	60 M 7 V 40
413510	321 51 - 3229.00	52ZY	32×25-6×40						99BA	60 M 7 V 40
413514	321 51 - 3247.00	52ZY	32×40-6×40						99BA	60 M 7 V 40
413522	321 51 - 4014.00	52ZY	40×16-6×40						99BA	60 M 7 V 40
413524	321 51 - 4039.00	52ZY	40×25-6×40						99BA	60 M 7 V 40
413529	321 51 - 4064.00	52ZY	40×40-6×40						99BA	60 M 7 V 40
413539	321 51 - 5013.00	52ZY	50×16-6×40						99BA	60 M 7 V 40
413541	321 51 - 5048.00	52ZY	50×25-6×40						99BA	60 M 7 V 40
360633	321 51 - 5065.00	52ZY	50×40-9×40						99BA	60 M 7 V 40

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■		□				
D × T – S × L_z								pink aluminium oxide, vitrified bond		
413549	321 61 - 0229.00	52ZY	2×6-3×40						98A	100 O 6 V 40
438675	321 61 - 0317.00	52ZY	3×6-3×40						98A	100 O 6 V 40

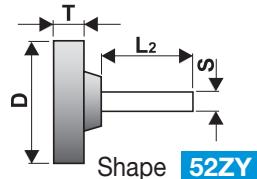
Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
413557	321 61 - 0337.00	52ZY	3x10-3x40	98A 100 O 6 V 40	50
413573	321 61 - 0413.00	52ZY	4x6-3x40	98A 100 O 6 V 40	50
435856	321 61 - 0437.00	52ZY	4x10-3x40	98A 100 O 6 V 40	50
413595	321 61 - 0547.00	52ZY	5x10-3x40	98A 100 O 6 V 40	50
413611	321 61 - 0643.00	52ZY	6x10-3x40	98A 100 O 6 V 40	50
413615	321 61 - 0671.00	52ZY	6x16-3x40	98A 80 O 6 V 40	50
413618	321 61 - 0679.00	52ZY	6x16-6x40	98A 80 O 6 V 40	50
413644	321 61 - 0825.00	52ZY	8x10-3x40	98A 80 O 6 V 40	50
413652	321 61 - 0863.00	52ZY	8x25-6x40	98A 80 O 6 V 40	50
413677	321 61 - 1025.00	52ZY	10x10-3x40	98A 80 O 6 V 40	50
413682	321 61 - 1047.00	52ZY	10x16-3x40	98A 80 O 6 V 40	50
413687	321 61 - 1063.00	52ZY	10x25-6x40	98A 60 O 6 V 40	50
413693	321 61 - 1083.00	52ZY	10x40-6x40	98A 60 O 6 V 40	50
748086	321 61 - 1173.00	52ZY	10x20-6x40	98A 46 P 6 V 40	50
413732	321 61 - 1243.00	52ZY	12x25-6x40	98A 60 O 6 V 40	20
413735	321 61 - 1263.00	52ZY	12x40-6x40	98A 60 O 6 V 40	20
413784	321 61 - 1646.00	52ZY	16x25-6x40	98A 60 O 6 V 40	20
413787	321 61 - 1653.30	52ZY	16x25-6x40	5RNA 24 Q 4 V 40	20
748087	321 61 - 1744.00	52ZY	16x20-6x40	98A 46 P 6 V 40	20
748088	321 61 - 1746.00	52ZY	16x32-6x40	98A 46 P 6 V 40	20
413791	321 61 - 1671.00	52ZY	16x40-6x40	98A 60 O 6 V 40	20
413841	321 61 - 2046.00	52ZY	20x25-6x40	98A 60 O 6 V 40	20
413844	321 61 - 2057.00	52ZY	20x32-6x40	98A 60 P 5 V 40	20
413849	321 61 - 2063.00	52ZY	20x40-6x40	98A 24 P 3 V 40	20
413850	321 61 - 2063.30	52ZY	20x40-6x40	5RNA 24 P 3 V 40	20
413852	321 61 - 2073.00	52ZY	20x40-6x40	98A 60 O 6 V 40	20
413875	321 61 - 2533.00	52ZY	25x25-6x40	98A 24 P 3 V 40	20
413876	321 61 - 2537.00	52ZY	25x25-6x40	98A 60 O 6 V 40	20
748092	321 61 - 2653.00	52ZY	25x32-6x40	98A 46 P 6 V 40	20
413888	321 61 - 2555.30	52ZY	25x40-6x40	5RNA 24 P 3 V 40	20
413890	321 61 - 2567.00	52ZY	25x40-6x40	98A 60 O 6 V 40	20
413895	321 61 - 2585.00	52ZY	25x40-6x40	98A 20 N 5 V 40	20
413937	321 61 - 3235.00	52ZY	32x32-6x40	98A 40 O 6 V 40	10
413940	321 61 - 3241.00	52ZY	32x40-6x40	98A 46 O 5 V 40	10
34155242	321 61 - 3297.30	52ZY	32x40-8x40	5RNA 24Q4 V 40	10
413983	321 61 - 4035.00	52ZY	40x25-6x40	98A 46 O 5 V 40	10
413991	321 61 - 4059.00	52ZY	40x40-6x40	98A 46 O 5 V 40	10
413996	321 61 - 4074.30	52ZY	40x40-6x40	5RNA 24 Q 4 V 40	10
414003	321 61 - 5008.00	52ZY	50x16-6x40	98A 46 O 5 V 40	10
414008	321 61 - 5050.00	52ZY	50x30-9x40	98A 20 N 5 V 40	10
414014	321 61 - 5069.30	52ZY	50x40-6x40	5RNA 24 P 5 V 40	10
34155241	321 61 - 5062.30	52ZY	50x40-8x40	5RNA 24 Q4 V 40	10

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity					
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□						
D × T – S × L₂									brown aluminium oxide, vitrified bond	
414047	321 71 - 1075.00	52ZY	10×40-6×40			96A	40 P 4 V 40			50
414058	321 71 - 1631.00	52ZY	16×25-6×40			96A	24 P 3 V 40			20
414061	321 71 - 2038.00	52ZY	20×25-6×40			96A	24 P 3 V 40			20
414062	321 71 - 2048.00	52ZY	20×30-6×40			96A	40 N 5 V 40			20
414064	321 71 - 2063.00	52ZY	20×40-6×40			96A	24 P 3 V 40			20
414074	321 71 - 2545.00	52ZY	25×32-6×40			96A	24 P 3 V 40			20
414076	321 71 - 2555.00	52ZY	25×40-6×40			96A	24 P 3 V 40			20
34242354	321 71 - 2557.00	52ZY	25×45-6×40			96A	36 P 5 V 40			20
414085	321 71 - 3235.00	52ZY	32×40-6×40			96A	24 P 3 V 40			10

Grey positions until stock run out

322

Mounted points – shape 52ZY



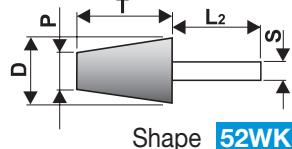
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				■		■	■	■	■	
$D \times T - S \times L_2$										
414128	322 31 - 3211.00	52ZY	32x6-6x40						48C 40 O 4 V 40	10
414130	322 31 - 4045.00	52ZY	40x10-6x40						48C 40 O 4 V 40	10
414131	322 31 - 5045.00	52ZY	50x10-6x40						48C 40 O 4 V 40	10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
$D \times T - S \times L_2$										
414144	322 51 - 1609.00	52ZY	16x2.5-3x40						99BA 80 M 7 V 40	20
414145	322 51 - 1625.00	52ZY	16x4-3x40						99BA 80 M 7 V 40	20
414151	322 51 - 2045.00	52ZY	20x6-3x40						99BA 80 M 7 V 40	20
414159	322 51 - 3216.00	52ZY	32x6-6x40						99BA 60 M 7 V 40	10
414161	322 51 - 3245.00	52ZY	32x10-6x40						99BA 60 M 7 V 40	10
414163	322 51 - 4015.00	52ZY	40x6-6x40						99BA 60 M 7 V 40	10
414165	322 51 - 4049.00	52ZY	40x10-6x40						99BA 60 M 7 V 40	10
414168	322 51 - 5049.00	52ZY	50x10-6x40						99BA 60 M 7 V 40	10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						
$D \times T - S \times L_2$										
414217	322 61 - 2519.00	52ZY	25x4-6x40						98A 80 O 6 V 40	20
414232	322 61 - 3247.00	52ZY	32x10-6x40						98A 60 O 6 V 40	10
414242	322 61 - 4017.00	52ZY	40x6-6x40						98A 60 O 6 V 40	10
414244	322 61 - 4051.00	52ZY	40x10-6x40						98A 60 O 6 V 40	10
414248	322 61 - 5015.00	52ZY	50x5-6x40						98A 60 O 6 V 40	10

323

Mounted points – shape 52WK



Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application			■	□		■	□	■		
$D/P \times T - S \times L_2$										
436136	323 31 - 2015.00	52WK	20/10x32-6x40						48C 40 O 4 V 40	20

Item number	Internal code	Shape	Dimension	Specification				Min. order quantity		
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				

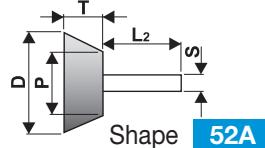
D/P × T – S × L₂**white** aluminium oxide, **vitrified** bond

436154	323 51 - 1011.00	52WK 10/6×16-3×40	99BA 80 M 7 V 40	50
436157	323 51 - 1635.00	52WK 16/6×25-6×40	99BA 80 M 7 V 40	20
436159	323 51 - 1971.00	52WK 19/5×63-6×40	99BA 80 O 6 V 40	20
438048	323 51 - 2023.00	52WK 20/10×32-6×40	99BA 80 M 7 V 40	20

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						

D/P × T – S × L₂**pink** aluminium oxide, **vitrified** bond

436165	323 61 - 2025.00	52WK 20/10×32-6×40	98A 80 O 6 V 40	20
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**324 Mounted points – shape 52A**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				

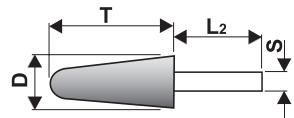
D/P × T – S × L₂**white** aluminium oxide, **vitrified** bond

436166	324 51 - 1615.00	52A 16/10×6-3×40	99BA 80 M 7 V 40	20
436167	324 51 - 2515.00	52A 25/16×12-6×40	99BA 80 M 7 V 40	20

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						

D/P × T – S × L₂**pink** aluminium oxide, **vitrified** bond

436170	324 61 - 3237.00	52A 32/16×20-6×40	98A 60 O 6 V 40	10
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**325 Mounted points – shape 52KE**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				□		■	□	□		

D × T – S × L₂**black** silicon carbide, **vitrified** bond

436172	325 31 - 2049.00	52KE 20×63-6×40 R=6	48C 40 O 4 V 40	20
436173	325 31 - 3225.00	52KE 32×40-6×40 R=6	48C 40 O 4 V 40	10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				

D × T – S × L₂**white** aluminium oxide, **vitrified** bond

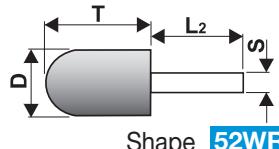
436175	325 51 - 1651.00	52KE 16×40-6×40 R=2	99BA 60 M 7 V 40	20
436177	325 51 - 2019.00	52KE 20×32-6×40 R=3	99BA 80 M 7 V 40	20
436180	325 51 - 2539.00	52KE 25×32-6×40 R=4	99BA 80 M 7 V 40	20
436181	325 51 - 3229.00	52KE 32×40-6×40 R=6	99BA 60 M 7 V 40	10

Grey positions until stock run out

■ – suitable, □ – possible | reducing rings – page 82

Item number	Internal code	Shape	Dimension	Specification				Min. order quantity		
Material	steel (grade11) Application	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
$D \times T - S \times L_2$										
436183	325 61 - 1653.00	52KE	16×40-6×40 R=2			98A	60 O 6 V 40			20
436185	325 61 - 2044.30	52KE	20×40-6×40 R=3			5RNA	24 P 5 V 40			20
436186	325 61 - 2056.00	52KE	20×63-6×40 R=6			98A	60 O 6 V 40			20
436189	325 61 - 3221.30	52KE	32×40-6×40 R=6			5RNA	24 P 5 V 40			10
436210	325 61 - 3231.00	52KE	32×40-6×40 R=6			98A	60 O 6 V 40			10
34155230	325 61 - 3222.30	52KE	32×40-8×40 R=6			5RNA	24Q 4 V 40			10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□								
$D \times T - S \times L_2$										
436212	325 71 - 2525.00	52KE	25×40-6×40 R=3			96A	40 P 4 V 40			20



326

Mounted points – shape 52WR

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
$D \times T - S \times L_2$										
436430	326 51 - 1215.00	52WR	12×16-3×40			99BA	80 M 7 V 40			20
436432	326 51 - 2015.00	52WR	20×25-6×40			99BA	60 M 7 V 40			20

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						
$D \times T - S \times L_2$										
440084	326 61 - 2533.00	52WR	25×32-6×40			98A	60 O 6 V 40			20

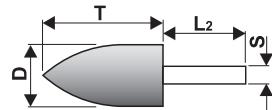
Grey positions until stock run out

■ – suitable, □ – possible | reducing rings – page 82

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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327

Mounted points – shape 52SP

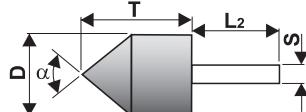
Shape **52SP**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
$D \times T - S \times L_2$										
436502	327 51 - 0609.00	52SP	6×10-3×40				99BA	80 M 7 V 40	50	
436503	327 51 - 1019.00	52SP	10×20-3×40				99BA	80 M 7 V 40	50	
436505	327 51 - 1629.00	52SP	16×32-6×40				99BA	60 M 7 V 40	20	
436507	327 51 - 2045.00	52SP	20×40-6×40				99BA	60 M 7 V 40	20	
436510	327 51 - 3051.00	52SP	30×50-6×40				99BA	80 O 6 V 40	10	

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						
$D \times T - S \times L_2$										
436512	327 61 - 1631.00	52SP	16×32-6×40				98A	60 O 6 V 40	20	
436514	327 61 - 2028.30	52SP	20×40-6×40				5RNA	24 M 7 V 40	20	
436516	327 61 - 2047.00	52SP	20×40-6×40				98A	60 O 6 V 40	20	
34064749	327 61 - 3570.30	52SP	35×70-8×40				5RNA	24P 5 V 40	10	

328

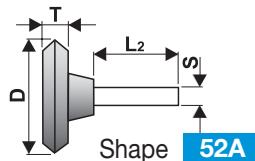
Mounted points – shape 52ZE

Shape **52ZE**

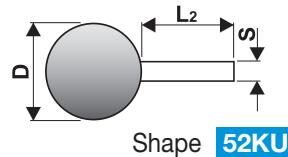
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
$D \times T - S \times L_2$ a										
436519	328 51 - 1039.00	52ZE	10×25-6×40 60°				99BA	80 M 7 V 40	50	
436524	328 51 - 1655.00	52ZE	16×40-6×40 60°				99BA	80 M 7 V 40	20	

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						
$D \times T - S \times L_2$ a										
436535	328 61 - 1657.00	52ZE	16×40-6×40 60°				98A	80 O 6 V 40	20	
436539	328 61 - 4043.00	52ZE	40×40-6×40 90°				98A	46 O 5 V 40	10	

Grey positions until stock run out

329
Mounted points – shape 52A


Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
$D \times T - S \times L_2$										
436735	329 51 - 2509.00	52A	25x6-6x40				99BA	80 M 7 V 40		20
436736	329 51 - 4015.00	52A	40x10-6x40				99BA	60 M 7 V 40		10

331
Mounted points – shape 52KU


Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
$D - S \times L_2$										
414280	331 51 - 0630.00	52KU	6-3x40				99BA	80 M 7 V 40		50
414284	331 51 - 0830.00	52KU	8-3x40				99BA	80 M 7 V 40		50
414286	331 51 - 1030.00	52KU	10-3x40				99BA	80 M 7 V 40		50
414289	331 51 - 1230.00	52KU	12-3x40				99BA	80 M 7 V 40		20
414294	331 51 - 1651.00	52KU	16-6x40				99BA	60 M 7 V 40		20
414295	331 51 - 2021.00	52KU	20-6x40				99BA	60 M 7 V 40		20
414296	331 51 - 2521.00	52KU	25-6x40				99BA	60 M 7 V 40		20
414300	331 51 - 3221.00	52KU	32-6x40				99BA	60 M 7 V 40		10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	□		□				
$D - S \times L_2$										
414333	331 61 - 1653.00	52KU	16-6x40				98A	60 O 6 V 40		20
414355	331 61 - 5036.00	52KU	50-9x40				98A	20 N 5 V 40		10

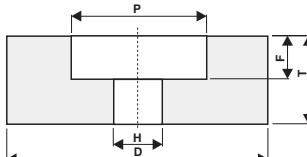


361 – Straight grinding wheels with diameter **D < 50,8 mm**



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
D × T × H										
414486	361 51 - 0825.00	1	8×10×3			99BA	80 K 8 V 40			50
414496	361 51 - 1019.00	1	10×10×3			99BA	60 K 9 V 40			50
414522	361 51 - 1379.00	1	13×16×6			99BA	60 K 9 V 40			20
414559	361 51 - 2029.00	1	20×20×6			99BA	60 K 9 V 40			20
414622	361 51 - 2579.00	1	25×32×10			99BA	80 K 9 V 40			20
414652	361 51 - 3272.00	1	32×32×13			99BA	60 K 9 V 40			10
414701	361 51 - 4083.00	1	40×40×16			99BA	80 K 9 V 40			10
414720	361 51 - 5041.09	1	50×10×13			99BA	100 M 8 V 40			10
D × T × H										
<i>white aluminium oxide, vitrified bond</i>										
414828	361 61 - 2078.00	1	20×20×6			98A	80 J 9 V 40			20
414848	361 61 - 2480.00	1	25×20×10			98A	60 K 9 V 40			20

368 – One side recessed grinding wheels with diameter D ≤ 75 mm

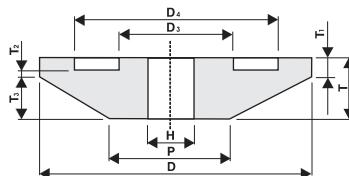


Shape **5**
D × T × H - P × F

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	□	□	□	□	□	□	□	□
D × T × H - P × F										white aluminium oxide, vitrified bond
415364	368 51 - 1329.00	5	13×16×3 - 8×8			99BA	60 K 8 V 40			20
360431	368 51 - 2526.00	5	25×25×6 - 12×12			99BA	60 K 8 V 40			20
415405	368 51 - 2532.00	5	25×25×6 - 12×12			99BA	80 K 8 V 40			20
415435	368 51 - 3225.00	5	32×32×10 - 20×16			99BA	46 K 9 V 40			10
415437	368 51 - 3230.00	5	32×32×10 - 20×16			99BA	60 K 9 V 40			10
415439	368 51 - 3235.00	5	32×32×10 - 20×16			99BA	80 K 9 V 40			10
415462	368 51 - 4028.00	5	40×40×10 - 20×20			99BA	46 K 9 V 40			10
415466	368 51 - 4035.00	5	40×40×10 - 20×20			99BA	60 L 9 V 40			10
413145	368 51 - 4039.00	5	40×40×10 - 20×20			99BA	80 K 9 V 40			10
415491	368 51 - 5074.00	5	50×50×20 - 32×20			99BA	60 K 9 V 40			10
34162974	368 51 - 6047.00	5	60×40×20 - 40×20			99BA	60 K 9 V 50			10
34162977	368 51 - 0773.00	5	75×32×20 - 40×16			99BA	60 K 9 V 50			1

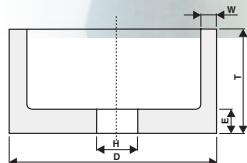
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■	□	□	□	□	□	□
D × T × H - P × F										pink aluminium oxide, vitrified bond
415517	368 61 - 2525.00	5	25×25×6 - 12×12			98A	60 J 9 V 40			20
415544	368 61 - 4028.00	5	40×40×10 - 20×20			98A	46 K 9 V 40			10
34162976	368 61 - 6046.00	5	60×40×20 - 40×20			98A	80 J 9 V 50			10
34162978	368 61 - 0772.00	5	75×32×20 - 40×16			98A	80 J 9 V 50			1

372 – One side tapered grinding wheels with diameter D < 50,8 mm for sciling machines knives sharpening

Shape **3WM2****D/PxT/T₃/T₁xD₃/H 1A/D₄xT₂**

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX carbides cast iron stone nonferrous metals titanium							PVC
Application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	D/PxT/T ₃ /T ₁ xD ₃ /H 1A/D ₄ xT ₂		brown	aluminium oxide, vitrified bond		

376 – Cup grinding wheels with diameter $D < 50,8 \text{ mm}$

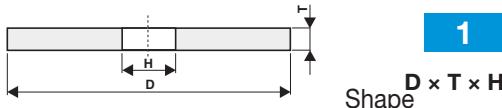


Shape **6**
 $D \times T \times H - W \times E$

Item number	Internal code	Shape	Dimension	Specification						Min. order quantity	
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
Application											
$D \times T \times H - W \times E$											
415342	376 36 - 5084.00	6	50×50×13 - 12,5×20			green silicon carbide, vitrified bond					10
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
Application	■	□	□	□							
$D \times T \times H - W \times E$											
415485	376 51 - 5056.00	6	50×50×13 - 12,5×20			white aluminium oxide, vitrified bond					10



411 – Straight grinding wheels with diameter 50,8 ≤ D ≤ 100 mm



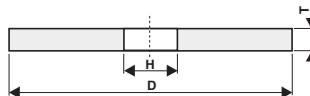
Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				□	□	■	□	□	■	
D × T × H					<i>green silicon carbide, vitrified bond</i>					
415712	411 36 - 8525.09	1	100×10×20				49C	80 K 9 V 40		1
415715	411 36 - 8546.09	1	100×10×20				49C	240 J 10 V 40		1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
D × T × H					<i>white aluminium oxide, vitrified bond</i>					
415784	411 51 - 4153.09	1	70×6,5×12				99BA	120 L 9 V 40		1
415850	411 51 - 8512.09	1	100×10×20				99BA	60 K 9 V 40		1
415857	411 51 - 8533.09	1	100×10×20				99BA	100 L 9 V 40		1
415879	411 51 - 9329.09	1	100×20×20				99BA	60 K 9 V 40		1
415881	411 51 - 9331.09	1	100×20×20				99BA	60 M 8 V 40		1
415882	411 51 - 9337.09	1	100×20×20				99BA	80 J 9 V 40		1
415900	411 51 - 9756.09	1	100×40×20				99BA	60 K 9 V 40		1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						
D × T × H					<i>pink aluminium oxide, vitrified bond</i>					
415953	411 61 - 6616.09	1	80×20×20				98A	24 P 5 V 40		1
415958	411 61 - 6638.39	1	80×20×20				5RNA	80 K 9 V 40		1
482373	411 61 - 8016.00	1	100x3,2x10				98A	60 K 9 V 40		1
415992	411 61 - 9312.09	1	100×20×20				98A	40 K 9 V 40		1
415996	411 61 - 9338.39	1	100×20×20				5RNA	80 K 9 V 40		1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□								
D × T × H					<i>brown aluminium oxide, vitrified bond</i>					
416100	411 71 - 9309.09	1	100×20×20				96A	24 P 5 V 40		1

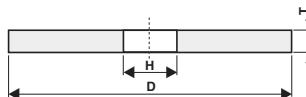
412 – Straight grinding wheels with diameter 100 < D ≤ 150 mm



1

D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application					■	■	■			
D × T × H				black silicon carbide, vitrified bond						
416191	412 31 - 8408.09	1	150×20×20	48C 22 P 5 V 40					1	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application		□	□	□	■	■	■	■	■	□
D × T × H				green silicon carbide, vitrified bond						
416226	412 36 - 4714.09	1	125×16×12,7	49C 80 K 9 V 40					1	
416245	412 36 - 4814.09	1	125×16×32	49C 80 K 9 V 40					1	
416256	412 36 - 5138.09	1	125×20×20	49C 60 K 9 V 40					1	
416270	412 36 - 5201.09	1	125×20×32	49C 80 L 9 V 40					1	
416304	412 36 - 7241.09	1	150×6×20	49C 120 M 8 V 40					1	
416319	412 36 - 7559.09	1	150×10×20	49C 80 K 9 V 40					1	
416320	412 36 - 7567.09	1	150×10×20	49C 100 L 9 V 40					1	
416321	412 36 - 7579.09	1	150×10×20	49C 240 J 10 V 40					1	
416362	412 36 - 8349.09	1	150×20×16	49C 80 K 9 V 40					1	
416366	412 36 - 8426.09	1	150×20×20	49C 40 L 8 V 40					1	
416368	412 36 - 8443.09	1	150×20×20	49C 60 J 9 V 40					1	
416390	412 36 - 8461.09	1	150×20×20	49C 80 K 9 V 40					1	
416394	412 36 - 8489.09	1	150×20×20	49C 240 J 10 V 40					1	
416419	412 36 - 8603.09	1	150×20×32	49C 60 K 9 V 40					1	



Shape **1**
D × T × H

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity							
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC		
Application	■	□	□	□	□	□	□	□	□	□		
			D × T × H	white aluminium oxide, vitrified bond								
416553	412 51 - 4329.09	1	125×10×20	99BA	60 K 9 V 40						1	
416558	412 51 - 4355.09	1	125×10×20	99BA	100 K 9 V 40						1	
416573	412 51 - 4718.89	1	125×16×12,7	99A	46 L 9 V 40						1	
416589	412 51 - 5111.89	1	125×20×20	99A	24 P 5 V 40						1	
416592	412 51 - 5138.09	1	125×20×20	99BA	60 K 9 V 40						1	
416593	412 51 - 5139.09	1	125×20×20	99BA	60 L 9 V 40						1	
416601	412 51 - 5201.09	1	125×20×32	99BA	80 L 9 V 40						1	
416657	412 51 - 7072.09	1	150×4×20	99BA	80 K 9 V 40						1	
416688	412 51 - 7224.09	1	150×6×20	99BA	60 L 9 V 40						1	
416690	412 51 - 7230.09	1	150×6×20	99BA	80 K 9 V 40						1	
416693	412 51 - 7234.09	1	150×6×20	99BA	100 J 10V 40						1	
416697	412 51 - 7240.09	1	150×6×20	99BA	120 L 9 V 40						1	
416723	412 51 - 7407.09	1	150×8×20	99BA	60 L 9 V 40						1	
416745	412 51 - 7553.09	1	150×10×20	99BA	60 L 9 V 40						1	
416750	412 51 - 7558.09	1	150×10×20	99BA	80 J 9 V 40						1	
416752	412 51 - 7560.09	1	150×10×20	99BA	80 L 9 V 40						1	
416760	412 51 - 7637.09	1	150×10×32	99BA	60 L 9 V 40						1	
416796	412 51 - 8008.09	1	150×16×12,7	99BA	60 L 8 V 40						1	
416814	412 51 - 8414.89	1	150×20×20	99A	24 P 5 V 40						1	
416820	412 51 - 8434.09	1	150×20×20	99BA	46 L 8 V 40						1	
416826	412 51 - 8444.09	1	150×20×20	99BA	60 K 9 V 40						1	
416829	412 51 - 8445.09	1	150×20×20	99BA	60 L 9 V 40						1	
416831	412 51 - 8446.89	1	150×20×20	99A	60 M 8 V 40						1	
416832	412 51 - 8460.09	1	150×20×20	99BA	80 J 9 V 40						1	
416834	412 51 - 8461.09	1	150×20×20	99BA	80 K 9 V 40						1	
416837	412 51 - 8462.09	1	150×20×20	99BA	80 L 9 V 40						1	
416848	412 51 - 8594.09	1	150×20×32	99BA	46 K 9 V 40						1	
416852	412 51 - 8603.09	1	150×20×32	99BA	60 K 9 V 40						1	
416858	412 51 - 8610.09	1	150×20×32	99BA	80 K 9 V 40						1	

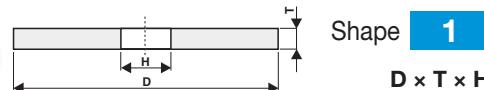


Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ ■	■ ■	■ ■	■ ■					
			D × T × H	<i>pink</i> aluminium oxide, vitrified bond					
634669	412 61 - 6974.00	1	145x3,2x22,2	98A 60 K 9 V 40					1
744865	412 61 - 9994.00	1	145x4,7x22,2	98A 60 K 9 V 40					1
417125	412 61 - 7159.09	1	150x5x20	98A 60 K 9 V 40					1
34448491	412 61 - 7180.00	1	150x5x20 FOR SKATES	98A 60 K 9 V 03 40					1
360276	412 61 - 7223.09	1	150x6x20	98A 60 K 9 V 40					1
417158	412 61 - 7552.09	1	150x10x20	98A 60 K 9 V 40					1
417160	412 61 - 7559.09	1	150x10x20	98A 80 K 9 V 40					1
417195	412 61 - 8433.09	1	150x20x20	98A 46 K 9 V 40					1
417196	412 61 - 8443.09	1	150x20x20	98A 60 J 9 V 40					1
417198	412 61 - 8444.09	1	150x20x20	98A 60 K 9 V 40					1
417209	412 61 - 8463.09	1	150x20x20	98A 80 M 8 V 40					1
417211	412 61 - 8471.09	1	150x20x20	98A 100 K 9 V 40					1
417226	412 61 - 8603.09	1	150x20x32	98A 60 K 9 V 40					1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■								
				D × T × H	<i>brown</i> aluminium oxide, vitrified bond					
417321	412 71 - 4704.09	1	125x16x12,7	96A 36 P 5 V 40					1	
417326	412 71 - 4781.09	1	125x16x20	96A 80 M 8 V 40					1	
417438	412 71 - 8001.09	1	150x16x12,7	96A 36 P 5 V 40					1	
417489	412 71 - 8412.09	1	150x20x20	96A 24 N 7 V 40					1	
417491	412 71 - 8417.09	1	150x20x20	96A 36 N 7 V 40					1	
417492	412 71 - 8420.09	1	150x20x20	96A 36 P 5 V 40					1	
417499	412 71 - 8447.09	1	150x20x20	96A 60 N 7 V 40					1	
417530	412 71 - 8588.09	1	150x20x32	96A 36 P 5 V 40					1	
417543	412 71 - 8612.09	1	150x20x32	96A 80 M 8 V 40					1	



413 – Straight grinding wheels with diameter 150 < D ≤ 200 mm



Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application						■	■			
34238532	413 31 - 6218.00	1	200×8×32			48C	60 K 9 V 40			1
34242343	413 31 - 6364.00	1	200×10×32			48C	60 K 9 V 40			1
417767	413 31 - 7273.09	1	200×20×32			48C	60 K 9 V 40			1
417779	413 31 - 7822.09	1	200×25×32			48C	60 K 9 V 40			1
417807	413 31 - 8766.00	1	200×50×63			48C	40 L 8 V 40			1

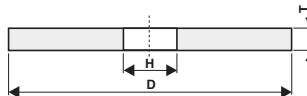
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application		□	□	■	■	■	■	■	■	□
417818	413 36 - 3052.09	1	175×5×20			49C	80 J 9 V 40			1
417819	413 36 - 3061.09	1	175×5×20			49C	100 L 8 V 40			1
417820	413 36 - 3128.09	1	175×6×20			49C	220 K 9 V 40			1
417822	413 36 - 3188.09	1	175×8×20			49C	80 J 10 V 40			1
417825	413 36 - 3193.09	1	175×8×20			49C	100 L 9 V 40			1
417850	413 36 - 3704.09	1	175×20×20			49C	40 L 8 V 40			1
417856	413 36 - 3741.09	1	175×20×20			49C	80 K 9 V 40			1
417860	413 36 - 3768.09	1	175×20×20			49C	240 J 10 V 40			1
417872	413 36 - 3878.09	1	175×20×32			49C	60 J/K 9 V 40			1
417985	413 36 - 6218.09	1	200×8×32			49C	80 K 9 V 40			1
417987	413 36 - 6224.09	1	200×8×32			49C	100 L 8 V 40			1
417988	413 36 - 6225.09	1	200×8×32			49C	100 M 8 V 40			1
418008	413 36 - 6456.09	1	200×10×51			49C	100 L 9 V 40			1
418042	413 36 - 7110.09	1	200×20×20			49C	80 L 9 V 40			1
418062	413 36 - 7253.09	1	200×20×32			49C	40 L 8 V 40			1
418070	413 36 - 7273.09	1	200×20×32			49C	60 K 9 V 40			1
418077	413 36 - 7293.09	1	200×20×32			49C	80 K 9 V 40			1
556578	413 36 - 7304.00	1	200×20×32			49C	100 J 9 V 40			1
418083	413 36 - 7313.09	1	200×20×32			49C	120 J 9 V 40			1



Item number	Internal code	Shape	Dimension	Specification				Min. order quantity	
418090	413 36 - 7365.09	1	200×20×51	49C 40 L 8 V 40				1	
418094	413 36 - 7378.09	1	200×20×51	49C 60 K 9 V 40				1	
418096	413 36 - 7386.09	1	200×20×51	49C 80 K 9 V 40				1	
418101	413 36 - 7408.09	1	200×20×51	49C 240 J 10 V 40				1	

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	■	□	■	□	■	■	■	■

		D × T × H	white aluminium oxide, vitrified bond
436259	413 51 - 3258.09	1 175×10×20	99BA 60 J 9 V 40
418281	413 51 - 3259.09	1 175×10×20	99BA 60 K 9 V 40
418282	413 51 - 3260.09	1 175×10×20	99BA 60 L 9 V 40
418283	413 51 - 3271.09	1 175×10×20	99BA 80 K 9 V 40
418301	413 51 - 3488.09	1 175×16×20	99BA 60 L 9 V 40
418307	413 51 - 3696.89	1 175×20×20	99A 24 P 5 V 40
418310	413 51 - 3707.89	1 175×20×20	99A 40 O 6 V 40
418312	413 51 - 3713.09	1 175×20×20	99BA 46 L 8 V 40
418313	413 51 - 3714.89	1 175×20×20	99A 46 M 8 V 40
418316	413 51 - 3722.09	1 175×20×20	99BA 60 L 9 V 40
418318	413 51 - 3723.89	1 175×20×20	99A 60 M 8 V 40
418321	413 51 - 3740.09	1 175×20×20	99BA 80 J 9 V 40
418333	413 51 - 3742.09	1 175×20×20	99BA 80 L 9 V 40
418334	413 51 - 3743.09	1 175×20×20	99BA 80 M 8 V 40
418339	413 51 - 3867.09	1 175×20×32	99BA 40 N 7 V 40
196635	413 51 - 3879.00	1 175×20×32	99BA 60 K 9 V 40
418346	413 51 - 3880.09	1 175×20×32	99BA 60 L 9 V 40
418464	413 51 - 6209.09	1 200×8×32	99BA 60 K 9 V 40
418471	413 51 - 6218.09	1 200×8×32	99BA 80 K 9 V 40
418473	413 51 - 6251.09	1 200×8×51	99BA 60 L 9 V 40
418491	413 51 - 6364.09	1 200×10×32	99BA 60 K 9 V 40
418511	413 51 - 6438.09	1 200×10×51	99BA 60 L 9 V 40
360361	413 51 - 7096.09	1 200×20×20	99BA 60 L 9 V 40
360390	413 51 - 7262.09	1 200×20×32	99BA 46 K 9 V 40
418595	413 51 - 7273.09	1 200×20×32	99BA 60 K 9 V 40
418606	413 51 - 7295.09	1 200×20×32	99BA 80 M 8 V 40
418608	413 51 - 7304.09	1 200×20×32	99BA 100 J 10 V 40
34242348	413 51 - 7313.00	1 200×20×32	99BA 120 J 9 V 40
418619	413 51 - 7370.09	1 200×20×51	99BA 46 J 9 V 40
418621	413 51 - 7372.09	1 200×20×51	99BA 46 L 8 V 40
418624	413 51 - 7378.09	1 200×20×51	99BA 60 K 9 V 40
436261	413 51 - 7380.89	1 200×20×51	99A 60 M 8 V 40
418634	413 51 - 7385.09	1 200×20×51	99BA 80 J 9 V 40
418635	413 51 - 7387.09	1 200×20×51	99BA 80 L 9 V 40



Shape

1

D × T × H

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
418639	413 51 - 7411.89	1	200×20×51	99A 22 N 7 V 40	1
418679	413 51 - 7824.09	1	200×25×32	99BA 60 M 8 V 40	1
418694	413 51 - 7898.89	1	200×25×51	99A 40 O 6 V 40	1
418696	413 51 - 7901.09	1	200×25×51	99BA 46 J 9 V 40	1
418706	413 51 - 7911.09	1	200×25×51	99BA 60 K 9 V 40	1
418708	413 51 - 7913.89	1	200×25×51	99A 60 M 8 V 40	1
418754	413 51 - 8454.00	1	200×32×51	99BA 60 K 9 V 40	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
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Application	■	■	□	■						
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D × T × H

pink aluminium oxide, vitrified bond

360313	413 61 - 3117.09	1	175×6×20		98A 60 K 9 V 40	1
34424106	413 61 - 3130.00	1	175×6×20	FOR SKATES	98A 60 K 9 V 03 40	1
418880	413 61 - 3259.09	1	175×10×20		98A 60 K 9 V 40	1
418900	413 61 - 3487.09	1	175×16×20		98A 60 K 9 V 40	1
418906	413 61 - 3721.09	1	175×20×20		98A 60 K 9 V 40	1
418909	413 61 - 3741.09	1	175×20×20		98A 80 K 9 V 40	1
418917	413 61 - 3879.09	1	175×20×32		98A 60 K 9 V 40	1
419058	413 61 - 6436.09	1	200×10×51		98A 60 J 9 V 40	1
419059	413 61 - 6437.09	1	200×10×51		98A 60 K 9 V 40	1
419086	413 61 - 6911.09	1	200×16×51		98A 60 K 9 V 40	1
419097	413 61 - 7109.09	1	200×20×20		98A 80 K 9 V 40	1
419104	413 61 - 7262.09	1	200×20×32		98A 46 K 9 V 40	1
419117	413 61 - 7363.09	1	200×20×51		98A 40 J 9 V 40	1
419125	413 61 - 7378.09	1	200×20×51		98A 60 K 9 V 40	1
419132	413 61 - 7385.09	1	200×20×51		98A 80 J 9 V 40	1
419191	413 61 - 7911.09	1	200×25×51		98A 60 K 9 V 40	1
419198	413 61 - 7921.09	1	200×25×51		98A 80 K 9 V 40	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
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Application	□	■	■							
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D × T × H

ruby aluminium oxide, vitrified bond

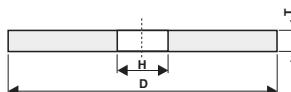
419286	413 66 - 3705.09	1	175×20×20		98RA 40 K 9 V 40	1
419296	413 66 - 6356.09	1	200×10×32		98RA 46 K 9 V 40	1
419305	413 66 - 7273.09	1	200×20×32		98RA 60 K 9 V 40	1



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ ■	□ □	D × T × H	brown aluminium oxide, vitrified bond					
419337	413 71 - 3697.09	1	175×20×20	96A	24 Q 4 V 40				1
419341	413 71 - 3715.09	1	175×20×20	96A	46 N 7 V 40				1
419344	413 71 - 3724.09	1	175×20×20	96A	60 N 7 V 40				1
419356	413 71 - 3857.09	1	175×20×32	96A	36 M 8 V 40				1
419488	413 71 - 6366.09	1	200×10×32	96A	60 M 8 V 40				1
34242350	413 71 - 6549.00	1	200×12×32	96A	60 M 8 V 40				1
419544	413 71 - 7259.09	1	200×20×32	96A	36 P 5 V 40				1
419552	413 71 - 7274.09	1	200×20×32	96A	60 L 9 V 40				1
419559	413 71 - 7295.09	1	200×20×32	96A	80 M 8 V 40				1
419642	413 71 - 7822.09	1	200×25×32	96A	60 K 9 V 40				1
419739	413 71 - 8599.09	1	200×40×20	96A	100 H 10 V 40				1



414 – Straight grinding wheels with diameter 200 < D < 350 mm



Shape 1
D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application					■	□	□	□	□	
		D × T × H		black silicon carbide, vitrified bond						
34242344	414 31 - 1176.00	1	250×10×32	48C	60 K 9 V 40					1
34242347	414 31 - 2635.00	1	250×32×32	48C	80 K 9 V 40					1
419880	414 31 - 2686.00	1	250×32×76	48C	36 O 6 V 40					1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				□	■	□	□	■	■	□
		D × T × H		green silicon carbide, vitrified bond						
420041	414 36 - 2254.00	1	250×25×76	49C	60 K 9 V 40					1
420046	414 36 - 2266.00	1	250×25×76	49C	80 K 9 V 40					1
420048	414 36 - 2274.00	1	250×25×76	49C	100 J 10 V 40					1
558157	414 36 - 2615.00	1	250×32×32	49C	46 K 9V 40					1
558158	414 36 - 2616.00	1	250×32×32	49C	46 L 8V 40					1
420074	414 36 - 2632.00	1	250×32×32	49C	80 K 9 V 40					1
420086	414 36 - 2690.00	1	250×32×76	49C	40 J 9 V 40					1
420093	414 36 - 2723.00	1	250×32×76	49C	80 J 9 V 40					1
34162611	414 36 - 2735.00	1	250×32×76,2	49C	80 J 9 V 40					1
558168	414 36 - 5292.00	1	300×32×32	49C	46 K 9V 40					1
558169	414 36 - 5293.00	1	300×32×32	49C	46 L 8V 40					1
420160	414 36 - 6301.00	1	300×32×32	49C	60 K 9 V 40					1
420163	414 36 - 5306.00	1	300×32×32	49C	80 K 9 V 40					1
420168	414 36 - 5365.00	1	300×32×76	49C	36 K 8 V 40					1
420174	414 36 - 5393.00	1	300×32×76	49C	60 K 9 V 40					1
34162614	414 36 - 5414.00	1	300×32×76,2	49C	60 K 9 V 40					1
420175	414 36 - 5403.00	1	300×32×76	49C	80 K 9 V 40					1
34162617	414 36 - 5416.00	1	300×32×76,2	49C	80 K 9 V 40					1

Grey positions until stock run out

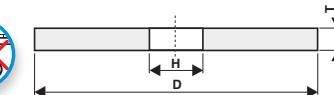
■ – suitable, □ – possible | reducing rings – page 82



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	■						
			D × T × H				white aluminium oxide, vitrified bond		
420354	414 51 - 1040.09	1	250×8×32				99BA	60 K 9 V 40	1
420372	414 51 - 1176.09	1	250×10×32				99BA	60 K 9 V 40	1
420402	414 51 - 1370.09	1	250×12×32				99BA	60 K 9 V 40	1
420456	414 51 - 1871.00	1	250×20×76				99BA	40 J 9 V 40	1
420460	414 51 - 1879.00	1	250×20×76				99BA	46 J 9 V 40	1
420469	414 51 - 1891.00	1	250×20×76				99BA	60 L 9 V 40	1
420494	414 51 - 2146.09	1	250×25×32				99BA	60 K 9 V 40	1
420514	414 51 - 2238.00	1	250×25×76				99BA	40 L 8 V 40	1
420522	414 51 - 2247.00	1	250×25×76				99BA	46 L 8 V 40	1
420524	414 51 - 2253.00	1	250×25×76				99BA	60 J 9 V 40	1
483647	414 51 - 2223.00	1	250×25×76,2				99BA	60 J 9 V 40	1
420527	414 51 - 2255.00	1	250×25×76				99BA	60 L 9 V 40	1
34036626	414 51 - 2299.00	1	250×25×76,2				99BA	60 L 9 V 40	1
420529	414 51 - 2256.80	1	250×25×76				99A	60 M 8 V 40	1
34162622	414 51 - 2296.80	1	250×25×76,2				99A	60 M 8 V 40	1
420535	414 51 - 2266.00	1	250×25×76				99BA	80 K 9 V 40	1
472910	414 51 - 2303.00	1	250×25×76,2				99BA	80 K 9 V 40	1
558162	414 51 - 2615.00	1	250×32×32				99BA	46 K 9 V 40	1
558163	414 51 - 2616.00	1	250×32×32				99BA	46 L 8 V 40	1
420589	414 51 - 2680.80	1	250×32×76				99A	24 P 5 V 40	1
420591	414 51 - 2686.80	1	250×32×76				99A	36 O 6 V 40	1
420603	414 51 - 2700.00	1	250×32×76				99BA	46 L 8 V 40	1
420605	414 51 - 2701.80	1	250×32×76				99A	46 M 8 V 40	1
420609	414 51 - 2708.00	1	250×32×76				99BA	60 K 9 V 40	1
420610	414 51 - 2709.00	1	250×32×76				99BA	60 L 9 V 40	1
677353	414 51 - 2737.00	1	250×32×76,2				99BA	60 L 9 V 40	1
420614	414 51 - 2710.80	1	250×32×76				99A	60 M 8 V 40	1
34162626	414 51 - 2755.80	1	250×32×76,2				99A	60 M 8 V 40	1
420752	414 51 - 4893.00	1	300×25×76				99BA	80 M 8 V 40	1
34162627	414 51 - 4917.00	1	300×25×76,2				99BA	80 M 8 V 40	1
558173	414 51 - 5292.00	1	300×32×32				99BA	46 K 9 V 40	1
558174	414 51 - 5293.00	1	300×32×32				99BA	46 L 8 V 40	1
670757	414 51 - 5296.00	1	300×32×32				99BA	46 L 10 VY 40	1
420796	414 51 - 5303.89	1	300×32×32				99A	60 M 8 V 40	1
420797	414 51 - 5353.80	1	300×32×76				99A	22 P 5 V 40	1
420799	414 51 - 5377.80	1	300×32×76				99A	40 N 6 V 40	1
420805	414 51 - 5393.00	1	300×32×76				99BA	60 K 9 V 40	1
420809	414 51 - 5395.80	1	300×32×76				99A	60 M 8 V 40	1
34162629	414 51 - 5398.80	1	300×32×76,2				99A	60 M 8 V 40	1

Grey positions until stock run out

■ – suitable, □ – possible | reducing rings – page 82



Shape

1

D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
420843	414 51 - 5913.80	1	300×40×76	99A 20 P 5 V 40					1
420855	414 51 - 5951.80	1	300×40×76	99A 46 M 8 V 40					1
420939	414 51 - 6346.00	1	300×50×127	99BA 60 K 9 V 40					1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	■						
D × T × H										
421058	414 61 - 1248.00	1	250×10×76						98A 60 K 9 V 40	1
421080	414 61 - 1578.00	1	250×16×76						98A 60 J 9 V 40	1
421099	414 61 - 1889.00	1	250×20×76						98A 60 J 9 V 40	1
34162634	414 61 - 1967.00	1	250×20×76,2						98A 60 J 9 V 40	1
421100	414 61 - 1890.00	1	250×20×76						98A 60 K 9 V 40	1
34162642	414 61 - 1975.00	1	250×20×76,2						98A 60 K 9 V 40	1
421135	414 61 - 2237.00	1	250×25×76						98A 40 K 9 V 40	1
421142	414 61 - 2245.00	1	250×25×76						98A 46 J 9 V 40	1
421143	414 61 - 2246.00	1	250×25×76						98A 46 K 9 V 40	1
421145	414 61 - 2253.00	1	250×25×76						98A 60 J 9 V 40	1
421146	414 61 - 2254.00	1	250×25×76						98A 60 K 9 V 40	1
421168	414 61 - 2635.09	1	250×32×32						98A 80 K 9 V 40	1
421185	414 61 - 2699.00	1	250×32×76						98A 46 K 9 V 40	1
421188	414 61 - 2708.00	1	250×32×76						98A 60 K 9 V 40	1
34162647	414 61 - 2760.00	1	250×32×76,2						98A 60 K 9 V 40	1
421213	414 61 - 2949.00	1	250×40×76						98A 46 J 9 V 40	1
421356	414 61 - 5975.00	1	300×40×76						98A 80 K 9 V 40	1
34162654	414 61 - 5979.00	1	300×40×76,2						98A 80 K 9 V 40	1

Grey positions until stock run out

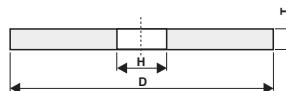


Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ □	■ □	□ ■						
			D × T × H						
421423	414 66 - 2246.00	1	250×25×76						
421424	414 66 - 2253.00	1	250×25×76						
421429	414 66 - 2732.00	1	250×32×76						

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□								
D × T × H										
34242346	414 71 - 1197.00	1	250×10×32							1
34223926	414 71 - 1372.00	1	250×12×32							1
421472	414 71 - 1410.09	1	250×13×32							1
421536	414 71 - 2146.09	1	250×25×32							1
421555	414 71 - 2248.00	1	250×25×76							1
421585	414 71 - 2611.09	1	250×32×32							1
421590	414 71 - 2628.09	1	250×32×32							1
421601	414 71 - 2681.00	1	250×32×76							1
421724	414 71 - 5290.09	1	300×32×32							1
421743	414 71 - 5386.00	1	300×32×76							1
421824	414 71 - 5913.00	1	300×40×76							1



415 – Straight grinding wheels with diameter $350 \leq D < 500$ mm



Shape **1**
D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application				■	□	□	□	□	
D × T × H									
422022	415 31 - 3412.00	1	350×63×127		48C 24 P 4 V 40				1
422038	415 31 - 5799.00	1	400×50×127		48C 20 P 5 V 40				1
422044	415 31 - 5811.00	1	400×50×127		48C 24 N 7 V 40				1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				□	■	■	□	■	■	□
D × T × H										
422099	415 36 - 2636.00	1	350×32×127			49C 60 K 9 V 40				1
422136	415 36 - 3238.00	1	350×50×127			49C 46 K 9 V 40				1
422141	415 36 - 3258.00	1	350×50×127			49C 80 K 9 V 40				1
422217	415 36 - 5850.00	1	400×50×127			49C 80 K 9 V 40				1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■								
D × T × H										
422300	415 51 - 2235.00	1	350×20×127			99BA 80 K 9 V 40				1
422338	415 51 - 2636.00	1	350×32×127			99BA 60 K 9 V 40				1
360521	415 51 - 2934.00	1	350×40×127			99BA 60 K 9 V 40				1
422409	415 51 - 2936.80	1	350×40×127			99A 60 M 8 V 40				1
422411	415 51 - 2945.00	1	350×40×127			99BA 80 K 9 V 40				1
422429	415 51 - 3159.80	1	350×50×51			99A 22 N 6 V 40				1
422439	415 51 - 3211.80	1	350×50×127			99A 22 N 6 V 40				1
422441	415 51 - 3232.80	1	350×50×127			99A 40 M 7 V 40				1
422448	415 51 - 3248.00	1	350×50×127			99BA 60 K 9 V 40				1
422453	415 51 - 3250.80	1	350×50×127			99A 60 M 8 V 40				1
422465	415 51 - 3412.80	1	350×63×127			99A 24 P 4 V 40				1
422468	415 51 - 3421.80	1	350×63×127			99A 40 M 6 V 40				1
422472	415 51 - 3430.80	1	350×63×127			99A 46 N 7 V 40				1



Shape

1

D × T × H

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
422482	415 51 - 3435.00	1	350×63×127	99BA 60 L 9 V 40	1
422484	415 51 - 3436.80	1	350×63×127	99A 60 M 8 V 40	1
422606	415 51 - 5479.80	1	400×40×127	99A 24 Q 4 V 40	1
422611	415 51 - 5500.00	1	400×40×127	99BA 46 K 9 V 40	1
422618	415 51 - 5508.00	1	400×40×127	99BA 60 J 9 V 40	1
422657	415 51 - 5759.80	1	400×50×51	99A 40 M 8 V 40	1
422666	415 51 - 5799.80	1	400×50×127	99A 20 P 5 V 40	1
422670	415 51 - 5820.80	1	400×50×127	99A 40 M 7 V 40	1
422675	415 51 - 5826.00	1	400×50×127	99BA 46 K 9 V 40	1
422678	415 51 - 5829.80	1	400×50×127	99A 46 N 7 V 40	1
422696	415 51 - 5850.00	1	400×50×127	99BA 80 K 9 V 40	1
422702	415 51 - 5899.80	1	400×50×203	99A 40 O 6 V 40	1
34162655	415 51 - 5917.80	1	400×50×203,2	99A 40 O 6 V 40	1
436274	415 51 - 6018.80	1	400×63×127	99A 24 O 6 V 40	1
422727	415 51 - 6033.00	1	400×63×127	99BA 60 K 9 V 40	1
422787	415 51 - 6479.00	1	400×200×203	99BA 80 K 9 V 40	1
34162656	415 51 - 6482.00	1	400×200×203,2	99BA 80 K 9 V 40	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						

D × T × H

pink aluminium oxide, vitrified bond

422901	415 61 - 2642.00	1	350×32×127	98A 80 K 9 V 40	1
422909	415 61 - 2917.00	1	350×40×127	98A 40 J 9 V 40	1
422926	415 61 - 3238.00	1	350×50×127	98A 46 K 9 V 40	1
422927	415 61 - 3248.00	1	350×50×127	98A 60 K 9 V 40	1
422934	415 61 - 3426.00	1	350×63×127	98A 46 J 9 V 40	1
422937	415 61 - 3434.00	1	350×63×127	98A 60 K 9 V 40	1
422983	415 61 - 5525.00	1	400×40×127	98A 80 J 9 V 40	1
748103	415 61 - 5825.00	1	400×50×127	98A 46 J 9 V 40	1
423008	415 61 - 5836.00	1	400×50×127	98A 60 K 9 V 40	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>								

D × T × H

brown aluminium oxide, vitrified bond

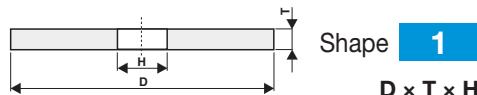
423126	415 71 - 2930.00	1	350×40×127	96A 46 N 7 V 40	1
423229	415 71 - 5803.00	1	400×50×127	96A 22 O 6 V 40	1
423254	415 71 - 6018.00	1	400×63×127	96A 24 O 6 V 40	1

Grey positions until stock run out

■ – suitable, □ – possible | reducing rings – page 82



416 – Straight grinding wheels with diameter 500≤D<1000 mm



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application									
		D x T x H		black silicon carbide, vitrified bond					
423358	416 31 - 0756.00	1	500×50×203	48C	60 K 9 V 40				1
34162657	416 31 - 0815.00	1	500×50×203,2	48C	60 K 9 V 40				1
34162659	416 31 - 1178.00	1	500×80×203,2	48C	60 K 9 V 40				1
		D x T x H		green silicon carbide, vitrified bond					
423438	416 36 - 0947.00	1	500×63×203	49C	40 L 8 V 40				1
34162661	416 36 - 0982.00	1	500×63×203,2	49C	40 L 8 V 40				1
		D x T x H		white aluminium oxide, vitrified bond					
423587	416 51 - 0756.00	1	500×50×203	99BA	60 K 9 V 40				1
423623	416 51 - 0953.00	1	500×63×203	99BA	46 K 9 V 40				1
34162662	416 51 - 0973.00	1	500×63×203,2	99BA	46 K 9 V 40				1
423665	Also in group 471 – possible use by 50 m.s ⁻¹ (page 48)	1	500×80×203	99BA	60 K 9 V 50				1
423673		1	500×80×203	99BA	80 K 9 V 50				1
34162667		1	500×80×203,2	99BA	80 K 9 V 50				1
423724	416 51 - 1423.80	1	500×150×305	99A	60 M 8 V 40				1
423745	416 51 - 1510.00	1	500×200×305	99BA	60 K 9 V 40				1
423825	416 51 - 2756.00	1	600×63×305	99BA	60 L 9 V 40				1
423852	416 51 - 2979.00	1	600×80×305	99BA	60 K 9 V 40				1

Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	■				
		D x T x H		pink aluminium oxide, vitrified bond				
424197	416 61 - 1155.00	1	500×80×203	98A	60 K 9 V 40			

■ – suitable, □ – possible | reducing rings – page 82



Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
424231	416 61 - 1512.00	1	500×200×305	98A 60 M 8 V 40	1
424234	416 61 - 1520.00	1	500×200×305	98A 80 K 9 V 40	1
424314	416 61 - 5265.00	1	750×63×305	98A 46 K 8 V 40	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
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Application	■	□								
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D × T × H

brown aluminium oxide, vitrified bond

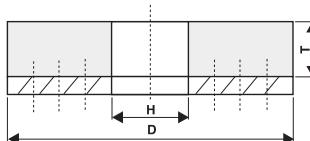
424409	416 71 - 0736.00	1	500×50×203	96A 22 P 5 V 40	1
34162663	416 71 - 0739.00	1	500×50×203,2	96A 22 P 5 V 40	1

Grey positions until stock run out

■ – suitable, □ – possible | reducing rings – page 82



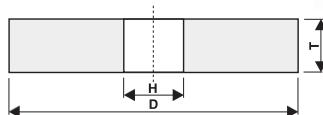
424 – Grinding wheels with inserted nuts



Shape **36**
D × T × H

Item number	Internal code	Shape	Dimension	Specification				Min. order quantity	
Material		steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals
Application		■	■					titanium	PVC
D × T × H									
437451	424 74 - 1263.00	36	125×63×55	4 NUTS M8		96A	20 Q 5 B 40		1
437453	424 74 - 1530.00	36	150×73×56,5	4 NUTS M8		96A	16 Q 4 B 50		1

432 – Porous straight grinding wheels for surface grinding



Shape **1**
D × T × H

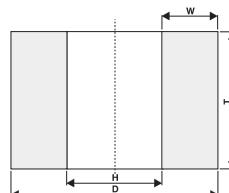
Item number	Internal code	Shape	Dimension	Specification					Min. order quantity		
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
Application											
D × T × H											
424981	432 36 - 2515.00	1	250×25×76			green silicon carbide, vitrified bond					1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
Application	■	□		□							
D × T × H											
425059	432 51 - 2047.89	1	200×20×51			white aluminium oxide, vitrified bond					1
425075	432 51 - 2524.80	1	250×25×76				99A 46 J 13 V 40				1
425078	432 51 - 2542.80	1	250×25×76					99A 60 J 12 V 40			1
34162665	432 51 - 2560.80	1	250×25×76,2						99A 60 J 12 V 40		1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
Application	□	■	□	■							
D × T × H											
425267	432 61 - 2524.00	1	250×25×76			pink aluminium oxide, vitrified bond					1
34162666	432 61 - 2567.00	1	250×25×76,2				98A 46J 13V 40				1

Grey positions until stock run out

■ – suitable, □ – possible | reducing rings – page 82



441 – Ring grinding wheels



Shape **2**

D × T - W

Item number	Internal code	Shape	Dimension	Specification				Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium
Application				■	■	■			PVC

D × T - W

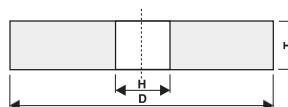
black silicon carbide, vitrified bond

451 – Non-reinforcement cutting wheels



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC		
Application	■ ■ ■	□ □ □	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■
		D x T x H		black silicon carbide, resinoid bond						
425670	451 34 - 1536.00	41	150x1x20			48C 100 R 3 B 80				1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC		
Application	■ ■ ■	□ □ □	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■
		D x T x H		brown aluminium oxide, resinoid bond						
425781	451 74 - 1045.00	41	100x1x20			96A 80 O 3 B 80				1
425804	451 74 - 1233.00	41	125x1x20			96A 80 O 3 B 80				1
425809	451 74 - 1249.00	41	125x1,3x20			96A 60 O 3 B 80				1
425831	451 74 - 1516.00	41	150x0,8x20			96A 80 O 3 B 80				1
436310	451 74 - 1530.00	41	150x1x20			96A 80 N 4 B 80				1
425837	451 74 - 1534.00	41	150x1x20			96A 100 O 3 B 80				1
425839	451 74 - 1544.00	41	150x1,3x20			96A 60 O 3 B 80				1
425842	451 74 - 1556.00	41	150x1,6x20			96A 46 O 3 B 80				1
425844	451 74 - 1566.00	41	150x2x20			96A 40 O 3 B 80				1
425854	451 74 - 1583.00	41	150x3,2x20			96A 60 O 3 B 80				1
425897	451 74 - 2015.00	41	200x1,6x32			96A 46 O 3 B 80				1
425900	451 74 - 2026.00	41	200x1,6x32			96A 80 O 3 B 80				1
425904	451 74 - 2041.00	41	200x2x32			96A 40 O 3 B 80				1
425935	451 74 - 2531.00	41	250x2x32			96A 40 O 3 B 80				1

471 – Grinding wheels for working speed up to 50 m.s⁻¹

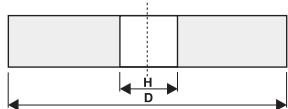


Shape 1
D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□								
D × T × H										
423665	471 51 - 1155.00	1	500×80×203				white	aluminium oxide, vitrified bond		1
426382	471 51 - 5326.00	1	500×80×203,2				99BA	60 K 9 V 50		1
423673	471 51 - 1162.00	1	500×80×203				99BA	80 K 9 V 50		1
34162667	471 51 - 5344.00	1	500×80×203,2				99BA	80 K 9 V 50		1
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□				□				
D × T × H										
426856		1	125×20×20				brown	aluminium oxide, resinoid bond		1
426869		1	150×20×20				96A	20 Q 2 B 63		1
746223		1	150×20×20				96A	24 P 4 B 63		1
426934	Also in group 472 – possible use by 63 m.s ⁻¹ (page 49)	1	400×50×150				96A	12 Q 2 B 63		1
426948		1	500×50×150				96A	20 O 4 B 63		1
558586		1	500×50×203,2				96A	12 O 4 B 63		1
426949		1	500×63×203				96A	12 O 4 B 63		1
426976		1	750×80×305				96A	12 Q 2 B 63		1

Grey positions until stock run out

472 – Grinding wheels for working speed up to 63 m.s⁻¹

Shape **1****D × T × H**

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□			□	□				
			D × T × H	brown aluminium oxide, resinoid bond						
427386	472 74 - 0817.03	1	80×20×20				96A	24 P 4 B 63		1
436343	472 74 - 1057.03	1	100×20×20				96A	20 Q 2 B 63		1
436349	472 74 - 1065.03	1	100×20×20				96A	24 P 4 B 63		1
436361	472 74 - 1155.03	1	100×32×20				96A	24 P 4 B 63		1
426856	472 74 - 1215.03	1	125×20×20				96A	20 Q 2 B 63		1
426869	472 74 - 1532.03	1	150×20×20				96A	20 Q 2 B 63		1
746223	472 74 - 1545.03	1	150×20×20				96A	24 P 4 B 63		1
426934	472 74 - 4080.00	1	400×50×150				96A	12 Q 2 B 63		1
426948	472 74 - 5025.00	1	500×50×150				96A	20 O 4 B 63		1
558586	472 74 - 5112.00	1	500×50×203,2				96A	12 O 4 B 63		1
426949	472 74 - 5056.00	1	500×63×203				96A	12 O 4 B 63		1



476 – Grinding wheels with reinforcement for working speed up to 80 m.s⁻¹



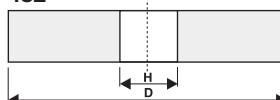
Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)		INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>					
D x T x H									semi-friable aluminium oxide, resinoid bond
442502	476 99 - 1224.03	1	125x20x22,2	97PA 22 P 3 BF 80				1	

482 – Straight regulating/ control wheels

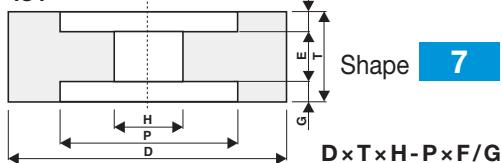
484 – Both side recessed regulating/control wheels



482



484



Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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482 Regulating wheels plain

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
	$D \times T \times H$									<i>brown</i> aluminium oxide, rubber bond
34380842	1	350×200×203 - 2-PART								
	CRA 120 - BR 60									1

484 Regulating wheels recessed both side

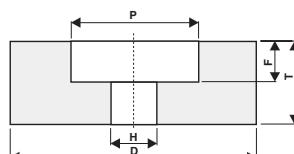
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
	$D \times T \times H - P \times F/G$									<i>brown</i> aluminium oxide, rubber bond
34380843	7	200×80×76 - 120×10/10								
34355077	7	250×100×127 - 190×12/12								
34374117	7	300×100×127 - 190×12/12								
34374617	7	300×150×127 - 190×38/38								
34374116	7	300×200×127 - 190×62/38 - 2-PART								
	CRA 120 - BR 60									1



511 – One side recessed grinding wheels

512 – One side recessed grinding wheels for surface grinding

513 – One side recessed grinding wheels for working speed up to 50 m.s⁻¹



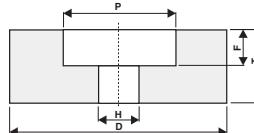
Shape **5**
D × T × H - P × F

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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511 One side recessed grinding wheels

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■		□		□				
D × T × H - P × F								white aluminium oxide, vitrified bond		
427817	511 51 - 1553.09	5	150×32×32 - 85×16		99BA 60 K 9 V 40		1			

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■									
D × T × H - P × F								brown aluminium oxide, vitrified bond		
428122	511 71 - 0913.09	5	90×20×32 - 60×10		96A 60 N 7 V 40		1			



Shape **5**
D × T × H - P × F

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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512

One side recessed grinding wheels for surface grinding

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
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Application	■	□		□		□				
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D × T/N × H - P × F *white aluminium oxide, vitrified bond*

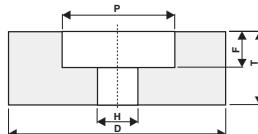
34162935	512 51 - 3561.80	5	350x50x127 - 200x10	99A 46 J 12 V 40	1
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Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
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Application	■	■	□	■						
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D × T × H - P × F *pink aluminium oxide, vitrified bond*

34162933	512 61 - 3019.00	5	300x50x127 - 200x10	98A 46 2 I 12 V 40	1
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Shape **5**
D × T × H - P × F

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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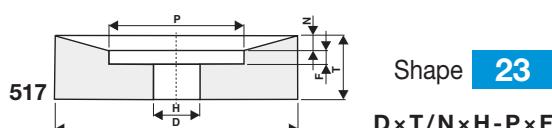
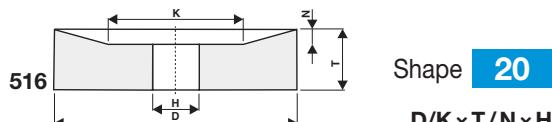
513

One side recessed grinding wheels for working speed up to 50 m.s⁻¹

<i>Material</i>	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
<i>Application</i>	■	□				□				
D × T × H - P × F							<i>brown</i> aluminium oxide, resinoid bond			
428293	513 74 - 1235.00		5	125×25×32 - 70×10				96A 22 Q 4 B 50	1	

516 – One side recessed grinding wheels

517 – One side relieved and recessed grinding wheels

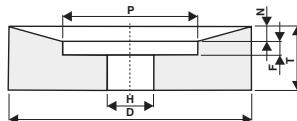


Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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516 One side recessed grinding wheels

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
D/K × T/N × H										white aluminium oxide, vitrified bond
34162971	516 51 - 5053.00	20	500/300×60/10×203,2					99BA	60 K 9 V 50	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	■						
D/K × T/N × H										pink aluminium oxide, vitrified bond
34162969	516 61 - 4549.00	20	450/220×50/10×127					98A	60 J 9 V 50	1
34162973	516 61 - 5052.00	20	500/300×60/10×203,2					98A	60 J 9 V 50	1

Shape **23****D × T/N × H - P × F**

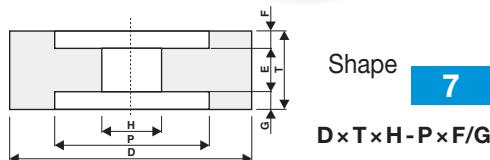
Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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517 One side relieved and recessed grinding wheels

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■		□		□				
D × T/N × H - P × F										
428319	517 51 - 2568.00	23	250×40/4,4×76	- 125×10,6		99BA	60 K 9 V 40			1
428331	517 51 - 3546.00	23	350×40/5,2×127	- 200×9,8		99BA	60 L 9 V 40			1
428341	517 51 - 3583.00	23	350×63/5,2×127	- 200×14,8		99BA	60 K 9 V 40			1
428350	517 51 - 4058.00	23	400×50/7,0×127	- 200×13,0		99BA	60 K 9 V 40			1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	□	■	□	■						
D × T/N × H - P × F										
428386	517 61 - 3545.00	23	350×40/5,2×127	- 200×9,8		98A	60 K 9 V 40			1

522 – Both side recessed grinding wheels for surface grinding



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
				$D \times T \times H - P \times F/G$					white aluminium oxide, vitrified bond	
34162941	522 51 - 4043.80	7	400x75x127 - 200x10/20			99A	46 J 12 V 40			1
34162945	522 51 - 4555.80	7	450x76x203,2 - 280x10/20			99A	46 J 12 V 40			1
34162962	522 51 - 6052.80	7	600x100x304,8 - 400x15/15			99A	46 J 12V 40			1

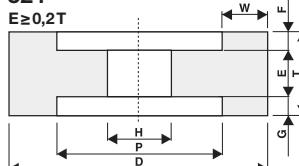
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	■						
				$D \times T \times H - P \times F/G$					pink aluminium oxide, vitrified bond	
34162946	522 61 - 4554.00	7	450x76x203,2 - 280x10/20			98A	46 2 I 12 V 40			1



524 – Both sides recessed grinding wheels

525 – Grinding wheels width $T \leq 6 \text{ mm}$ for snap gauges

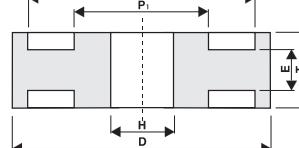
524

 $E \geq 0,2T$ 

Shape 9

 $D \times T \times H - W \times E$

525

 P_1 

Shape 902

 $D/P_1 \times T/E \times P/H - W \times E$

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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524

Both sides recessed grinding wheels

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	■	□	■	□			
$D \times T \times H - W \times E$									pink aluminium oxide, vitrified bond	
428674	524 61 - 2015.00	9	200	20	32	-	7	10	98A 70 K 9 V 40	1
428688	524 61 - 2532.00	9	250	20	76	-	7	10	98A 60 J 9 V 40	1
428692	524 61 - 2535.00	9	250	20	76	-	7	10	98A 70 K 9 V 40	1
428694	524 61 - 2568.00	9	250	25	76	-	7	10	98A 60 J 9 V 40	1

525

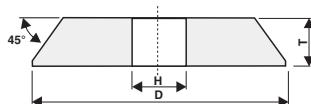
Grinding wheels width $T \leq 6 \text{ mm}$ for snap gauges

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	■	□	■	□			
$D/P_1 \times T/E \times P/H$									pink aluminium oxide, vitrified bond	
34162669	525 61 - 2526.00	902	250	210	6/3	240/76,2			98A 70 K 9 V 40	1

Grey positions until stock run out

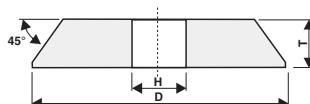
■ – suitable, □ – possible | reducing rings – page 82

539 – Grinding wheels – form C for saw sharpening



Shape **1** profil **C**
D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	□						
			D × T × H	white aluminium oxide, vitrified bond					
436849	539 51 - 1537.09	1	150×4×20	- PROFIL C	99BA	100 L 9 V 40			1
436850	539 51 - 1540.09	1	150×4×20	- PROFIL C	99BA	120 L 9 V 40			1
436851	539 51 - 1542.09	1	150×4×20	- PROFIL C	99BA	150 L 9 V 40			1
437023	539 51 - 1572.90	1	150×8/3×20	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 8 V 40			1
436853	539 51 - 1578.09	1	150×8×20	- PROFIL C	99BA	60 K 9 V 40			1
436854	539 51 - 1590.09	1	150×10×20	- PROFIL C	99BA	100 L 8 V 40			1
437024	539 51 - 1594.90	1	150×10/3×20	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 8 V 40			1
583976	539 51 - 1647.00	1	150×6×20	- PROFIL C	99BA	60 K 9 V 40			1
437027	539 51 - 1769.90	1	175×8/3×20	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 9 V 40			1
437028	539 51 - 1778.90	1	175×10/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 8 V 40			1
748093	539 51 - 1823.00	1	178×8×20	- PROFIL C	99BA	60 K 9 V 40			1
436855	539 51 - 2023.09	1	200×8×32	- PROFIL C	99BA	80 L 9 V 40			1
437037	539 51 - 2059.90	1	200×8/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 8 V 40			1
436865	539 51 - 2039.09	1	200×10×32	- PROFIL C	99BA	60 L 8 V 40			1
436866	539 51 - 2039.25	1	200×10×32	- PROFIL C RESIN TREAT.	99BA	60 L 8 V 40			1
437034	539 51 - 2039.90	1	200×10/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/M 8 V 40			1
437038	539 51 - 2085.90	1	200×13/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 8 V 40			1
436867	539 51 - 2519.09	1	250×8×32	- PROFIL C	99BA	60 L 8 V 40			1
437042	539 51 - 2519.90	1	250×8/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 8 V 40			1
436868	539 51 - 2545.09	1	250×10×32	- PROFIL C	99BA	60 L 8 V 40			1
436870	539 51 - 2545.25	1	250×10×32	- PROFIL C RESIN TREAT.	99BA	60 L 8 V 40			1
437044	539 51 - 2545.90	1	250×10/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N V 40			1
436871	539 51 - 2560.09	1	250×12×32	- PROFIL C	99BA	60 L 8 V 40			1
437050	539 51 - 2568.90	1	250×13/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/N 7 V 40			1
437053	539 51 - 2623.90	1	250×12/3×32	- PROFIL C 2 LAYERS	99BA/98A	60/80 L/M 8 V 40			1



Shape

1

profil

C

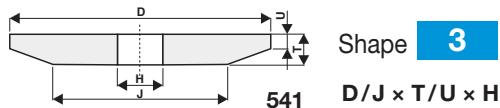
D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity			
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC		
Application	■	■	□	■								
			D × T × H	ruby aluminium oxide and brown , vitrified bond								
436873	539 66 - 1995.39	1	200×8×32	- PROFIL C		5RTNA	60 M 8 V 40			1		
521858	539 66 - 2039.30	1	200×10×32	- PROFIL C		5RTNA	60 L 9 V 40			1		
436874	539 66 - 2545.39	1	250×10×32	- PROFIL C		5RTNA	60 L 8 V 40			1		

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC		
Application	■	□										
			D × T × H	brown aluminium oxide, vitrified bond								
436875	539 71 - 1556.09	1	150×5×20	- PROFIL C		96A	80 M 8 V 40			1		
436886	539 71 - 1582.09	1	150×8×20	- PROFIL C		96A	80 L 8 V 40			1		
436887	539 71 - 1588.09	1	150×10×20	- PROFIL C		96A	60 M 8 V 40			1		
436890	539 71 - 1714.09	1	175×5×20	- PROFIL C		96A	80 L 8 V 40			1		
436891	539 71 - 1755.09	1	175×8×20	- PROFIL C		96A	80 M 8 V 40			1		
436893	539 71 - 1767.09	1	175×10×20	- PROFIL C		96A	60 M 8 V 40			1		
436902	539 71 - 1777.09	1	175×10×20	- PROFIL C		96A	60 L 8 V 40			1		
436912	539 71 - 1980.09	1	200×10×32	- PROFIL C		96A	60 M 8 V 40			1		
436914	539 71 - 2015.09	1	200×5×32	- PROFIL C		96A	80 L 8 V 40			1		
436943	539 71 - 2059.09	1	200×8×32	- PROFIL C		96A	60 L 9 V 40			1		
436940	539 71 - 2039.09	1	200×10×32	- PROFIL C		96A	60 L 8 V 40			1		
436945	539 71 - 2116.09	1	200×10×32	- PROFIL C		96A	80 L 9 V 40			1		
436950	539 71 - 2519.09	1	250×8×32	- PROFIL C		96A	60 L 8 V 40			1		
436953	539 71 - 2545.09	1	250×10×32	- PROFIL C		96A	60 L 8 V 40			1		
436955	539 71 - 2554.09	1	250×10×32	- PROFIL C		96A	60 M 8 V 40			1		
436960	539 71 - 3034.09	1	300×10×32	- PROFIL C		96A	60 L 9 V 40			1		

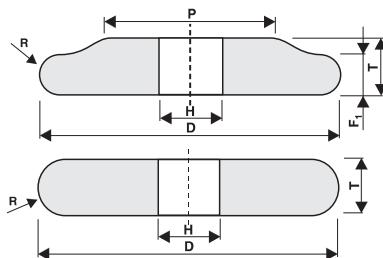
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC		
Application	■	□										
			D × T × H	brown aluminium oxide, resinoid bond								
436967	539 74 - 1516.09	1	150×3×20	- PROFIL C		96A	80 O 4 B 40			1		
436969	539 74 - 1717.09	1	175×5×20	- PROFIL C		96A	80 O 4 B 40			1		
436970	539 74 - 2540.00	1	250×10×32	- PROFIL C		96A	46 L 6 B 40			1		

541 – One side tapered grinding wheels



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■	□	□						
		D/J x T/U x H		white aluminium oxide, vitrified bond					
428730	541 51 - 1234.09	3	125/68x7/2x32	99BA	60 K 9 V 40				1
428740	541 51 - 1547.09	3	150/82x8/2x32	99BA	60 K 9 V 40				1
428753	541 51 - 1743.09	3	175/96x10/3x32	99BA	60 K 9 V 40				1
428755	541 51 - 2016.09	3	200/98x12/3x32	99BA	60 J 9 V 40				1

555 – Grinding wheels – form F



Shape 1 profil **F₁**
D × T × H

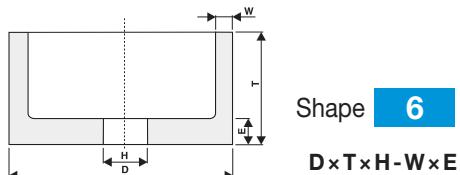
Shape 1 profil **F**
D × T × H

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■	□	□						
D × T × H								<i>white aluminium oxide, vitrified bond</i>	
436406	555 51 - 2534.09	1	250×10×32 R=5 PROFIL F	99BA 60 L 9 V 40					1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■	■	□	■					
D × T × H								<i>pink aluminium oxide, vitrified bond</i>	
494076	555 61 - 1012.00	1	100×4,5×10 R=2,25 PROFIL F	98A 60 K 9 V 40					1

571 – Cup grinding wheels for working speed up to 32 m.s⁻¹

572 – Porous cup grinding wheels for surface grinding

574 – Cup grinding wheels for working speed up to 40 m.s⁻¹



Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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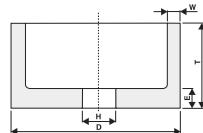
571 Cup grinding wheels for working speed up to 32 m.s⁻¹

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
D × T × H - W × E										black silicon carbide, vitrified bond
428897	571 31 - 1077.09	6	100×50×20 - 8×10					48C 80 K 9 V 32		1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>				
D × T × H - W × E										white aluminium oxide, vitrified bond
429005	571 51 - 0815.09	6	80×40×20 - 6×8					99BA 60 K 9 V 32		1
429032	571 51 - 1065.09	6	100×50×20 - 7,5×10					99BA 60 K 9 V 32		1
429043	571 51 - 1103.09	6	100×50×32 - 12×18					99BA 40 J 9 V 32		1
429087	571 51 - 1264.09	6	125×63×20 - 8×13					99BA 60 K 9 V 32		1
429188	571 51 - 1612.09	6	150×80×32 - 10×16					99BA 46 K 9 V 32		1
429190	571 51 - 1617.09	6	150×80×32 - 10×16					99BA 60 K 9 V 32		1
429205	571 51 - 1734.00	6	175×70×76 - 17,5×14					99BA 40 J 9 V 32		1
429239	571 51 - 2062.00	6	200×80×150 - 15×16					99BA 40 J 9 V 32		1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>						
D × T × H - W × E										pink aluminium oxide, vitrified bond
429344	571 61 - 1065.09	6	100×50×20 - 7,5×10					98A 60 K 9 V 32		1
429347	571 61 - 1077.09	6	100×50×20 - 7,5×10					98A 80 K 9 V 32		1
429362	571 61 - 1293.09	6	125×63×32-15×13					98A 120 L 9 V 32		1

■ – suitable, □ – possible | reducing rings – page 82



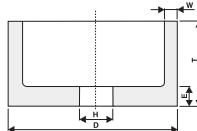
Shape **6**
D × T × H - W × E

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
429363	571 61 - 1301.09	6	125×63×32 - 8×13	98A 40 J 9 V 32	1
429367	571 61 - 1315.09	6	125×63×32 - 8×13	98A 60 K 9 V 32	1
429389	571 61 - 1603.09	6	150×80×32 - 12,5×16	98A 40 J 9 V 32	1
429386	571 61 - 1612.09	6	150×80×32 - 12,5×16	98A 46 K 9 V 32	1
429397	571 61 - 1634.09	6	150×80×51 - 12,5×16	98A 60 K 9 V 32	1
429413	571 61 - 2065.00	6	200×80×150 - 15×16	98A 46 K 9 V 32	1
429432	571 61 - 3573.00	6	350×100×275 - 25×20	98A 40 L 8 V 32	1
429435	571 61 - 4015.00	6	400×100×310 - 25×20	98A 24 O 6 V 32	1
429436	571 61 - 4028.00	6	400×100×310 - 25×20	98A 40 K 9 V 32	1
429443	571 61 - 4046.00	6	400×100×325 - 25×20	98A 40 K 9 V 32	1

572**Porous cup grinding wheels
for surface grinding**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				□	□	■		■		□
D × T × H - W × E										black silicon carbide, vitrified bond
429513	572 31 - 1531.09	6	150×80×32 - 12,5×16						48C 60 L 12 V 32	1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	□		□		■	□	
D × T × H - W × E										white aluminium oxide, vitrified bond
429542	572 51 - 1522.89	6	150×80×32 - 12,5×16						99A 46 J 12 V 32	1



Shape **6**
D × T × H - W × E

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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574

Cup grinding wheels for working speed up to 40 m.s⁻¹

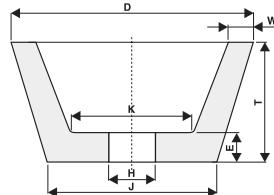
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D × T × H - W × E									green silicon carbide, vitrified bond	
427682	574 36 - 0668.00	6	63×50×20	- 14,5×20		49C	40 K 9 V 40			1
427695	574 36 - 1541.00	6	150×32×20	- 35×12		49C	80 K 9 V 40			1
427702	574 36 - 1731.00	6	175×32×32	- 42×12		49C	80 K 9 V 40			1
427707	574 36 - 2033.00	6	200×32×32	- 45×12		49C	40 L 8 V 40			1
427708	574 36 - 2035.00	6	200×32×32	- 45×12		49C	60 K 9 V 40			1
427710	574 36 - 2039.00	6	200×32×32	- 45×12		49C	80 K 9 V 40			1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>				
D × T × H - W × E									white aluminium oxide, vitrified bond	
427748	574 51 - 0669.00	6	63×50×20	- 15,5×20		99BA	46 K 9 V 40			1
427750	574 51 - 0671.00	6	63×50×20	- 15,5×20		99BA	60 K 9 V 40			1
427774	574 51 - 0869.00	6	80×50×32	- 15×20		99BA	60 J 9 V 40			1
427785	574 51 - 1114.00	6	100×50×32	- 20×20		99BA	60 K 9 V 40			1
427806	574 51 - 1356.00	6	125×63×51	- 22,5×25		99BA	60 K 9 V 40			1
427827	574 51 - 1725.00	6	175×32×32	- 42,5×12		99BA	60 K 9 V 40			1
427830	574 51 - 1732.00	6	175×32×32	- 42,5×12		99BA	80 L 9 V 40			1
427835	574 51 - 2034.00	6	200×32×32	- 45×12		99BA	46 M 8 V 40			1
427836	574 51 - 2037.00	6	200×32×32	- 45×12		99BA	60 M 8 V 40			1
427846	574 51 - 2080.00	6	200×40×51	- 45×15		99BA	60 K 9 V 40			1



575 – Tapered cup grinding wheels

576 – Porous tapered cup grinding wheels



Shape 11

D/J × T × H - W × E × K

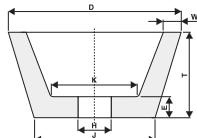
Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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575 Tapered cup grinding wheels

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application						■	■			
D/J × T × H - W × E × K										
429690	575 34 - 1119.03	11	110/90×55×22,2 - 20×10×47			48C	36 Q 5 B 11 50			1
429692	575 34 - 1280.03	11	125/100×50×22,2 - 25×20×54			48C	24 Q 3 B 11 50			1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application		□	□	□	■	□		□	□	
D/J × T × H - W × E × K										
429702	575 36 - 1015.09	11	100/71×40×20 - 8×10×56			49C	46 K 9 V 32			1
429708	575 36 - 1269.09	11	125/92×45×32 - 7,5×12×80			49C	80 K 9 V 32			1
429715	575 36 - 1557.09	11	150/114×50×32 - 10×12×100			49C	80 K 9 V 32			1

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
D/J × T × H - W × E × K										
429731	575 51 - 0708.09	11	80/56×32×20 - 6×10×47			99BA	46 J 9 V 32			1
429734	575 51 - 0715.09	11	80/56×32×20 - 6×10×47			99BA	60 K 9 V 32			1
429737	575 51 - 0720.09	11	80/56×32×20 - 6×10×47			99BA	80 K 9 V 32			1
429757	575 51 - 1017.09	11	100/75×35×20 - 7,5×10×65			99BA	60 J 9 V 32			1
429759	575 51 - 1020.09	11	100/71×40×20 - 8×10×56			99BA	60 K 9 V 32			1
429793	575 51 - 1212.09	11	125/92×45×20 - 7,5×12×80			99BA	40 J 9 V 32			1
429797	575 51 - 1222.09	11	125/92×45×20 - 7,5×12×80			99BA	60 K 9 V 32			1
429847	575 51 - 1554.09	11	150/114×50×32 - 10×12×100			99BA	60 K 9 V 32			1
429869	575 51 - 1775.09	11	175/134×55×32 - 16×15×105			99BA	40 K 9 V 32			1



Shape 11

D/J × T × H - W × E × K

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX carbides	cast iron stone nonferrous metals titanium	PVC					
Application									
		D/J × T × H - W × E × K		<i>pink</i> aluminium oxide, vitrified bond					
429888	575 61 - 1015.09	11	100/71×40×20 - 8×10×56	98A	46	K	9	V 32	1
429892	575 61 - 1021.09	11	100/71×40×20 - 8×10×56	98A	60	L	9	V 32	1
429893	575 61 - 1025.09	11	100/71×40×20 - 8×10×56	98A	80	K	9	V 32	1
429909	575 61 - 1256.09	11	125/92×45×32 - 7,5×12×80	98A	40	J	9	V 32	1
429910	575 61 - 1260.09	11	125/92×45×32 - 7,5×12×80	98A	46	K	9	V 32	1
429911	575 61 - 1263.09	11	125/92×45×32 - 7,5×12×80	98A	60	K	9	V 32	1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX carbides	cast iron stone nonferrous metals titanium	PVC					
Application									
		D/J × T × H - W × E × K		<i>brown</i> aluminium oxide, resinoid bond					
429936	575 74 - 1277.03	11	125/100×50×22,2 - 25×20×54	96A	20	Q	2	B11 50	1
429937	575 74 - 1538.03	11	150/110×50×22,2 - 20×12×70	96A	20	Q	2	B11 50	1

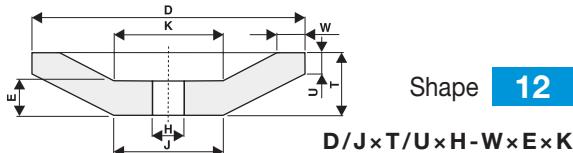
576

Porous tapered cup grinding wheels

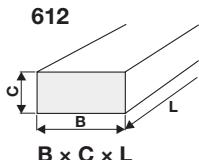
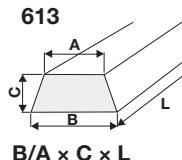
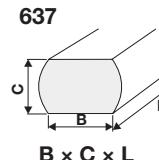
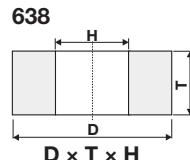
Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX carbides	cast iron stone nonferrous metals titanium	PVC					
Application									
		D/J × T × H - W × E × K		<i>white</i> aluminium oxide, vitrified bond					
429950	576 51 - 1225.89	11	125/92×45×20 - 7,5×12×80	99A	46	M	12	V 32	1



581 – Dish grinding wheels



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application			■	■	■				
D/J x T/U x H - W x E x K black silicon carbide, vitrified bond									
429972	581 31 - 1533.09	12	150/50x15/3x20 - 8x10x50		48C 80 K 9 V 32				1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■	□	■	□					
D/J x T/U x H - W x E x K white aluminium oxide, vitrified bond									
429986	581 51 - 0715.00	12	75/28x8/2x13 - 4x6x28		99BA 60 K 9 V 32				1
429998	581 51 - 1015.09	12	100/35x12/3x20 - 5x8x35		99BA 60 K 9 V 32				1
430001	581 51 - 1020.09	12	100/35x12/3x20 - 5x8x35		99BA 80 J 9 V 32				1
430011	581 51 - 1222.09	12	125/40x14/3x20 - 6x9x40		99BA 60 K 9 V 32				1
430028	581 51 - 1527.09	12	150/50x15/3x20 - 8x10x50		99BA 60 K 9 V 32				1
430034	581 51 - 1538.09	12	150/50x15/3x20 - 8x10x50		99BA 60 J 9 V 32				1
430054	581 51 - 1716.09	12	175/60x18/3x32 - 10x11x60		99BA 46 L 8 V 32				1
430056	581 51 - 1722.09	12	175/60x18/3x32 - 10x11x60		99BA 60 K 9 V 32				1
430068	581 51 - 2021.09	12	200/70x19/3x32 - 10x12x70		99BA 60 K 9 V 32				1

612 – Grinding segments – rectangle**613 – Grinding segments – trapezoid****637 – Grinding segments – rectangle and rounded****638 – Grinding segments – ring**Shape **3101**Shape **3109**Shape **31S**Shape **5420**

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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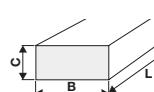
612**Grinding segments – rectangle**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application						■	□	□	□	
B x C x L										black silicon carbide, vitrified bond
430131	612 31 - 0861.00	3101	80x25x150				48C	40 J 9 V		8

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□		□		□				
B x C x L										white aluminium oxide, vitrified bond
430140	612 51 - 0829.00	3101	80x25x150					99BA	24 G 10 V	8
430141	612 51 - 0831.00	3101	80x25x150					99BA	36 G 10 V	8
430144	612 51 - 0835.00	3101	80x25x150					99BA	24 J 9 V	8
430145	612 51 - 0837.00	3101	80x25x150					99BA	24 K 9 V	8
430146	612 51 - 0843.00	3101	80x25x150					99BA	36 J 9 V	8
430150	612 51 - 0853.00	3101	80x25x150					99BA	40 G 10 V	8
430152	612 51 - 0861.00	3101	80x25x150					99BA	40 J 9 V	8
430153	612 51 - 0862.00	3101	80x25x150					99BA	40 J 12 V	8
430154	612 51 - 0863.00	3101	80x25x150					99BA	40 K 9 V	8
430155	612 51 - 0864.80	3101	80x25x150					99A	40 K 12 V	8
430158	612 51 - 0872.00	3101	80x25x150					99BA	46 K 9 V	8



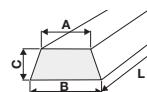
612



Shape 3101

 $B \times C \times L$

613



Shape 3109

 $B/A \times C \times L$

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$B \times C \times L$									white aluminium oxide, vitrified bond	
430163	612 51 - 0880.00	3101	80x25x150				99BA	60 K 9 V		8
430166	612 51 - 0948.00	3101	90x35x150				99BA	24 H 10 V		8
430168	612 51 - 0952.00	3101	90x35x150				99BA	24 J 9 V		8
413126	612 51 - 0954.00	3101	90x35x150				99BA	24 K 9 V		8
430170	612 51 - 0962.00	3101	90x35x150				99BA	36 J 9 V		8
430171	612 51 - 0964.00	3101	90x35x150				99BA	36 K 9 V		8
430173	612 51 - 0976.00	3101	90x35x150				99BA	40 J 9 V		8
430175	612 51 - 0978.00	3101	90x35x150				99BA	40 K 9 V		8
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>							
$B \times C \times L$									pink aluminium oxide, vitrified bond	
430183	612 61 - 0813.00	3101	80x25x150				98A	24 J 9 V		8
430187	612 61 - 0952.00	3101	90x35x150				98A	24 J 9 V		8

613

Grinding segments – trapezoid

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>						
$B/A \times C \times L$									white aluminium oxide, vitrified bond	
430234	613 51 - 1014.00	3109	100/85x35x150				99BA	24 K 10 V		8
430235	613 51 - 1016.00	3109	100/85x35x150				99BA	40 J 9 V		8
430241	613 51 - 1035.00	3109	100/85x35x200				99BA	36 I 10 V		8

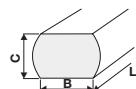
637

Grinding segments – rectangle and rounded

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
$B \times C \times L$									white aluminium oxide, vitrified bond	
436422	637 51 - 0845.00	31S	85x56x63				99BA	40 G 10 V		8



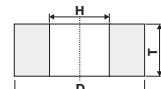
637



Shape 31S

 $B \times C \times L$

638



Shape 5420

 $D \times T \times H$

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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638

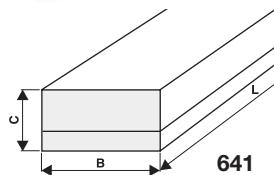
Grinding segments – ring

Material	steel (grade 1)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>						
$D \times T \times H$									pink aluminium oxide, vitrified bond	
436548	638 61 - 1230.00	5420	125x63x63			98A 24 I 10 V				8



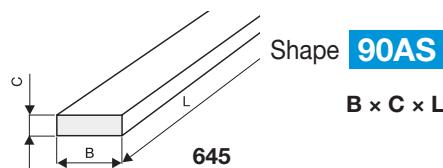
641 – Grinding combination stones

645 – Grinding hand stones – rectangle



Shape 90K

B × C × L



Shape 90AS

B × C × L

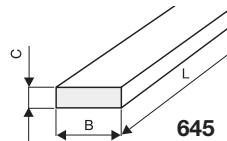
Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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641 Grinding combination stones

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	■	□	□					
B × C × L										black silicon carbide, vitrified bond
436555	641 31 - 0589.94	90K 50×25×200							48C 150/240 N 7 V	10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	■	■	□	□				
B × C × L										green silicon carbide, vitrified bond
437100	641 36 - 0245.94	90K 25×15×150							49C 120/400 M 8 V	10
437105	641 36 - 0537.94	90K 50×25×150							49C 150/320 N 7 V	10
386844	641 36 - 0577.94	90K 50×25×200							49C 150/320 N 7 V	10

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■								
B × C × L										white aluminium oxide, vitrified bond
437111	641 51 - 0538.94	90K 50×25×150							99A 150/320 O 6 V	10
437114	641 51 - 0578.94	90K 50×25×200							99A 150/320 O 6 V	10



Shape 90AS

B × C × L

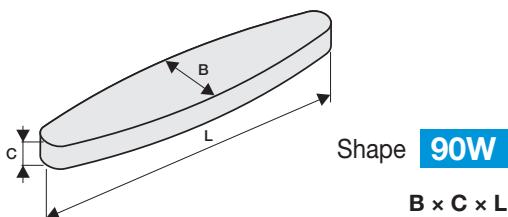
Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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645**Grinding hand stones – rectangle**

Material	steel (grade1)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
B × C × L										<i>black silicon carbide, vitrified bond</i>
430326	645 31 - 0555.00	90AS	50×25×200			48C	40 K 9 V			10



648 – Stones for scythes sharpening



Item number	Internal code	Shape	Dimension	Specification				Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■						
$B \times C \times L$								
523426	648 31 - 2315.92	90W	35x13x230	C.190A	IN BOX	48C	100 N 7 V	1



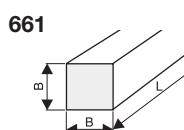
661 – Grinding files – square

662 – Grinding files – rectangle

668 – Grinding files – triangular

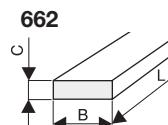
671 – Grinding files – round

672 – Grinding files – half round



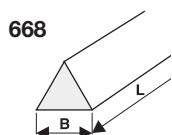
Shape

9011

 $B \times L$ 

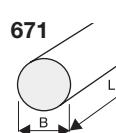
Shape

9010

 $B \times C \times L$ 

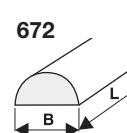
Shape

9020

 $B \times L$ 

Shape

9030

 $B \times L$ 

Shape

9040

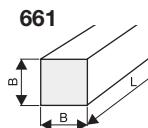
 $B \times L$

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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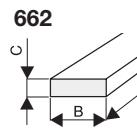
661

Grinding files – square

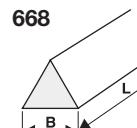
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	□	■	■	■	□				
430428	661 36 - 1051.00	9011	10×100				green silicon carbide, vitrified bond			20
430431	661 36 - 1058.00	9011	10×100				49C 220 N 7 V			20
430448	661 36 - 1335.00	9011	13×150				49C 320 N 7 V			20
430451	661 36 - 1347.00	9011	13×150				49C 120 N 7 V			20
430457	661 36 - 2035.00	9011	20×200				49C 320 N 7 V			10
430459	661 36 - 2041.00	9011	20×200				49C 80 N 7 V			10
430461	661 36 - 2047.00	9011	20×200				49C 120 N 7 V			10
							49C 220 N 7 V			10



**Shape
9011**
B × L



**Shape
9010**
B × C × L



**Shape
9020**
B × L

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity			
<i>Material</i>	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium			
<i>Application</i>	■	■		□					PVC			
			B × L	white aluminium oxide, vitrified bond								
430473	661 51 - 1052.80	9011	10×100			99A	220 O 6 V			20		
430499	661 51 - 2048.80	9011	20×200			99A	220 O 6 V			10		

662

Grinding files – rectangle

<i>Material</i>	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
<i>Application</i>	■	■	■	■	■	□				PVC			
				B × C × L	green silicon carbide, vitrified bond								
430527	662 36 - 1341.00	9010	13×3×100			49C	320 N 7 V			20			
430537	662 36 - 2016.00	9010	20×6×100			49C	220 N 7 V			20			
430543	662 36 - 2040.00	9010	20×10×150			49C	120 N 7 V			20			
430545	662 36 - 2055.00	9010	20×10×150			49C	320 N 7 V			20			
430551	662 36 - 2524.00	9010	25×13×200			49C	320 N 7 V			10			

<i>Material</i>	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
<i>Application</i>	■	■		□						PVC			
				B × C × L	white aluminium oxide, vitrified bond								
430565	662 51 - 2012.80	9010	20×6×100			99A	120 O 6 V			20			
430575	662 51 - 2041.80	9010	20×10×150			99A	120 O 6 V			20			
430579	662 51 - 2519.80	9010	25×13×200			99A	220 O 6 V			10			

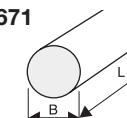
668

Grinding files – triangular

<i>Material</i>	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC			
<i>Application</i>	■	■	■	■	■	■				PVC			
				B × L	green silicon carbide, vitrified bond								
430607	668 36 - 0615.00	9020	6×100			49C	220 N 7 V			20			
430614	668 36 - 1015.00	9020	10×100			49C	120 N 7 V			20			
436560	668 36 - 1021.00	9020	10×100			49C	220 N 7 V			20			
430620	668 36 - 1325.00	9020	13×150			49C	120 N 7 V			20			
437122	668 36 - 1623.00	9020	16×150			49C	220 N 7 V			20			
430624	668 36 - 2011.00	9020	20×200			49C	80 N 7 V			10			
430627	668 36 - 2027.00	9020	20×200			49C	320 N 7 V			10			



671

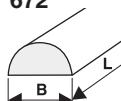


Shape

9030

B × L

672



Shape

9040

B × L

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ ■	■	■						
		B × L	white aluminium oxide, vitrified bond						
430641	668 51 - 1326.80	9020	13×150	99A	120 O 6 V				20
430642	668 51 - 1332.80	9020	13×150	99A	220 O 6 V				20
430652	668 51 - 2012.80	9020	20×200	99A	80 O 6 V				10
430654	668 51 - 2018.80	9020	20×200	99A	120 O 6 V				10

671

Grinding files – round

Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ ■	■	■	■	■				
		B × L	green silicon carbide, vitrified bond						
430679	671 36 - 1029.00	9030	10×100	49C	220 N 7 V				20

672

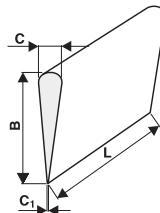
Grinding files – half round

Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ ■	■	■	■	■				
		B × L	green silicon carbide, vitrified bond						
430746	672 36 - 1321.00	9040	13×150	49C	120 N 7 V				20
430758	672 36 - 2023.00	9040	20×200	49C	220 N 7 V				10

Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	■ ■	■	■	■	■				
		B × L	white aluminium oxide, vitrified bond						
430777	672 51 - 1322.80	9040	13×150	99A	120 O 6 V				20
430792	672 51 - 2024.80	9040	20×200	99A	220 O 6 V				10



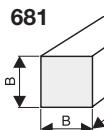
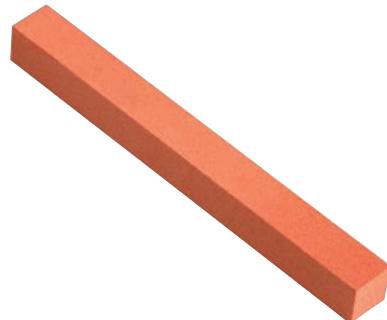
675 – Grinding files – knife blade shape

Shape **90HM****C/C₁ × B × L**

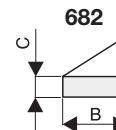
Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	■	■	■					□
C/C ₁ ×B×L										<i>green silicon carbide, vitrified bond</i>
436562	675 36 - 3525.00	90HM 10/3×35×150					49C	120 O 7 V		20
437131	675 36 - 4524.00	90HM 6/2×45×115					49C	220 N 7 V		20
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	■	■	□	□						
C/C ₁ ×B×L										<i>white aluminium oxide, vitrified bond</i>
437132	675 51 - 4528.80	90HM 6/2×45×115					99A	320 O 6 V		20
437134	675 51 - 4550.80	90HM 13/5×45×115					99A	320 O 6 V		20

681 – Honing stones – square

682 – Honing stones – rectangle



Shape 5411

 $B \times L$ 

Shape 5410

 $B \times C \times L$

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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681

Honing stones – square

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
$B \times L$										green silicon carbide, vitrified bond
430826	681 36 - 1057.00	5411	10x125				49C	120 M 8 V		20
430828	681 36 - 1060.00	5411	10x125				49C	220 L 9 V		20
430843	681 36 - 1370.00	5411	13x160				49C	120 M 8 V		20
430844	681 36 - 1382.00	5411	13x160				49C	320 K 9 V		20

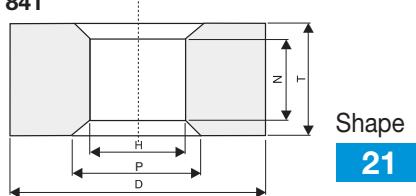
682

Honing stones – rectangle

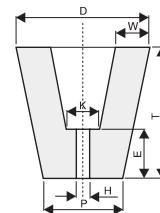
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application	<input checked="" type="checkbox"/>	<input type="checkbox"/>								
$B \times C \times L$										white aluminium oxide, vitrified bond
430902	682 51 - 1011.80	5410	10x6x100				99A	220 K 9 V		20

841 – Dressing wheels for device PERPLEX**842 – Dressing wheels for device DIABOLO****843 – Dressing stones – round****844 – Dressing stones – square**

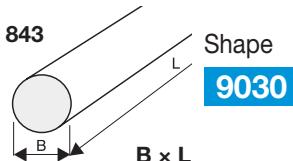
841



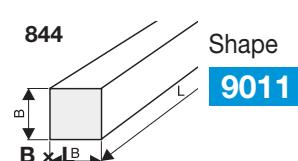
842



843



844



Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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841 Dressing wheels for device PERPLEX

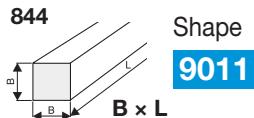
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										

 $D \times T / N \times P / H$

black silicon carbide, vitrified bond

842 Dressing wheels for device DIABOLO

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
$D / P \times T \times H - W \times E \times K$						black silicon carbide, vitrified bond				
436593	842 31 - 5010.00	11	50/44x57x8 - 11,5x8x23			48C 36 P 4 V				5
436597	842 31 - 6510.00	11	65/42x45x8 - 18,5x13x22			48C 36 P 4 V				5



Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
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843**Dressing stones – round**

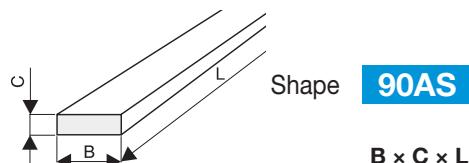
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
	B x L									<i>black silicon carbide, vitrified bond</i>
437143	843 31 - 1515.00	9030	15x56			48C	36 P 4 V			20

844**Dressing stones – square**

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
	B x L									<i>black silicon carbide, vitrified bond</i>
437144	844 31 - 3010.00	9011	30x300			48C	14 P 4 V			10
437146	844 31 - 5010.00	9011	50x200			48C	14 P 4 V			10



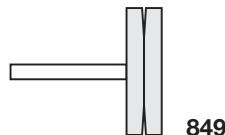
847 – Dressing stones for diamond wheels



Item number	Internal code	Shape	Dimension	Specification					Min. order quantity	
Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
B x C x L									white aluminium oxide, vitrified bond	
437228	847 51 - 0214.94	90AS	13x25x100				99BA	80 K 11 V		20
437229	847 51 - 0218.94	90AS	25x13x100				99BA	150 I 10 V		20
437232	847 51 - 0225.94	90AS	25x13x100				99BA	220 I 10 V		20
437233	847 51 - 0235.94	90AS	25x13x150				99BA	80 I 12 V		20
437235	847 51 - 0240.94	90AS	25x13x150				99BA	220 I 10 V		20
437241	847 51 - 0250.94	90AS	25x13x150				99BA	150 I 10 V		20

Material	steel (grade11)	steel (<55HRC)	steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC
Application										
B x C x L									brown aluminium oxide, rubber bond	
438141	847 73 - 0305.00	90AS	20x35x150				96A	80 E 1 R		10

849 – Knives, scissors sharpener – fixing in drill power machine

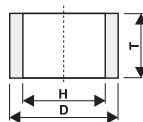


849

Item number	Internal code	Shape	Dimension	Specification					Min. order quantity
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
D/J/K × T/E × H								<i>white</i> aluminium oxide colored blue, vitrified bond	
437259	849 51 - 0590.88	57/29/24×8/6×7				HEXAGON SHAFT	99A	100L 9 V 40	1
Material	steel (grade11) steel (<55HRC) steel (<67HRC)	INOX	carbides	cast iron	stone	nonferrous metals	titanium	PVC	
Application	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
D/J/K × T/E × H								<i>brown</i> aluminium oxide, vitrified bond	
437267	849 71 - 0590.00	57/29/24×8/6×7				HEXAGON SHAFT	96A	100L 9 V 40	1



Reducing rings



Shape **100RR**
 $D \times T \times H$

Item number	Internal code	Shape	Dimension	Specification	Min. order quantity
76648		100RR	20x6x12		1
76618		100RR	20x6x13		1
76628		100RR	20x6x16		1
79292		100RR	20x10x6		1
84850		100RR	25x6x16		1
76254		100RR	25,4x6x20		1
261732		100RR	32x6x12		1
89158		100RR	32x6x16		1
822766		100RR	32x6x20		1
822767		100RR	32x6x25		1
822769		100RR	32x6x30		1
111434		100RR	32x19x16		1
76253		100RR	32x25,4x6		1
911408		100RR	51x9x32		1
638253		100RR	51x9x35		1
667841		100RR	51x10x31,75		1
109381		100RR	51x9x40		1
111436		100RR	76x9x40		1

Reducing rings with unlisted dimensions can be provided on request.

Application pictograms



surface grinding



floorstand grinder

external cylindrical
grindingdressing and
sharpeninginternal cylindrical
grinding

wet

profile surface
grinding

dry



cutting



wet/dry



saw sharpening

hand held
grinding

tool sharpening



off-hand grinding

Pictograms



Use ear protection



Pay attention
to the safety
recommendations



Use dust mask



Use gloves



Use eye and face
protection



Not permitted for
side grinding

Working speed

Working speed is stated on the attached labels or directly marked on wheel (revolutions).
The whell can be marked with colour stripe:

Maximum working speed

Colour of stripe

up to 40 m.s^{-1}	without stripe
up to 50 m.s^{-1}	blue
up to 63 m.s^{-1}	yellow
up to 80 m.s^{-1}	red
up to 100 m.s^{-1}	green
up to 125 m.s^{-1}	blue + yellow
up to 160 m.s^{-1}	green + blue

Speed conversion table

Diameter in mm	Peripheral speed (m.s ⁻¹)													
	5	10	15	20	25	30	35	40	45	50	55	60	80	100
	Revolutions per minute (min ⁻¹)													
4	23 870	47 740	71 610	95 490	119 360	134 230	167 110							
5	19 090	38 190	57 290	76 390	95 490	114 590	133 690							
6	15 900	31 830	47 740	63 660	79 570	95 490	111 400							
8	11 930	23 870	35 800	47 740	59 680	71 610	83 550	95 490						
10	9 540	19 090	28 640	38 190	47 740	57 290	66 840	76 390	85 940					
13	7 340	14 690	22 030	29 380	36 720	44 070	51 410	58 760	66 110	73 450	80 800	88 140		
16	5 960	11 930	17 900	23 870	29 840	35 800	41 770	47 740	53 710	59 680	65 650	71 610	95 490	
20	4 770	9 540	14 320	19 090	23 870	28 640	33 420	38 190	42 970	47 740	52 520	57 290	76 390	
25	3 810	7 630	11 450	15 270	19 090	22 910	26 730	30 550	34 370	38 190	42 010	45 830	61 110	
32	2 980	5 960	8 950	11 930	14 920	17 900	20 880	23 870	26 850	29 840	32 820	35 800	47 740	
40	2 380	4 770	7 160	9 540	11 930	14 320	16 710	19 090	21 480	23 870	26 260	28 640	38 190	
50	1 900	3 810	5 720	7 630	9 540	11 450	13 360	15 270	17 180	19 090	21 000	22 910	30 550	38 190
63	1 510	3 030	4 540	6 060	7 570	9 090	10 610	12 120	13 640	15 150	16 670	18 180	24 250	30 310
80	1 190	2 380	3 580	4 770	5 960	7 160	8 350	9 540	10 740	11 930	13 130	14 320	19 090	23 870
100	950	1 900	2 860	3 810	4 770	5 720	6 680	7 630	8 590	9 540	10 500	11 450	15 270	19 090
115	830	1 660	2 490	3 320	4 150	4 980	5 810	6 640	7 470	8 300	9 130	9 960	13 280	16 600
125	760	1 520	2 290	3 050	3 810	4 580	5 340	6 110	6 870	7 630	8 400	9 160	12 220	15 270
150	630	1 270	1 900	2 540	3 180	3 810	4 450	5 090	5 720	6 360	7 000	7 630	10 180	12 730
160	590	1 190	1 790	2 380	2 980	3 580	4 170	4 770	5 370	5 960	6 560	7 160	9 540	11 930
175	540	1 090	1 630	2 180	2 720	3 270	3 810	4 360	4 910	5 450	6 000	6 540	8 730	10 910
180	530	1 060	1 590	2 120	2 650	3 180	3 710	4 240	4 770	5 300	5 830	6 360	8 480	10 610
200	470	950	1 430	1 900	2 380	2 860	3 340	3 810	4 290	4 770	5 250	5 720	7 630	9 540
230	415	830	1 240	1 660	2 070	2 490	2 900	3 320	3 730	4 150	4 560	4 980	6 640	8 300
250	380	760	1 140	1 520	1 900	2 290	2 670	3 050	3 430	3 810	4 200	4 580	6 110	7 630
300	310	630	950	1 270	1 590	1 900	2 220	2 540	2 860	3 180	3 500	3 810	5 090	6 360
315	300	600	900	1 210	1 510	1 810	2 120	2 420	2 720	3 030	3 330	3 630	4 850	6 060
350	270	540	810	1 090	1 360	1 630	1 900	2 180	2 450	2 720	3 000	3 270	4 360	5 450
400	230	470	710	950	1 190	1 430	1 670	1 900	2 140	2 380	2 620	2 860	3 810	4 770
450	210	420	630	840	1 060	1 270	1 480	1 690	1 900	2 120	2 330	2 540	3 390	4 240
500	190	380	570	760	950	1 140	1 330	1 520	1 710	1 900	2 100	2 290	3 050	3 810
600	155	310	470	630	790	950	1 110	1 270	1 430	1 590	1 750	1 900	2 540	3 180
630	150	300	450	600	750	900	1 060	1 210	1 360	1 510	1 660	1 810	2 420	3 030
750	125	250	380	500	630	760	890	1 010	1 140	1 270	1 400	1 520	2 030	2 540
800	115	235	355	470	590	710	830	950	1 070	1 190	1 310	1 430	1 900	2 380
900	106	212	318	420	530	630	740	840	950	1 060	1 160	1 270	1 690	2 120
1000	95	190	285	380	470	570	660	760	850	950	1 050	1 140	1 520	1 900
1120	85	170	255	340	420	510	590	682	760	852	930	1 020	1 360	1 700
1250	76	172	225	305	380	450	530	610	680	760	840	910	1 220	1 520
1400	68	136	200	270	340	400	470	540	610	680	750	810	1 090	1 360
1600	59	119	178	235	295	355	410	470	530	590	650	710	950	1 190

Basic dimensions of grain

Grinding grain

Grain size in micrometers (μm)

Marking according ČSN 22 4012/93 (FEPA 42-D84)	Specific size of the main grain	
	from	to
F 8	2800	2360
F 10	2360	2000
F 12	2000	1700
F 14	1700	1400
F 16	1400	1180
F 20	1180	1000
F 22	1000	850
F 24	850	710
F 30	710	600
F 36	600	500
F 40	500	425
F 46	425	355
F 54	355	300
F 60	300	250
F 70	250	212
F 80	212	180
F 90	180	150
F 100	150	125
F 120	125	106
F 150	106	90
F 180	90	75
F 220	75	63

Micro grain

Grain size in micrometers (μm)

Marking according PN 22 4012.4 (FEPA 42-D84)	Former marking according to ds50 ČSN 22402/1973	
F 230	53	5
F 240	44,5	4
F 280	36,5	3
F 320	29,2	M 32
F 360	22,8	M 32
F 400	17,3	M 22
F 500	12,8	M 15
F 600	9,3	M 10
F 800	6,5	M 7
F 1000	4,5	M 5
F 1200	3,0	M 3

Note: ds50 – average size of a grain main fraction (theoretical gran diameter) presents the 50 % point of the sedimentation curve of the evaluated grains.

Some principles for grinding

- for bigger material removal use coarser grit,
- for harder material use softer wheel,
- grinding of materials with a tendency to smear (copper, brass, aluminium and like) are selected grinding wheel with coarse grain size
- the larger the contact area (Liaison arc multiplied by the width of the wheel) between the grinding wheel and the workpiece , the coarser the grain size is chosen and the lower hardness of the grinding wheel
- for material sensitive to temperature changes is chosen softer grinding wheel,
- for intermittent grinding surfaces are selected wheel harder,
- for grinding of the workpiece face of the wheel face is usually selected wheel softer than for grinding wheel circumference

The ten most important rules for grinders

1. Working speed must not exceed the permissible value. For pedestal grinders which are difefrently sized wheels, number of revolutions is governed by a larger diameter.
2. For clamping of grinding wheels use only zhe prescribed flanges and pads. Both flanges must have the same diameter.
3. Before clamping grinding wheel must be carefully inspected for cracked. Clear sound when Lightly tapped is proof,that the grinding wheel has been damaged in transit. This applies especially for ceramic grinding wheels.
4. Grinding wheel must be mounted freely on the shaft.
5. Nuts or bolts of flanges should be tightened evenly without violence.
6. Grinding machines must be fitted with a protective cover, pedestal grinders also adjustable supports.
7. The clearance between rest and grinding wheel must exceed a half-width of grinding wheel, but no more than 3 mm.
8. It is essential the newly clamped wheel to test at idle operating speed for at least 1 min., with closed protective cover and in an enclosed space. During this test the operator must stay out of the track of the disc.
9. Grinding wheel is permitted dressing only by specially designated dressing tool.
10. When grinding and dressing grinding wheel it is necessary to use protective equipment.

Defects by grinding and their reasons

Defect	Reason
Grinding wheel is clogging and burning	Grinding wheel is too hard Grit of wheel is too fine Speed is too high Grinding wheel is badly dressing
Grinding wheel wears down to quickly	Grinding wheel is soft
Grinding wheel moving a few	Grinding wheel is too hard Grit is too fine
Grinding wheel not adhered profile	Grinding wheel is too soft Grit is too rough Number of revolutions is too minor
Chatter marks on ground surface	Grinding machine does not work calmly Imbalance in large wheels Bearing spindle of grinding machine is wrong Grinding wheel is not correctly balanced Grinding wheel is too hard
Tick marks on the ground surface	Dirt in coolant
Spots on the ground surface	Grinding wheel is too hard or too fine Feed is too great Speed of workpiece is too minor Coolant not suitable
Grinding wheel beats	Incorrect imposition of grinding machine Grinding wheel is badly dressed

Common errors when dressing

If the dressing tool is driven over the ($ae = 0$) grinding wheel without infeed, the wheel becomes blunt and clogs. This results in a greater risk of overheating when grinding.

If the free clamping length of dresser is too large. Vibrations arise and the grinding wheel surface becomes irregular. This face is reproduced on the workpiece in the subsequent grinding process.

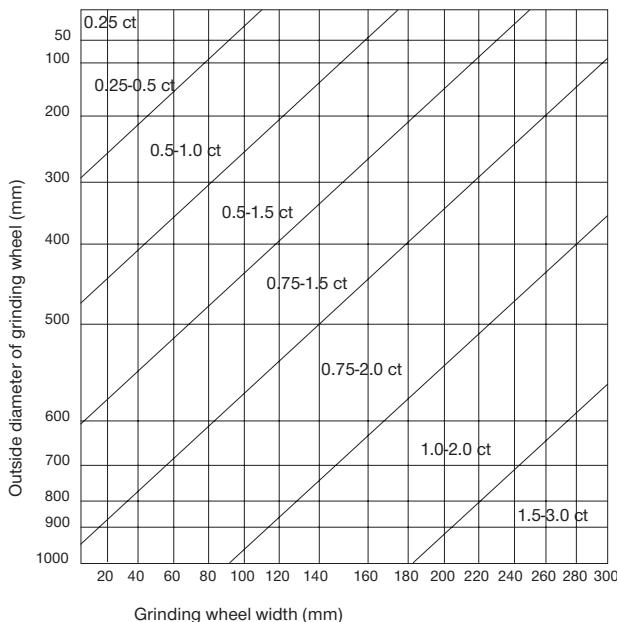
When the dressing infeed selected ($ae > 0,03$) is too high. This causes a fracture in the bond bridges in the grinding wheel and the grains to come out too soon. This results in a poorer workpiece surface due to formations of comma-shaped scratches.

The cooling system is not switched on in time. As a result of the thermal overload, the diamond is destroyed because of quenching or because temperatures are too high. Remedy: The cooling system should be switched on before the grinding wheel first comes into contact with the dresser.

The cooling system is switched off too soon after dressing. The grain and bond residue that has come out through dressing cannot be sufficiently removed (rinsed out). This can lead, amongst other things, to the formation of comma-shaped scratches on the workpiece surface.

The single-grain diamond is ground down too much, meaning that implementation of the diamonds is no longer possible.

Diamond size (carat) in relations to grinding wheel dimensions



Interrelationship: surface roughness / grit size

The table below will help you select the right grit size to achieve the surface roughness result required. Variable process parameters (e.g. the dressing method) have a significant effect as to which surface roughness can be achieved with a grit size. Therefore, the table below also lists the surface areas/grit size.

You should take into account that large grit sizes remove slivers (material) more simply. It is not necessary to select the finest for each initial selection of the grit size.

Interrelationship: surface roughness/grit size										
Surface		Grit size								
micro inch CLA	µm Ra	36	46	60	80	100	120	150	180	220
42	1,1	*								
32	0,8	*	*							
26	0,7		*							
21	0,5		*	*						
16	0,4			*						
14	0,35			*	*					
11	0,25				*					
8	0,2				*	*				
7	0,17					*				
6	0,14					*	*			
5	0,12						*	*		
4	0,1							*	*	
3	0,08							*	*	
2	0,05								*	

Interrelationship: profile radius / grit size

The table below provides an overview of which grit size can achieve a minimum profile radius. As a standard value, it can be assumed that three abrasive grains are required to maintain a minimum profile radius. To achieve a profile radius of 0,3 mm, an approximate grit size diameter of 0,1 mm is required.

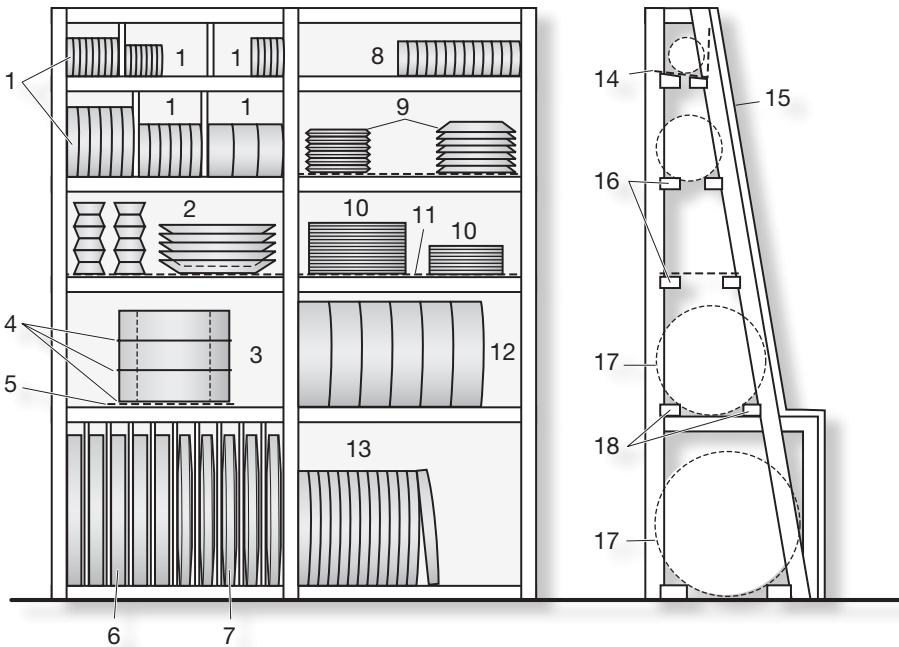
Interrelationship: profile radius/grit size										
Grit size		36	46	60	80	100	120	150	180	220
Min. profile radius	mm	1	0,8	0,6	0,45	0,3	0,2	0,15	0,12	0,1
	inch	0,04	0,03	0,03	0,02	0,01	0,01	0,01	0,01	0,00

Storage

The wheels are stored in dry place, if is possible with consistent temperature. It is necessary that the wheels were protected against hit, moisture and frost.

Before putting the wheel on machine it is necessary proceed according to regulations ČSN.

Details of storage you can find in ČSN EN 12413 „Grinding and cutting wheels – Technical regulations“.



1 – straight wheels

2 – dish wheels

3 – soft rings wheels

4 – paper

5 – steel plate

6 – big straight wheels

7 – big conical wheels

8 – smal cup wheels and rings

9 – profile wheels

10 – cut off wheels

11 – steel plate

12 – hard rings wheels

13 – middle size straight wheels

14 – conical device for small wheels

15 – covered back side for safety of the wheels

16 – straight device for cut off wheels

17 – outside part of the wheel can't be over

18 – two supports for stability

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