



**ANDRE**®  
abrasive articles

## REINFORCED GRINDING WHEELS

for cutting and grinding

## CUP GRINDING WHEELS

## SEMI-FLEXIBLE ABRASIVE TOOLS



NOVEMBER 2014

The ANDRE Company received funding from EU funds for the implementation of the project within the framework of the following Program:

---

**POIG 4.3**



**INNOVATIVE  
ECONOMY**  
NATIONAL COHESION STRATEGY



BANK  
GOSPODARSTWA  
KRAJOWEGO

**ANDRE**<sup>®</sup>  
abrasive articles

EUROPEAN UNION  
EUROPEAN REGIONAL  
DEVELOPMENT FUND



---

More information can be found on our website: [www.andre.com.pl](http://www.andre.com.pl)

# CONTENTS

General terms and conditions	5
Symbols and markings of grinding wheels	6
System of grinding wheel marking	7
Marking of a grinding wheel according to ISO 525 - example	8
Pictograms, safety symbols	9
Speed conversion table depending on outer diameter of grinding wheel	10
<b>Grinding wheels type 41 and type 42 (PRO LINE, ECO LINE, MASTER LINE product lines)</b>	<b>11</b>
Typical application/use of 41 and 42 type grinding wheels	12
Type 41 grinding wheels for cutting with hand grinders; for cutting with stationary and swing frame grinders	13
Type 42 grinding wheels for cutting with hand grinders	17
<b>Grinding wheels type 27 (PRO LINE, ECO LINE, MASTER LINE product lines)</b>	<b>19</b>
Typical application/use of 27 type grinding wheels	20
Type 27 grinding wheels for cutting with hand grinders	21
<b>Grinding wheels type 11, 1112 and 1114 - with resin bond</b>	<b>25</b>
<b>Abrasive flap discs</b>	<b>27</b>
<b>Semi-flexible grinding discs with profiled abrasive coating</b>	<b>32</b>
<b>CBS grinding wheels</b>	<b>33</b>

## NOTE

Products in tables marked bold indicate typical resin items with additional discounts



Unbeatable  
Quality

## GENERAL TERMS AND CONDITIONS

Ladies and Gentlemen,

Thank you for choosing the ANDRE brand and trust to our company and abrasive tools manufactured by us. Our strategic goal is to provide Customers with products with the best on the market quality to price ratio. Our Sales Department staff are at your disposal to help with current logistics of placed orders, as well as service and technical advice on the proper selection of tools for specific technology tasks in your companies. For our part, we declare making every effort to satisfy you, our Customers, with our cooperation as much as possible.

We invite you to contact our Sales Department from 07.00AM to 03.00PM Monday to Friday:

- Customer Service Office (CSO): e-mail [inquiries@andre.com.pl](mailto:inquiries@andre.com.pl); tel. +48 63/26 26 301, -343, -360;
- Customer Technical Support Department (TOK): e-mail [tok@andre.com.pl](mailto:tok@andre.com.pl); tel. +48 63/26 26 349, -365;
- Marketing Department: e-mail [marketing@andre.com.pl](mailto:marketing@andre.com.pl); tel. +48 63/26 26 370.

1. Ordering

- Orders for goods shall be sent in writing:
  - fax: +48 63/26 26 323
  - e-mail: [inquiries@andre.com.pl](mailto:inquiries@andre.com.pl)
- Each order is recorded, confirmed in writing (by fax, e-mail) and is binding for the parties upon written confirmation by ANDRE (by fax, e-mail),
- Orders for standard products (which are on stock) are processed within two working days,
- Orders for customized and specialized products are processed as follows:
  - vitrified bonded grinding wheels: 6 weeks
  - resin bonded grinding wheels: 4 weeks,
- In case of custom wheels we assume quantitative tolerance of  $\pm 10\%$  (not less than 1 piece),
- Cancellation of orders is possible after prior, written agreement with the Sales Department. In case of cancellation of an order during its processing, the Customer agrees to cover the costs incurred by ANDRE company until the date of cancellation.

2. The products are sold in full packs as specified in the pricelist. It is possible to buy incomplete package of products for an additional fee (1 EUR net).

3. Delivery of goods to the Customer is carried out only through courier companies, which means that there is no possibility of goods pick up with Customer own transport from our warehouse. On request we can send the goods to the place specified by the Customer, other than its headquarters.

4. Making of delivery. Goods are handed over to a carrier at the moment of picking it up at the Supplier's warehouse (i.e. upon loading and goods receipt). The right to dispose of the goods as owner passes entirely to the Purchaser at the moment of handing over the goods.

5. The cost of shipping orders with value above 3000.00 EUR net is covered by ANDRE.

6. We accept individual orders for dimensional (shape) alterations of grinding wheels that are on stock of the company, by prior arrangement with the Customer the cost and term of this operation.

7. The ANDRE company does not sell retail products at its headquarters.

8. The terms and conditions of trade cooperation:

- transaction prices include the granted basic discount, discount for so-called "typical resin bond products"; discount for payment on time and discount for orders via the Internet (IZAM).
- overdue receivables result in blocking further shipments and accepting new orders.
- There are valid forms of payment agreed with the Customer within the range of: cash advance up to 30 days, unless otherwise agreed in writing. Payment term affects the level of the basic discount.
- interruption in trade (no purchase) for a period of six months results in the expiration of the agreed terms and conditions.

9. Products sold by ANDRE are checked for compliance with the European Standard EN12413 and meet the related standards: ISO-525 „Bonded abrasive tools – General requirements”; ISO-13942 „Bonded abrasive tools - dimensional deviations”. On request we issue a “Declaration of Conformity”. Our approvals and certificates can be downloaded on our website [www.andre.com.pl](http://www.andre.com.pl) (“Certificates” tag).

10. All materials contained on our website (pictures, descriptions, sample documents) are owned by ANDRE and their use, copying and distribution for purposes other than those contained in the contract with the Customer without our permission is prohibited.

11. Submitting a complaint:

- quality complaints should be reported immediately
- quantity complaints should be reported to logistics department, e-mail: [logistyka@andre.com.pl](mailto:logistyka@andre.com.pl) or by phone: +48 63/26 26 367.

## SYMBOLS AND MARKINGS OF GRINDING WHEELS

### System of markings

Marking of a grinding tool in accordance with the ISO 525 standard is composed of the following groups of alphanumerical characters separated with “-”

1 <sup>st</sup> group	-	Type + shape
	-	Dimensions
2 <sup>nd</sup> group	-	Technical characteristics
3 <sup>rd</sup> group	-	Permissible operating speed (for grinding wheels)
and name and/or logo of the manufacturer.		

In addition, on grinding wheels there may be various additional information in the form of inscriptions or graphics, such as:

- coloured stripes by speed colour code
- safety symbols and/or certificate numbers
- pictograms, symbols of personal protection, restrictions on use
- application e.g. "STEEL", "STONE", "INOX", "ALUMINIUM", etc.
- symbol of static unbalance orientation of a grinder or direction of assembly on a spindle

### Permissible operating speed of grinding wheel

Each wheel has a defined maximum permissible operating speed (rotational and peripheral).

Operating speed of the grinding wheel is expressed as follows:

- rotational speed  $n$  [ $\text{min}^{-1}$ ] = revolutions per minute or [1/min.], [R/min.]
- peripheral speed  $v$  [ $\text{m} \cdot \text{s}^{-1}$ ] = meters per second or [m/s]

The formulas for expressing „n” in the function of „v” and vice versa are as follows:

$$n = \frac{v \cdot 1000 \cdot 60}{\pi \cdot D} \quad v = \frac{\pi \cdot D \cdot n}{60 \cdot 1000}$$

D [mm] = grinding wheel diameter

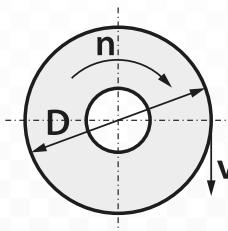
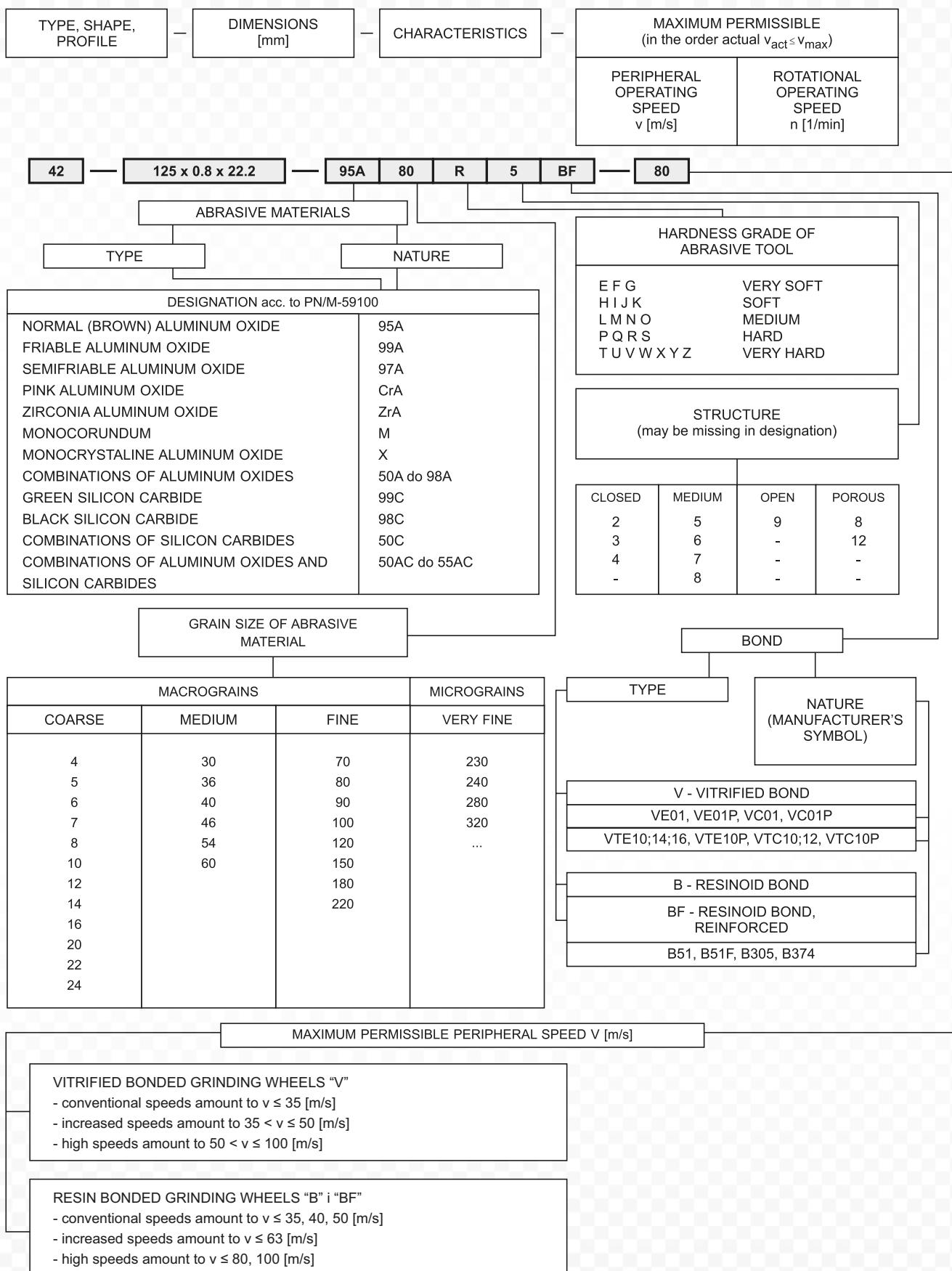


Fig. Graphically presented relationship between the peripheral speed „v” and the number of rotations „n”

**User must check if the maximum permissible peripheral speed marked on the wheel is consistent with the speed indicated on the machine.**

**In any case, the maximum permissible speed of the wheel can not be exceeded on the machine.** In machines with variable spindle speed or multiple speeds of operation, the rotational speed of the wheel can be increased as the grinding wheel wear, but without exceeding the maximum permissible peripheral speed of the grinding wheel.

## SYSTEM OF GRINDING WHEEL MARKING



## SYMBOLS AND DESIGNATIONS OF GRINDING WHEEL – EXAMPLE

## Designation of grinding wheel acc. to ISO 525

## Example:

Depressed centre cutting-off wheel, type 42 with dimensions D = 125 [mm], U = 0,8 [mm], H = 22,2 [mm] and technical specification 95A 80 R BF, maximum peripheral operational speed v = 80 [m/s], made in METAL+INOX version, is marked as follows:

**42 - 125 x 0,8 x 22,2 - 95A 80 R BF - 80 METAL + INOX**



- 1 – Technical specification of a grinding wheel with maximum peripheral speed,  
 2 – Type / dimensions of a grinding wheel,  
 3 – Product code,  
 4 – Maximum permissible peripheral speed [m/s] = [m·s⁻¹],  
 5 – Pictograms / safety symbols,  
 6 – Restrictions on use,  
 7 – Safety standard number. Declaration of conformity,  
 8 – Name and logo of the manufacturer,  
 9 – Quality system. ISO standard number,  
 10 – Colour stripe according to colour code,  
 11 – Maximum permissible rotational speed [1/min] = [min⁻¹] = [rev/min],  
 12 – Purpose / application / machined material,  
 13 – Product line. Additional descriptive feature of grinding wheel,  
 14 – EAN code.

## PICTOGRAMS, SAFETY SYMBOLS



wear ear protection



use eye and face protection



wear respiratory protection



wear protective and anti-vibration gloves



follow the work instructions and safety regulations



application: face (side) grinding



restriction on use: face (side) grinding prohibited

**PRODUCT LINES OF 27, 41 and 42  
TYPE GRINDING WHEELS**

**Eco Line****Pro Line****Master Line**

Colour strip - additional visual information on the maximum permissible operating speed according to the colour code (from EN 12413).

Maximum peripheral speed [ms <sup>-1</sup> ]	Number of strips and colour	
50		1 x blue
63		1 x yellow
80		1 x red
100		1 x green

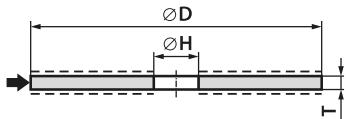
**SPEED CONVERSION TABLE**  
**DEPENDING ON OUTER DIAMETER OF GRINDING WHEEL**

Wheel diameter [mm]	Maximum peripheral speed V in [m/s].																	
	5	6	8	10	12	16	20	25	32	35	40	50	63	80	100	125	140	160
Rotational speed n [1/min]																		
6	16000	19100	25500	31900	38200	51000	64000	80000	102000	112000	128000	160000	201000					
8	12000	14400	19100	24000	29000	38200	48000	60000	76500	84000	95500	120000	150000	191000				
10	9600	11500	15300	19100	23000	30600	38200	48000	61200	67000	76500	95500	120500	153000	191000			
13	7400	8850	11800	14700	17700	23550	29500	35600	47100	51500	58800	73500	92600	118000	147000	184000	206000	
16	6000	7200	9550	11950	14350	19100	23900	29850	38200	41800	47800	59700	75200	95500	120000	150000	168000	191000
20	4800	5750	7650	9550	11500	15300	19100	23900	30600	33500	38200	47800	60200	76500	95500	120000	134000	153000
25	3850	4600	6150	7650	9200	12300	15300	19100	24500	26800	30600	38200	48200	61200	76500	95500	107000	123000
32	3000	3600	4800	6000	7200	9550	11950	14950	19100	20900	23900	30000	37600	48000	60000	75000	84000	95500
40	2400	2900	3850	4800	5750	7650	9550	11950	15300	16750	19100	23900	30100	38200	47200	59700	67000	76500
50	1950	2300	3100	3850	4600	6150	7650	9550	12250	13400	15300	19100	24100	30600	38200	47750	53500	61200
63	1550	1850	2450	3050	3650	4850	6100	7600	9750	10650	12150	15200	19100	24300	30250	37900	42500	48500
80	1200	1450	1950	2400	2900	3850	4800	6000	7650	8400	9550	12000	15100	19100	23900	29850	33500	38200
100	960	1150	1550	1950	2300	3100	3850	4800	6150	6700	7650	9550	12100	15300	19100	23900	26800	30600
115	830	1000	1350	1700	2000	2700	3350	4200	5350	5850	6650	8350	10500	13300	16650	20800	23250	26600
125	770	920	1250	1550	1850	2450	3100	3850	4900	5350	6150	7650	9650	12250	15300	19100	21400	24500
150	640	770	1050	1300	1550	2050	2550	3200	4100	4500	5100	6400	8050	10200	12700	16000	17850	20400
180	530	640	850	1100	1300	1700	2150	2700	3400	3750	4250	5350	6700	8500	10650	13300	14900	17000
200	480	580	765	955	1150	1550	1950	2400	3100	3350	3850	4800	6050	7650	9950	11950	13400	15300
230	420	500	665	830	1000	1350	1700	2100	2700	2950	3350	4200	5250	6650	8350	10400	11650	13300
250	380	460	615	765	920	1250	1550	1950	2450	2700	3100	3850	4850	6150	7650	9950	10700	12250
300	320	380	510	640	765	1050	1300	1600	2050	2250	2550	3200	4050	5100	6400	8000	8850	10200
350/356	280	330	440	550	655	875	1100	1400	1750	1950	2200	2750	3450	4400	5500	6850	7650	8750
400/406	240	290	385	480	575	765	960	1200	1550	1700	1950	2400	3050	3850	4800	6000	6700	7650
450/457	210	255	340	425	510	680	850	1100	1400	1500	1700	2150	2700	3400	4250	5350	5950	6800
500/508	190	230	310	385	460	615	765	960	1250	1350	1550	1950	2450	3100	3850	4800	5350	6150
600/610	160	190	255	320	385	510	640	800	1050	1150	1300	1600	2050	2550	3200	4000	4500	5100
750/762	130	155	205	255	310	410	510	640	820	895	1050	1300	1650	2050	2550	3200	3600	4100
800/813	120	145	195	240	290	385	480	600	765	840	960	1200	1550	1950	2400	3000	3350	3850
900/914	110	130	170	215	255	340	425	535	680	750	850	1100	1350	1700	2150	2700	3000	3400
1000/1015	100	115	155	195	230	310	385	480	615	670	765	960	1250	1550	1950	2400	2700	3100
1060/1067	95	110	150	185	220	295	365	455	585	640	730	910	1150	1500	1850	2300	2550	2950
1200	90	105	140	175	210	280	350	435	560	610	695	870	1100	1400	1750	2200	2450	2800
1220	85	95	130	160	195	255	320	400	510	560	640	800	1050	1300	1600	2000	2250	2550
1500	65	75	105	130	155	205	255	320	410	450	510	640	805	1050	1300	1600	1800	2050
1800	55	65	85	110	130	170	220	265	340	375	425	535	670	850	1100	1350	1500	1700

(Fragment of EN 12413)

## TYPE 41

### FLAT CUTTING-OFF WHEELS



Type 41 and type 42 grinding wheels represent a large and popular group of general purpose and specialized abrasive tools for cutting various materials.

They are commonly used in construction sites, steel construction fabrication, shipbuilding, machine building plants, steel plants, foundries, chemical and other industries, as well as in smaller workshops and tool rooms.

Depending on the size and requirements they operate with different grinders - cutters: portable, bench, tool, laboratory, fixed, swing and carriage with electric, pneumatic, hydraulic or engine power.

These grinding wheels are mechanically reinforced - designed to operate at a speed of 80 [m/s] and 100 [m/s] (special reinforcement).

Limitation in use: RE6 „Face grinding prohibited”.

#### 1. PRODUCT LINE- ECO LINE

- **METAL version**

These wheels are intended for operations that do not require high usability. Application – like the PRO LINE product line in STANDARD version.

May also be used in those cases where it is required to use a wheel cutting more softly.

- **METAL + INOX version**

Thin wheels for precision cutting universal, structure, tool, stainless and acid-resistant steel. They do not contain iron, sulphur and chlorine.

#### 2. PRODUCT LINE – PRO LINE

- **STANDARD version**

Wheels intended for most cutting operations on steel, cast iron, cast steel, especially objects with larger cross-sectional areas: full bars, round and square profiles, flat profiles, sheet metal, castings sprue.

For grinders of average / standard power, lower rigidity and average cutting conditions.

They have an average degree of hardness, thus enabling a relatively quick and light cutting, especially on harder materials.

- **EXTRA version**

Increased hardness. High durability / „resilience”.

These wheels are intended for cutting steel, cast iron, cast steel, especially thin material: pipes, profiles, sheets, rods, sections.

For grinders – cutters with increased rigidity and higher operating parameters; also for grinders with increased power: air-operated or electrical with an increased frequency of power supply.

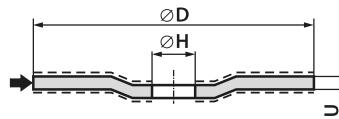
- **METAL + INOX version**

Thin wheels for efficient, accurate cutting ( $T \leq 2 \text{ mm}$ ).

Short cutting time, reduced energy consumption, reduced material consumption, high durability, operating comfort.

## TYPE 42

### DEPRESSED CENTRE CUTTING-OFF WHEELS



Universal, structure, tool, stainless and acid-resistant steel. The grinding wheels do not contain iron, sulphur and chlorine. Do not cause corrosion and discolouration of the material cut

- **INOX version**

These wheels are intended for cutting stainless and acid-resistant steel. Thin version for efficient, accurate cutting and typical general-purpose version. Possible use for cutting carbon and alloy structural steel.

The grinding wheels do not contain iron, sulphur and chlorine. Do not cause corrosion and discolouration of the material cut.

- **ALUMINIUM version**

These wheels are intended for cutting non-ferrous metals and their alloys such as aluminum, bronze, brass.

- **SERIA 500 version**

Special wheels for cutting steel objects, in particular, for efficient cutting of rubber conveyor belts with steel cords or steel cords themselves. Also for other works on power grinders.

- **RAIL version**

These wheels are intended for cutting railway and tram rails with combustion, electric or hydraulic grinders with high power.

They can also be used for other operations, e.g. cutting large diameter shafts, rescue actions.

- **STONE version**

These wheels are intended for cutting concrete, reinforced concrete, terrazzo, natural and artificial stones, ceramics and hard brittle cast iron.

#### 3. PRODUCT LINE – MASTER LINE

- **METAL version**

These grinding wheels are made of a special abrasive material for cutting steel, cast iron, cast steel objects and items with large cross-sectional areas.

They require grinders - cutters with high performance power and rigidity, e.g.: air-operated or electrical with an increased frequency of power supply. Thin version for precision cutting.

They are characterized by the highest cutting performance.

- **METAL + INOX version**

These wheels are intended for efficient and precise cutting of universal, structure, stainless, acid-resistant steel and items with large cross-sectional areas. They do not contain iron, sulphur and chlorine, therefore do not cause corrosion and discolouration of the material cut. The MASTER LINE METAL+INOX wheels ensure high durability, reduced energy consumption and high working comfort. Require grinder - cutter with high performance power and rigidity.



## TYPICAL APPLICATION / USE OF 41 AND 42 TYPE GRINDING WHEELS

Application / use	PRODUCT LINE											
	ECO LINE		PRO LINE						MASTER LINE			
	METAL	METAL+INOX	STANDARD	EXTRA	METAL+INOX	INOX	ALUMINIUM	SERIA 500	RAIL	STONE	METAL	METAL+INOX
Steel – general purpose	✓	✓	✓		✓						✓	✓
Structural steel	large cross-sections	✓	✓	✓							✓	✓
	small cross-sections	✓	✓	✓	✓	✓					✓	✓
	thin metal sheet, pipes, thin-walled profiles	✓	✓	✓	✓	✓	✓				✓	✓
	platform grilles										✓	
Tool steel	✓	✓	✓		✓						✓	✓
Stainless and acid-resistant steel	general purpose		✓		✓	✓						✓
	thin metal sheet, pipes, thin-walled profiles		✓		✓	✓						✓
Concrete, terrazzo											✓	
Stone, ceramics											✓	
Iron hard, white											✓	
Grey cast iron, ductile iron	✓		✓	✓							✓	
Cast steel	✓		✓	✓							✓	
Aluminium and its alloys							✓					
Non-ferrous metals							✓					
Rails									✓			
Steel cords								✓				

**TYP 41****PRODUCT LINE PRO LINE****STANDARD VERSION**

Wheels intended for most cutting operations on steel, cast iron, cast steel, especially objects with larger cross-sectional areas: full bars, round and square profiles, flat profiles, sheet metal, castings sprue.

<b>Code</b>	<b>Dimensions (mm) D × T × H</b>	<b>Characteristics</b>	<b>Speed (m/s)</b>	<b>Items per box</b>	<b>Net price EUR/pc.</b>
020009	115 × 2,5 × 22,2	95A 30R BF	80	25	0,64
010083	125 × 2 × 22,2	95A 30R BF	80	25	0,65
<b>020018</b>	<b>125 × 2,5 × 22,2</b>	<b>95A 30R BF</b>	<b>80</b>	<b>25</b>	<b>0,68</b>
020029	125 × 3 × 22,2	95A 30R BF	80	25	0,69
020033	150 × 2,5 × 22,2	95A 24R BF	80	25	0,84
020042	180 × 2,5 × 22,2	95A 24R BF	80	25	1,02
<b>020060</b>	<b>230 × 2,5 × 22,2</b>	<b>95A 24R BF</b>	<b>80</b>	<b>25</b>	<b>1,42</b>
<b>020072</b>	<b>230 × 3 × 22,2</b>	<b>95A 24R BF</b>	<b>80</b>	<b>25</b>	<b>1,51</b>
<b>030017</b>	<b>300 × 3 × 32</b>	<b>95A 24R BF</b>	<b>80</b>	<b>10</b>	<b>2,52</b>
030093	350 × 3,5 × 25,4	95A 24R BF	80	10	3,64
<b>030074</b>	<b>350 × 3,5 × 32</b>	<b>95A 24R BF</b>	<b>80</b>	<b>10</b>	<b>3,64</b>
030226	350 × 4 × 32	95A 24R BSKF	100	10	5,48
<b>030147</b>	<b>400 × 4 × 32</b>	<b>95A 24R BF</b>	<b>80</b>	<b>10</b>	<b>4,90</b>
030228	400 × 4,5 × 32	95A 24R BSKF	80	10	5,48
040018	500 × 5,5 × 51	95A 24R BSKF	80	10	12,02
040047	600 × 7 × 76	95A 24R BF	80	5	20,53

**EXTRA VERSION**

Increased hardness. For cutting steel, cast iron, cast steel, especially thin-walled material: pipes, profiles, sheets, rods, sections.

<b>Code</b>	<b>Dimensions (mm) D × T × H</b>	<b>Characteristics</b>	<b>Speed (m/s)</b>	<b>Items per box</b>	<b>Net price EUR/pc.</b>
020010	115 × 2,5 × 22,2	95A 30T BF	80	25	0,64
<b>020021</b>	<b>125 × 2,5 × 22,2</b>	<b>95A 30T BF</b>	<b>80</b>	<b>25</b>	<b>0,68</b>
020036	150 × 3 × 22,2	95A 24T BF	80	25	0,84
020043	180 × 2,5 × 22,2	95A 24T BF	80	25	1,02
<b>010056</b>	<b>230 × 2 × 22,2</b>	<b>95A 36T BF</b>	<b>80</b>	<b>25</b>	<b>1,35</b>
<b>020061</b>	<b>230 × 2,5 × 22,2</b>	<b>95A 24T BF</b>	<b>80</b>	<b>25</b>	<b>1,42</b>
<b>020074</b>	<b>230 × 3 × 22,2</b>	<b>95A 24T BF</b>	<b>80</b>	<b>25</b>	<b>1,51</b>
<b>030021</b>	<b>300 × 3 × 32</b>	<b>95A 24T BF</b>	<b>80</b>	<b>10</b>	<b>2,52</b>
030094	350 × 3,5 × 25,4	95A 24T BF - 80	80	10	3,64
<b>030078</b>	<b>350 × 3,5 × 32</b>	<b>95A 24T BF</b>	<b>80</b>	<b>10</b>	<b>3,64</b>
030778	350 × 4 × 22,2	95A 24T BF	80	10	3,90
<b>030153</b>	<b>400 × 4 × 32</b>	<b>95A 24T BF</b>	<b>80</b>	<b>10</b>	<b>4,90</b>
030591	400 × 4,5 × 25,4	95A 24T BSKF	100	10	6,35



## PRODUCT LINE PRO LINE (cont.)

## TYP 41

## METAL+INOX VERSION



Thin wheels for efficient, accurate cutting of universal, structure, tool, stainless and acid-resistant steel. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010014	115 × 1 × 22,2	95A 60R BF	80	25	0,63
010019	115 × 1,6 × 22,2	95A 46R BF	80	25	0,66
010027	125 × 1 × 22,2	95A 60R BF	80	25	0,70
010037	125 × 1,6 × 22,2	95A 46R BF	80	25	0,73
010086	125 × 2,0 × 22,2	95A 30R BF	80	25	0,67
010041	150 × 1,2 × 22,2	95A 60R BF	80	25	1,03
010042	150 × 1,6 × 22,2	95A 46R BF	80	25	1,05
010046	180 × 1,8 × 22,2	95A 36R BF	80	25	1,21
010055	230 × 2 × 22,2	95A 36R BF	80	25	1,43

## METAL+INOX SMALL LABEL VERSION



Thin grinding wheels with active side surface for efficient, precise cutting of universal, structure, tool, stainless and acid-resistant steel. Characterized by increased cutting performance in comparison to standard thin METAL + INOX wheels as well as reduced discolouration and spots on material cut. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010179	115 × 1 × 22,2	95A 60R BF	80	25	0,66
010193	115 × 1,6 × 22,2	95A 46R BF	80	25	0,70
010180	125 × 1 × 22,2	95A 60R BF	80	25	0,73

## INOX VERSION



For cutting stainless and acid-resistant steel. Thin version for efficient, accurate cutting and typical general-purpose version. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010013	115 × 1 × 22,2	95A 60R BF	80	25	0,72
010017	115 × 1,6 × 22,2	95A 46R BF	80	25	0,76
<b>010025</b>	<b>125 × 1 × 22,2</b>	<b>95A 60R BF</b>	<b>80</b>	<b>25</b>	<b>0,80</b>
<b>010032</b>	<b>125 × 1,6 × 22,2</b>	<b>95A 46R BF</b>	<b>80</b>	<b>25</b>	<b>0,84</b>
020172	125 × 2,5 × 22,2	95A 30R BF	80	25	0,79
020027	125 × 3 × 22,2	95A 30R BF	80	25	0,79
010094	180 × 1,8 × 22,2	95A 46R BF	80	25	1,39
010052	230 × 2 × 22,2	95A 36R BF	80	25	1,65
020062	230 × 2,5 × 22,2	95A 30R BF	80	25	1,64
030204	300 × 3 × 32	95A 30R BF	80	10	2,90
030080	350 × 3,5 × 32	95A 30R BF	80	10	4,18
030230	400 × 4 × 32	95A 24R BF	80	10	5,64

## TYP 41

PRODUCT LINE PRO LINE (cont.)

## INOX SMALL LABEL VERSION

Thin grinding wheels with active side surface for efficient, precise cutting of stainless and acid-resistant steel. Characterized by increased cutting performance in comparison to standard thin INOX wheels as well as reduced discolouration and spots on material cut. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010184	115 × 1 × 22,2	95A 60R BF	80	25	0,76
010194	115 × 1,6 × 22,2	95A 46R BF	80	25	0,80
010181	125 × 1 × 22,2	95A 60R BF	80	25	0,84
010195	125 × 1,6 × 22,2	95A 46R BF	80	25	0,92



## ALUMINIUM VERSION

For cutting non-ferrous metals and their alloys such as aluminum, bronze, brass.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010024	125 × 1 × 22,2	56A 60R BF	80	25	1,00



## RAIL VERSION

For cutting railway and tram rails with combustion, electric or hydraulic grinders with high power.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
030035	300 × 3,5 × 32	95A 24R BF	100	10	3,98
030039	300 × 3,5 × 32	95A 24R BF	80	10	3,68
030068	350 × 3,5 × 32	95A 24R BF	100	10	5,20
030103	350 × 4 × 25,4	95A 24R BF	100	10	5,73
030136	400 × 4 × 25,4	95A 24R BF	100	10	6,63
030144	400 × 4 × 32	95A 24R BF	100	10	6,63



## STONE VERSION

For cutting concrete, reinforced concrete, terrazzo, natural and artificial stones, ceramics and hard brittle cast iron.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010016	115 × 1 × 22,2	98C 60R BF	80	25	0,69
020011	115 × 2,5 × 22,2	98C 30R BF	80	25	0,71
010028	125 × 1 × 22,2	98C 60R BF	80	25	0,77
020024	125 × 2,5 × 22,2	98C 30R BF	80	25	0,75
<b>020081</b>	<b>230 × 3 × 22,2</b>	<b>98C 24R BF</b>	<b>80</b>	<b>25</b>	<b>1,78</b>
030024	300 × 3 × 32	98C 24R BF	80	10	2,78
030082	350 × 3,5 × 32	98C 24R BF	80	10	4,00
030158	400 × 4 × 32	98C 24R BF	80	10	5,39



## PRODUCT LINE ECO LINE

## TYP 41

## METAL VERSION



For cutting steel, cast iron and cast steel items that do not require the highest performance parameters of the wheel.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010165	115 x 1 x 22,2	A 60R BF	80	25	0,50
010166	115 x 1,6 x 22,2	A 46R BF	80	25	0,57
020910	115 x 2,5 x 22,2	A 30R BF	80	25	0,55
010167	125 x 1 x 22,2	A 60R BF	80	25	0,50
010168	125 x 1,6 x 22,2	A 46R B	80	25	0,62
020913	125 x 2,5 x 22,2	A 30R BF	80	25	0,58
010170	150 x 1,6 x 22,2	A 46R BF	80	25	0,89
020916	150 x 2,5 x 22,2	A 24R BF	80	25	0,71
010172	180 x 1,8 x 22,2	A 36R BF	80	25	1,03
010173	230 x 2 x 22,2	A 36R BF	80	25	1,22
020919	230 x 2,5 x 22,2	A 24R BF	80	25	1,21

## METAL+INOX VERSION



Thin wheels do for efficient and precise cutting of universal, structure, tool, stainless, acid-resistant steel. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010237	125 x 1 x 22,2	A 60R BF	80	25	0,52
010238	125 x 1,6 x 22,2	A 46R BF	80	25	0,65
010239	230 x 2 x 22,2	A 36R BF	80	25	1,29

## PRODUCT LINE MASTER LINE

## TYP 41

## METAL VERSION



These grinding wheels are made of a special abrasive material for cutting steel, cast iron, cast steel objects and items with large cross-sectional areas.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020196	125 x 2,5 x 22,2	55A 30R BF	80	25	0,98

## METAL+INOX VERSION



Grinding wheels for efficient and precise cutting of universal, structure, stainless, acid-resistant steel and items with large cross-sectional areas.

Code	Dimensions (mm) D × T × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010225	125 x 1 x 22,2	55A 60R BF	80	50	1,05
010224	230 x 2 x 22,2	55A 36R BF	80	50	2,64

**TYP 42****PRODUCT LINE PRO LINE****STANDARD VERSION**

For cutting operations on steel, cast iron, cast steel, especially objects with larger cross-sectional areas: full bars, round and square profiles, flat profiles, sheet metal, castings sprue.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020092	115 × 2,5 × 22,2	95A 30R BF	80	25	0,62
020096	115 × 3 × 22,2	95A 30R BF	80	25	0,66
020102	125 × 2,5 × 22,2	95A 30R BF	80	25	0,67
020108	125 × 3 × 22,2	95A 30R BF	80	25	0,72
020120	150 × 3 × 22,2	95A 24R BF	80	25	0,88
020131	180 × 3 × 22,2	95A 24R BF	80	25	1,18
020233	230 × 2,5 × 22,2	95A 24R BF	80	25	1,37
020150	230 × 3 × 22,2	95A 24R BF	80	25	1,61

**EXTRA VERSION**

Increased hardness. For cutting steel, cast iron, cast steel materials; especially thin-walled objects: pipes, profiles, metal sheets, rods, sections.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020093	115 × 2,5 × 22,2	95A 30T BF	80	25	0,62
020097	115 × 3 × 22,2	95A 30T BF	80	25	0,66
020103	125 × 2,5 × 22,2	95A 30T BF	80	25	0,67
020111	125 × 3 × 22,2	95A 30T BF	80	25	0,72
020121	150 × 3 × 22,2	95A 24T BF	80	25	0,88
020132	180 × 3 × 22,2	95A 24T BF	80	25	1,18
010063	230 × 2 × 22,2	95A 36T BF	80	25	1,48
020154	230 × 3 × 22,2	95A 24T BF	80	25	1,61

**METAL+INOX VERSION**

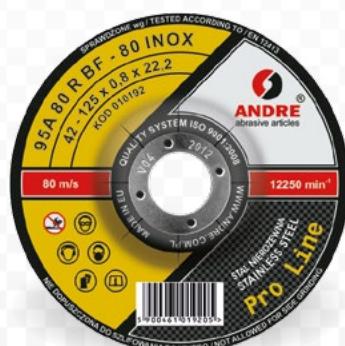
Thin wheels for efficient, accurate cutting of general purpose, structure, tool, stainless and acid-resistant steel. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010187	115 × 0,8 × 22,2	95A 80RBF	80	25	0,75
010003	125 × 0,8 × 22,2	95A 80RBF	80	25	0,84
010062	230 × 2 × 22,2	95A 36R BF	80	25	1,54

**INOX VERSION**

For cutting stainless and acid-resistant steel. Thin version for efficient, accurate cutting and typical general-purpose version. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
010191	115 × 0,8 × 22,2	95A 80RBF	80	25	0,86
010192	125 × 0,8 × 22,2	95A 80RBF	80	25	0,96
020169	125 × 2,5 × 22,2	95A 30R BF	80	25	0,77
020110	125 × 3 × 22,2	95A 46R BF	80	25	0,82
020220	180 × 3 × 22,2	95A 30R BF	80	25	1,42
020160	230 × 3 × 22,2	95A 30R BF	80	25	1,92



## PRODUCT LINE PRO LINE (cont.)

TYP 42

## SERIA 500 VERSION



Special wheels for cutting steel objects, in particular, for efficient cutting of rubber conveyor belts with steel cords or steel cords themselves.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020134	180 x 3 x 22,2	95A 24U9 BF	80	25	2,80
020158	230 x 3 x 22,2	95A 24U9 BF	80	25	3,89

## STONE VERSION



For cutting concrete, reinforced concrete, terrazzo, natural and artificial stones, ceramics and hard brittle cast iron.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020099	115 x 3 x 22,2	98C 30R BF	80	25	0,73
020115	125 x 3 x 22,2	98C 30R BF	80	25	0,79
020137	180 x 3 x 22,2	98C 24R BF	80	25	1,29
020161	230 x 3 x 22,2	98C 24R BF	80	25	1,83

## PRODUCT LINE ECO LINE

TYP 42

## METAL VERSION



Lower price. For cutting steel, cast iron, cast steel materials that do not require the highest performance parameters of the grinding wheels.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020911	115 x 3 x 22,2	A 30R BF	80	25	0,56
020929	125 x 2,5 x 22,2	A 30R BF - 80	80	25	0,57
020912	125 x 3 x 22,2	A 30R BF	80	25	0,61
020915	180 x 3 x 22,2	A 24RBF	80	25	1,05
010171	230 x 2 x 22,2	A 36R BF	80	25	1,26
020917	230 x 3 x 22,2	A 24R BF	80	25	1,42

## PRODUCT LINE MASTER LINE

TYP 42

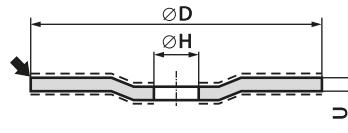
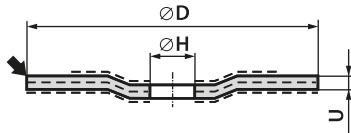
## METAL VERSION



Grinding wheels made of a special abrasive material for cutting steel, cast iron, cast steel objects, especially items with large cross-sectional areas.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
020237	125 x 3 x 22,2	55A 30R BF	80	25	0,88
020243	230 x 3 x 22,2	55A 24R BF	80	50	2,38

## TYPE 27 DEPRESSED CENTRE GRINDING WHEELS



The Type 27 grinding wheels are a very popular group of general purpose and specialized abrasive tools intended for rough grinding on various materials.

They are commonly used in building, shipbuilding, metal, foundry, engineering, chemical and other industries as well as in smaller workshops and households. They can be used on portable electrically or pneumatically driven angle, horizontal/vertical spindle grinders.

Most frequently they are operated at angles 20-35° and 90° when required by grinding operations.

Depending on application and grinding requirements, a wide range of the type 27 grinding wheels is available for customer.



### 1. PRODUCT LINE – ECO LINE

- **METAL version**

Grinding wheels intended for operations that do not require high usability. Application – similarly to the PRO LINE product line in STANDARD version.

May also be used in those cases where it is required to use a wheel cutting more softly.

### 2. PRODUCT LINE – PRO LINE

- **STANDARD version**

Basic version. General purpose type.

Wheels intended for most cutting operations on steel, cast iron, cast steel, objects with large, continuous surfaces and with considerable grinding allowances.

For grinders of average / standard power and average cutting conditions.

Wheels in this version have an average degree of hardness, thus enabling quick removal of machined material, especially on harder materials.

- **EXTRA version**

Increased hardness. High durability / „resilience”

Intended for cutting steel, cast iron, cast steel, objects with discontinuous, narrow, sharp surfaces, where active wheel surface is exposed to aggressive impact of the workpiece causing wheel premature

wear.

For grinders of average / standard power and average to hard duty cutting conditions. May be also used with grinders of higher operating parameters: air-operated, turbine or electrical with an increased frequency of power supply.

They are characterized by a higher hardness than the STANDARD versions and a longer service life. When a high rate of stock removal causes a local overheating in the form of burns on material being ground or “loading” of active wheel surface, use the STANDARD version.

- **METAL + INOX version**

Commonly used in building, shipbuilding, metal, foundry, engineering, chemical and other industries as well as in smaller workshops and households. They can be used on portable electrically or pneumatically driven angle, horizontal/vertical spindle grinders. Do not contain iron, sulphur and chlorine. Operational tests showed that the wheels can grind: stainless, acid-resistant, structure and tool steel. The technology used in the wheels allows for eliminating discolouration and corrosion of the material being ground.

- **INOX version**

Intended for grinding on stainless, acid resistant and high-alloy steels.

They are able to perform so called “cool” grinding. Successfully used for grinding of carbon and alloy constructional steels.

Do not contain iron, sulphur and chlorine.

Don't cause corrosion or discolouration of the material being ground.

- **ALUMINIUM version**

Intended for grinding on non-ferrous metals and their alloys, such as: aluminium, bronze, brass

- **STONE version**

These grinding wheels are intended for grinding on concrete, reinforced concrete, terrazzo, natural and artificial stones, ceramics as well as hard, brittle cast iron and also for descaling and desanding of castings.

- **FOUNDRY version**

Grinding wheels designed specifically to operate in foundries, for grinding various types of cast iron.

### 3. PRODUCT LINE – MASTER LINE

- **METAL version**

Grinding wheels made of special abrasive material, intended for grinding on steel, cast iron, cast steel workpieces with large surfaces and high grinding allowances.

They require grinding machines with high parameters, especially increased power and rigidity: pneumatic, turbine or electrical with an increased frequency of supply power.

They are characterized by the highest metal removal rate.

**It is possible to design a grinding wheel meeting individual customer's needs.**



### TYPICAL APPLICATION / USE OF 27 TYPE GRINDING WHEELS

Application / intended use	ECO LINE		PRO LINE						MASTER LINE					
	A30QBF-80 METAL	A24QBF-80 METAL	95A30QBF-80 STANDARD	95A24QBF-80 STANDARD	95A30TBF-80 EXTRA	95A24TBF-80 EXTRA	95A30QBF-80 INOX	50A30PBF-80 ALUMINIUM	98C30QBF-80 STONE	98C24QBF-80 STONE	3ZA30TBF-80 FOUNDRY	3ZA24RBF-80 FOUNDRY	55A30QBF-80 METAL	55A24QBF-80 METAL
steel – general purpose	✓			✓									✓	
ordinary constructional steel	✓		✓		✓		✓						✓	
higher hardness steel	✓		✓										✓	
higher strength steel	✓		✓				✓						✓	
tool and high-alloy steel	✓		✓				✓						✓	
stainless and acid resistant steel							✓							
welds	✓		✓		✓								✓	
steel - bevelling							✓							
steel – grinding of narrow, discontinuous areas							✓							
steel – high power grinding machines							✓							✓
cast steel	✓		✓		✓								✓	
cast iron – general purpose	✓		✓		✓								✓	
chilled cast iron													✓	
cast iron – descaling and desanding													✓	
ductile cast iron	✓		✓		✓								✓	
grey cast iron	✓		✓		✓								✓	
aluminium and its alloys									✓					
non-ferrous metals									✓					
concrete, terrazzo											✓			
stone, ceramics											✓			

## TYP 27

## PRODUCT LINE PRO LINE

## STANDARD VERSION

Basic version. General purpose type. For cutting operations on steel, cast iron, cast steel, objects with large, continuous surfaces and with considerable grinding allowances.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050014	115 × 6 × 22,2	95A 30Q BF	80	10	1,02
050026	125 × 4 × 22,2	95A 30Q BF	80	10	0,86
050036	125 × 6 × 22,2	95A 30Q BF	80	10	1,06
050050	125 × 8 × 22,2	95A 30Q BF	80	10	1,35
050056	150 × 4 × 22,2	95A 24Q BF	80	10	1,25
050059	150 × 6 × 22,2	95A 24Q BF	80	10	1,58
050066	150 × 8 × 22,2	95A 24Q BF	80	10	1,86
050073	180 × 4 × 22,2	95A 24Q BF	80	10	1,45
050080	180 × 6 × 22,2	95A 24Q BF	80	10	1,96
050101	180 × 8 × 22,2	95A 24Q BF	80	10	2,17
050113	180 × 10 × 22,2	95A 24Q BF	80	10	2,41
050118	230 × 4 × 22,2	95A 24Q BF	80	10	1,91
050132	230 × 6 × 22,2	95A 24Q BF	80	10	2,55
050149	230 × 8 × 22,2	95A 24Q BF	80	10	2,85
050160	230 × 10 × 22,2	95A 24Q BF	80	10	3,25



## EXTRA VERSION

Increased hardness. For cutting steel, cast iron, cast steel, objects with discontinuous, narrow, sharp surfaces, where active wheel surface is exposed to aggressive impact of the workpiece causing wheel premature wear.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050015	115 × 6 × 22,2	95A 30T BF	80	10	1,02
050038	125 × 6 × 22,2	95A 30T BF	80	10	1,06
050052	125 × 8 × 22,2	95A 30T BF	80	10	1,35
050061	150 × 6 × 22,2	95A 24T BF	80	10	1,58
050084	180 × 6 × 22,2	95A 24T BF	80	10	1,96
050103	180 × 8 × 22,2	95A 24T BF	80	10	2,17
050114	180 × 10 × 22,2	95A 24T BF	80	10	2,41
050120	230 × 4 × 22,2	95A 24T BF	80	10	1,91
050134	230 × 6 × 22,2	95A 24T BF	80	10	2,55
050151	230 × 8 × 22,2	95A 24T BF	80	10	2,85



## PRODUCT LINE PRO LINE (cont.)

## TYP 27

## METAL + INOX VERSION



For grinding on stainless, acid resistant, constructional and tool steel. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050172	125 x 6 x 22,2	95A 30Q BF	80	10	1,12

## INOX VERSION



For grinding on stainless, acid resistant and high-alloy steels; enable so-called "cool" grinding. Do not contain iron, sulphur and chlorine.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050027	125 x 4 x 22,2	95A 30Q BF	80	10	0,98
<b>050031</b>	<b>125 x 6 x 22,2</b>	<b>95A 30Q BF</b>	<b>80</b>	<b>10</b>	<b>1,22</b>
050072	180 x 4 x 22,2	95A 30Q BF	80	10	1,70
050088	180 x 6 x 22,2	95A 30Q BF	80	10	2,25
<b>050135</b>	<b>230 x 6 x 22,2</b>	<b>95A 30Q BF</b>	<b>80</b>	<b>10</b>	<b>2,93</b>

## ALUMINIUM VERSION



For grinding on non-ferrous metals and their alloys, such as: aluminium, bronze, brass.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050200	125 x 6 x 22,2	50A 30P BF	80	10	1,51

## STONE VERSION



For grinding on concrete, reinforced concrete, terrazzo, natural and artificial stones, ceramics as well as hard, brittle cast iron and also for descaling and desanding of castings.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050016	115 x 6 x 22,2	98C 30Q BF	80	10	1,13
050041	125 x 6 x 22,2	98C 30Q BF	80	10	1,16
050089	180 x 6 x 22,2	98C 24Q BF	80	10	2,16
050106	180 x 8 x 22,2	98C 24Q BF	80	10	2,38
<b>050186</b>	<b>230 x 6 x 22,2</b>	<b>98C 24Q BF</b>	<b>80</b>	<b>10</b>	<b>2,80</b>
050154	230 x 8 x 22,2	98C 24Q BF	80	10	3,13

**TYP 27**PRODUCT LINE **PRO LINE** (cont.)**FOUNDRY VERSION**

Grinding wheels designed specifically to operate in foundries, for grinding various types of cast iron.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
059190	125 × 7 × 22,2	3ZA 30T BF	80	10	1,52
050937	180 × 7 × 22,2	3ZA 24T BF	80	10	2,90
059200	230 × 4 × 22,2	3ZA 24R BF	80	10	2,80
059199	230 × 4 × 22,2	3ZA 24T BF	80	10	2,80
059202	230 × 6 × 22,2	3ZA 24R BF	80	10	4,13
059201	230 × 6 × 22,2	3ZA 24T BF	80	10	4,13
050941	230 × 7 × 22,2	3ZA 24R BF	80	10	4,60
050935	230 × 7 × 22,2	3ZA 24T BF	80	10	4,60

**TYP 27**PRODUCT LINE **ECO LINE****METAL VERSION**

For cutting on steel, cast iron, cast steel materials that do not require the highest operational parameters of the grinding wheel.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050909	115 × 6 × 22,2	A 30Q BF	80	10	0,92
050063	125 × 6 × 22,2	A 30Q BF	80	10	0,95
050911	180 × 6 × 22,2	A 24Q BF	80	10	1,69
050923	180 × 8 × 22,2	A 24Q BF	80	10	1,95
050912	230 × 6 × 22,2	A 24Q BF	80	10	2,29

**TYP 27**PRODUCT LINE **MASTER LINE****METAL VERSION**

Grinding wheels made of special abrasive material, intended for grinding on steel, cast iron, cast steel workpieces with large areas and high grinding allowances.

Code	Dimensions (mm) D × U × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
050192	125 × 6 × 22,2	55A 30Q BF	80	50	1,50
050227	230 × 6 × 22,2	55A 24Q BF	80	10	3,60
050197	230 × 8 × 22,2	55A 24Q BF	80	10	4,75

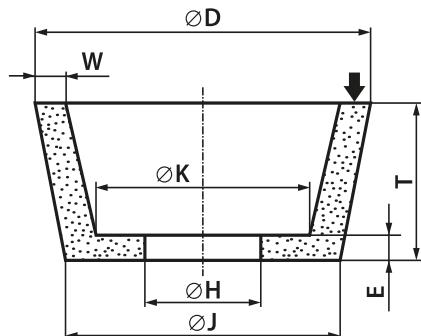


## ANDRE ABRASIVE ARTICLES

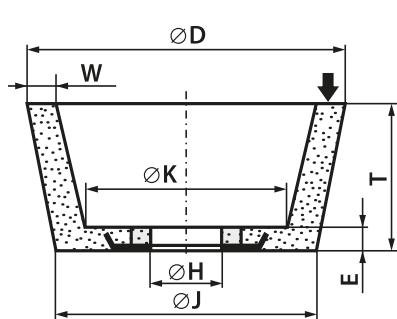


## TYPE 11 TAPER CUP WHEELS

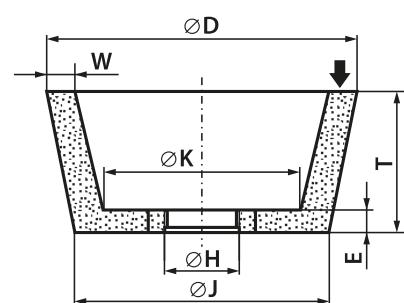
## TYPE 1112, TYPE 1114 TAPER CUP WHEELS WITH A CENTRAL THREADED INSERT



TYPE 11



TYPE 1112



TYPE 1114

The Type 11 grinding wheels are manufactured in various design solutions: with a through bore, with a central threaded insert and with reinforced bottom. They are used for rough and precision grinding on various materials such as steel, cast iron, bronze, brass, aluminium, concrete, stone, terrazzo, ceramics, e.g. welds of steel structures, castings, railway rails, terrazzo surfaces, levelling of concrete, repair works, etc.

Unique cutting surface of the taper cup wheels, in the form of cylinder, provides smooth grinding of required surface profile without any undesired "cuts" into material being ground. They are used on portable horizontal/vertical grinders, electrically or pneumatically driven angle grinders, carriage grinders and grinding units.



### TYPE 11

### 95A - Normal aluminium oxide

For rough grinding on steel, cast iron, cast steel materials, e.g. welds of steel structures, castings, railway rails.

Code	Dimensions (mm) D / J x T x H - W... E... K...	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
130016	110/90 x 55 x 22,2 - W20E12K48	95A16N6B97	50	8	4,58
130032	110/90 x 55 x 22,2 - W20E12K48	95A16Q6B97	50	8	4,58
130035	110/90 x 55 x 22,2 - W20E12K48	95A36Q6B97	50	8	4,58



**98C - Black silicon carbide****TYPE 11**

Intended for rough and precision grinding on concrete, reinforced concrete, natural and artificial stone, terrazzo, ceramics and hard, brittle cast iron.

Code	Dimensions (mm) D / J × T × H - W... E... K...	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
130036	110/90 × 55 × 22,2 - W20E12K48	98C14N6B97	50	8	4,73
130037	110/90 × 55 × 22,2 - W20E12K48	98C16N6B97	50	8	4,73
130038	110/90 × 55 × 22,2 - W20E12K48	98C24N6B97	50	8	4,73
130039	110/90 × 55 × 22,2 - W20E12K48	98C36N6B97	50	8	4,73
130040	110/90 × 55 × 22,2 - W20E12K48	98C46N6B97	50	8	4,73
130041	110/90 × 55 × 22,2 - W20E12K48	98C60N6B97	50	8	4,73

**95A - Normal aluminium oxide****TYPE 1112**

For rough grinding on steel, cast iron, cast steel as well as grinding railway and tram rails.



Code	Dimensions (mm) D / J × T × H - W... E... K...	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
130002	110/90 × 55 × M14 - W20E20K48	95A24Q6B97	50	8	7,38
130121	125/100 × 50 × 5/8" - W25E20K50	95A16Q6B97	50	12	7,90
130134	150/120 × 50 × 5/8" - W40E20K54	95A16Q6B97	50	12	9,77

**98C - Black silicon carbide****TYPE 1112**

Intended for rough grinding on concrete, reinforced concrete, natural and artificial stone, terrazzo, ceramics and hard, brittle cast iron.



Code	Dimensions (mm) D / J × T × H - W... E... K...	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
130601	150/120 × 50 × 5/8" - W40E20K54	98C16P6B346	50	8	10,08

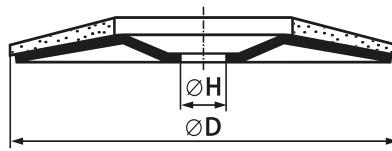
**95A - Normal aluminium oxide****TYPE 1114**

For rough grinding on steel, cast iron, cast steel materials, e.g. welds of steel structures, castings, railway rails.



Code	Dimensions (mm) D / J × T × H - W... E... K...	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
130722	80/54 × 55 × M14 - W10E12K30	95A24Q6B97	50	27	5,26

# ABRASIVE FLAP DISCS



Abrasive flap discs with abrasive grain layer on the ground of impregnated fibreglass cloth.

#### **Advantages of abrasive flap discs:**

- the best abrasive tool for deburring and finishing used on portable angle grinders for treatment of all metal types, in particular of stainless steel
- deburring and finishing of surface in a single operation
- no scratches on the workpiece
- light, easily adapting to workpiece shape
- easier grinding of corners
- silent operation
- direct mounting on a grinder without the necessity to use additional pads

#### **ECO LINE PRODUCT LINE**

Abrasive flap discs coated with regular aluminium oxide, for general applications that don't demand high operational features.

#### **PRO LINE PRODUCT LINE**

Abrasive flap discs coated with zirconium aluminium oxide, for general applications demanding high operational features.

#### **MASTER LINE PRODUCT LINE**

Abrasive flap discs with coated with ceramic coated aluminium oxide, for grinding operations demanding high-quality surface finishing and no-burns on the material being ground. They have also proven to be good for general applications.

## PRODUCT LINE ECO LINE

### VERSION I



Universal application mainly for steel, and also stainless steel and non-ferrous metals. Used for grinding of surface and light welds. Avoid to use for grinding edges and major welds.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810072	127 × 22,2	A 40	80	10	1,44
810073	127 × 22,2	A 60	80	10	1,44
810074	127 × 22,2	A 80	80	10	1,44

### VERSION II



For grinding on steel (not suitable for grinding stainless steel, also aluminum grinding). Use for grinding of surface and light welds. Avoid to use for grinding edges and major welds. Average service life of a grinding wheel.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810100	127 × 22,2	A 40	80	10	1,07
810101	127 × 22,2	A 60	80	10	1,07
810102	127 × 22,2	A 80	80	10	1,07

## PRODUCT LINE PRO LINE



Cover of zircon grains. General application giving high operational advantages: edge deburring, weld grinding, grinding and cleaning of surface: for all types of materials, perfect for stainless and acid resistant steel. General purpose application.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810058	115 × 22,2	ZrA 40	80	10	1,60
810059	115 × 22,2	ZrA 60	80	10	1,60
810060	115 × 22,2	ZrA 80	80	10	1,60
810067	178 × 22,2	ZrA 40	80	10	3,43
810068	178 × 22,2	ZrA 60	80	10	3,43
810069	178 × 22,2	ZrA 80	80	10	3,43

# ANDRE ABRASIVE ARTICLES

## PRODUCT LINE PRO LINE (cont.)

### VERSION I

For grinding steel, stainless steel, non-ferrous metals and plastics. Use for grinding of surface and light welds. Avoid to use for grinding edges and major welds. Aggressive operation. Average service life of a grinding wheel.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810127	127 × 22,2	ZrA 40	80	10	1,35
810128	127 × 22,2	ZrA 60	80	10	1,35
810129	127 × 22,2	ZrA 80	80	10	1,35
810065	127 × 22,2	ZrA 120	80	10	1,35



### VERSION II

For grinding steel, stainless steel, non-ferrous metals. Use for grinding of surface and light welds. Avoid to use for grinding edges and major welds.

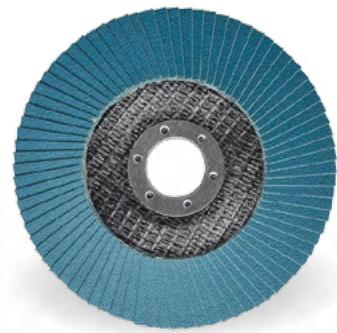
Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810096	127 × 22,2	ZrA 40	80	10	1,57
810094	127 × 22,2	ZrA 60	80	10	1,57
810098	127 × 22,2	ZrA 80	80	10	1,57
810106	127 × 22,2	ZrA 120	80	10	1,57



### VERSION III

For general purpose grinding on steel, stainless steel, non-ferrous metals and plastics. Use for grinding of surface, welds and edges. Long service life of a grinding wheel.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810097	127 × 22,2	ZrA 40	80	10	1,59
810095	127 × 22,2	ZrA 60	80	10	1,59
810099	127 × 22,2	ZrA 80	80	10	1,59
810107	127 × 22,2	ZrA 120	80	10	1,59

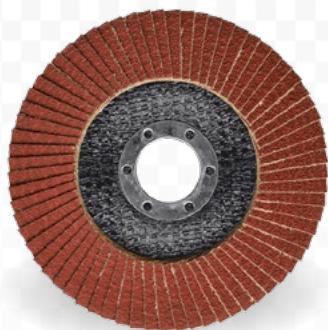


### VERSION IV

For general purpose grinding on steel, stainless steel, non-ferrous metals and plastics. Use for grinding of welds and edges with high pressure. More aggressive in operation than Pro Line version III. Very long service life of a grinding wheel.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810108	127 × 22,2	ZrA 40	80	10	1,91
810109	127 × 22,2	ZrA 60	80	10	1,91
810110	127 × 22,2	ZrA 80	80	10	1,91
810111	127 × 22,2	ZrA 120	80	10	1,91

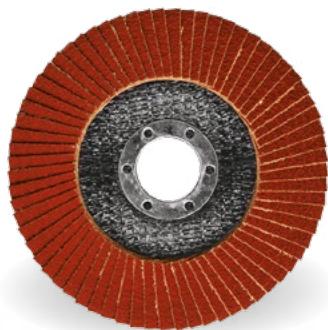


PRODUCT LINE **MASTER LINE**

Coating of zircon grains. General application giving high operational advantages and high quality surface finish with no burns; for all types of materials, perfect for stainless and acid resistant steel.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810012	115 × 22,2	CA 40	80	10	1,98
810013	115 × 22,2	CA 60	80	10	1,98
810014	115 × 22,2	CA 80	80	10	1,98
810015	115 × 22,2	CA 120	80	10	1,98
810045	178 × 22,2	CA 40	80	10	3,99
810046	178 × 22,2	CA 60	80	10	3,99
810047	178 × 22,2	CA 80	80	10	3,99
810049	178 × 22,2	CA 120	80	10	3,99

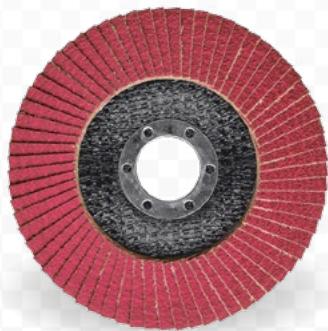
## VERSION I



General purpose application for steel, stainless steel and non-ferrous metals. High aggressiveness and long service life. Cool grinding.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810032	127 × 22,2	CA 40	80	10	2,18
810033	127 × 22,2	CA 60	80	10	2,18
810034	127 × 22,2	CA 80	80	10	2,18
810035	127 × 22,2	CA 120	80	10	2,18

## VERSION II



For stainless steel. Use for grinding edges, surface and welds at high pressure. High aggressiveness. Very long service life. Cool grinding.

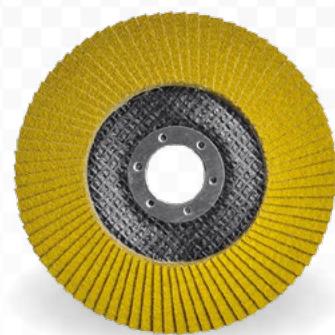
Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810112	127 × 22,2	CA 40	80	10	2,60
810113	127 × 22,2	CA 60	80	10	2,60

PRODUCT LINE **MASTER LINE** (cont.)

VERSION III

For stainless steel. Use for grinding edges, surface and welds at high pressure. High aggressiveness. Very long service life. Cool grinding. More aggressive in operation than Master Line version II.

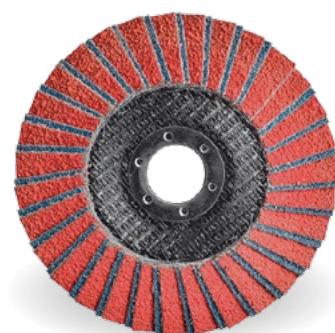
Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810116	127 × 22,2	CA 40	80	10	2,65
810117	127 × 22,2	CA 60	80	10	2,65
810118	127 × 22,2	CA 80	80	10	2,65
810119	127 × 22,2	CA 120	80	10	2,65



VERSION IV

For surface grinding. Special design of the grinding wheel with two types of alternatively mounted leaves with various backplates and grains – combines advantages of Master Line and Pro Line.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810120	127 × 22,2	CA 40	80	10	2,45
810121	127 × 22,2	CA 60	80	10	2,45

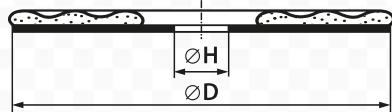
PRODUCT LINE **MASTER LINE NONWOVEN**

Use for finishing of stainless steel. After grinding forms a satin surface. Delicate finish grinding.

Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
810124	127 × 22,2	THICK	80	10	3,65
810125	127 × 22,2	MEDIUM	80	10	3,65
810126	127 × 22,2	VERY FINE	80	10	3,65



## SEMI-FLEXIBLE GRINDING DISCS WITH PROFILED ABRASIVE COATING



Made on the base of a very strength fibre backplate with a multi-layer resin bonded abrasive material. Due to a considerable amount of abrasive material and a special profile this disc is characterized by a long life, resistance to "loading", does not burn the ground material, etc. Due to its excellent operational features in many cases it may be used instead of depressed centre grinding Wheel of type 27. Being more flexible it adapts easily to a shape of workpiece. Due to lower pressures it reduces a fatigue of operator. Must be mounted together with a special plastic or rubber pads.



Intended for grinding and cleaning of marble, granite, terrazzo, concrete, ceramics, glass and cas iron.

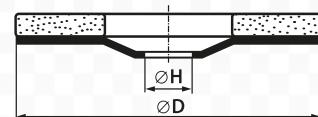
Code	Dimensions (mm) D × H	Characteristics	Speed (m/s)	Items per box	Net price EUR/pc.
820002	115 × 22,2	C 24	63	25	1,79
820003	115 × 22,2	C 36	63	25	1,79
820004	115 × 22,2	C 60	63	25	1,79
820005	127 × 22,2	C 24	63	25	1,95
820006	127 × 22,2	C 36	63	25	1,95
820007	127 × 22,2	C 60	63	25	1,95
820008	178 × 22,2	C 24	63	25	2,48
820009	178 × 22,2	C 36	63	25	2,48
820010	178 × 22,2	C 60	63	25	2,48

# CBS GRINDING WHEELS

ABRASIVE DISCS MADE OF NON-WOVEN FABRIC FOR CLEANING, GRINDING AND POLISHING

Abrasive discs made of non-woven impregnated fibre glass fabric.

Used on portable angle grinders and mounted without any additional pads.



Intended for cleaning and polishing of all types of materials.

Code	Dimensions (mm) D × H	Speed (m/s)	Items per box	Net price EUR/pc.
830001	115 × 22,2	80	10	4,12
830002	127 × 22,2	80	10	5,21



## ANDRE ABRASIVE ARTICLES





Management Services

# CERTIFICATE

The certification body  
**TÜV SÜD Management Service GmbH**  
certifies that the company



**ANDRE ABRASIVE ARTICLES**  
Spółka z ograniczoną  
odpowiedzialnością S-ka K.  
ul. Przemysłowa 10  
62-600 Koło  
Polska

has established and applies  
the quality management system in the field o

**Design, manufacture and sale of resin  
and vitrified bonded abrasive products**

Based on the audit report no.: 707033542

there is confirmed fulfilment  
of requirements of the standard

ISO 9001:2008

This certificate is valid from **2014-11-01** to **2017-10-31**  
Certificate registration number **12 100 48787 TMS**

M. Wiegert

Product Compliance Management  
Monachium, 2014-10-14



DAkkS

Deutsche  
Akkreditierungsstelle  
D-ZM-14143-01-03



## ANDRE ABRASIVE ARTICLES

Spółka z ograniczoną odpowiedzialnością  
Spółka komandytowa

PL 62-600 Koło, ul. Przemysłowa 10

### HEADQUARTER

tel.: +48 63/26 26 300; fax: +48 63/26 26 338;  
e-mail: aaa@andre.com.pl

### SALES DEPARTMENT

tel.: +48 63/26 26 301, -343, -360; fax: +48 63/26 26 323;  
e-mail: inquiries@andre.com.pl

### CUSTOMER TECHNICAL SUPPORT DEPARTMENT

tel.: +48 63/26 26 349; fax: +48 63/26 26 323;  
e-mail: tok@andre.com.pl

[www.andre.com.pl](http://www.andre.com.pl)