



## **ELASTIC GRINDING TOOLS**

For matting, deburring, effect grinding,  
fine grinding and polishing

# TYROLIT Group

## A global company

As one of the world's leading manufacturers of bonded grinding, cutting, sawing, drilling and dressing tools and a system supplier of tools and machines for the construction industry, the family-run company TYROLIT has been synonymous with superior quality, innovative spirit and outstanding service since 1919.

Day in, day out, the experts at TYROLIT work on delivering tailor-made solutions for customers around the world, helping to make their businesses successful. Around 80,000 available products are the benchmark in a wide variety of industries.



## Business units

TYROLIT provides its customers with cost-effective and "green" solutions in four business units. What's more, with its global sales network and a team of experienced application engineers, TYROLIT offers top-quality service.



### Metal / Precision

From precision machining in the engine and gearbox industry to the production of cut-off wheels for the steel industry – the TYROLIT product range in the Metal & Precision business unit includes high-tech tools for a huge variety of applications.



### Trade

Thanks to its global sales network, in addition to premium product solutions in the three core areas of cutting, grinding and finishing, TYROLIT's Trade business unit guarantees truly customer-focused marketing support.



### Construction

In the Construction business unit, TYROLIT is a leading system supplier of drilling systems, wall and wire saws, floor saws and tools for grinding the uneven surfaces of concrete motorways.



### Stone – Ceramics – Glass

Our tailor-made diamond tools and grinding solutions in the Stone – Ceramics – Glass business unit never fail to impress through their exceptional performance and quality.

## Quality and innovation

TYROLIT is one of the world's market leaders in this sector. For us, maximum precision is paramount – both in the quality of the manufactured products and where innovation is concerned. Continuous further development and improvement of products in all business units is a primary corporate objective.

## Expertise for customers

At TYROLIT we offer our customers a first-class service in the form of advice and ongoing support. In each business unit of our company, a team of experts with years of experience in the industry is at your side wherever you are in the world – providing tailored, local advice.

## Customised products

TYROLIT has a huge and varied product range for numerous fields of application. These include both standard products for everyday use and individually adapted, customised products for customer-specific processes.

# Industry and application

## TYROLIT system solutions from a single source

Industry	Application	Component
Medical technology	Deburring & fine grinding	Implants (bone splints)
	Matting	Tweezers, forceps, etc.
	Sharpening	Scalpels & scissors
Cutting tools industry	Grinding	Knives & scissors
	Whetting	Knives
	Fine polishing (effect grinding)	Kitchen knives
Cutlery manufacturer	Matting	Pieces of cutlery
Clock and watch industry	Fine grinding & matting	Housing & belts
Jewellery industry	Fine grinding & matting	Metal spectacle frames
Metalware industry	Matting & fine grinding	Lamp parts, badges
Needle industry	Fine grinding	Sewing and knitting needles
Textile industry	Fine grinding & deburring	Yarn bobbins
Sports industry	Edge grinding	Ski edges
Flat glass industry	Remove metal layer	Thermo glasses
Tool manufacturing industry	Effect grinding	Circular saw blades
	Radiusing	Thread rolling dies and rollers
	Flute fine grinding	Twist drills
	Radiusing	Cutting inserts
Woodworking industry	Fine grinding	Picture frame mouldings
Synthetic materials industry	Fine grinding pre-polishing	Injection moulds
Aviation industry	Fine grinding	Turbine blades
Porcelain industry	Fine grinding of undersides	Plates and cups
	Flaw grinding	Decorative porcelain
Electronics industry	Remove metal layer	Frequency filters (ceramics)
Engine manufacturer	Deburring lubrication hole	Crankshafts
	Deburring	Piston rings
Automotive supply industry	Ultrafine grinding	Shock absorber rods
Pipe manufacturer	Fine grinding	INOX steel pipe
Nuclear industry	Fine grinding	INCONEL pipes
Concrete cutting companies	Sharpening	Diamond saws and hollow drills
Plant construction	Mottling, decorative grinding	Devices, containers, shelves

# The alternative to abrasive belts

## TYROLIT Elastic

The extensive range of elastic fine grinding wheels proves particularly effective for the improvement and dimensional accuracy of workpiece surfaces

### Your benefits

- + Uniform surface structure and texture for all workpieces
- + Shorter belt changing times (short service life)
- + Longer service life of elastic grinding tools
- + Easy profiling of wheels (where necessary)
- + Dry and wet grinding possible

### Possible applications:

Industry	Applications	Peripheral speeds
Medical technology	Deburring & fine grinding of prosthetics	20 m/s
Clock and watch industry	Matting of housing components	16 m/s
Cutlery industry	Matting and fine grinding	20 m/s
Aviation industry	Fine grinding of turbine blades	20 m/s
Precision-casting industry	Deburring of aluminium die-cast components	20-32 m/s
Woodworking industry	Fine grinding of profiled wood strips	16-25 m/s
Metalware industry	Deburring, matting, fine grinding	20 m/s
Pipe manufacturer	Centreless grinding (food industry)	45 m/s
Nuclear industry	Centreless fine grinding (Inconel pipes)	25 m/s

### Requirements for using TYROLIT Elastic

- + Elastic wheel mounted onto motor spindle (drive screw)
- + Revolutions per minute regulated at 16 – 32 m/s (special case: 45 m/s... for very hard wheels)
- + Selection of suitable wheel sizes (dependent on rpm and application)
- + Wheel type with hard grain body (hard plastic core without abrasives) possible.
- + Abrasive grain of Elastic grinding tool should be rougher than abrasive belt grain
- + Weight-saving grinding tool design with recesses in the body (shape 7)
- + Wheel flanges required



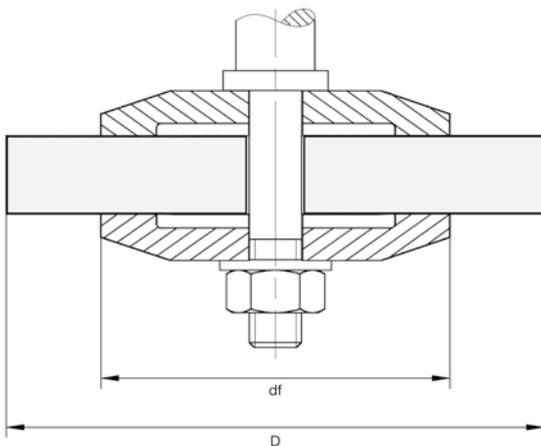
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## Peripheral speeds and wheel flanges

For safety reasons, 2/3 wheel flanges must be used with ELASTIC wheels for floor stand grinders:  $df = 2/3$  of the wheel's  $\varnothing D$



## Explanation of symbols and terminology

### Dimension-relevant

A	Number of threaded nuts	J	Diameter of graduation on offset grinding wheels
D, D1	Exterior diameter of grinding wheel	N	Height of graduation
DB	Pitch circle diameter for threaded nut	T, T1	Width of the grinding wheel
df	Flange diameter	V, V1	Edge profile angle
E	Base thickness of grinding wheel	W	Rim thickness
GE	Thread diameter	X	Incremental width of edge profiles
H, H1	Bore diameter	vs	Peripheral speed

### Relevant to bonding

F	Fibre reinforcement	SP	Sharpening plate
K	Conglomerate wheel, hard particles in soft matrix	T	Resin version
P	Patented wheel version, soft particles in hard matrix	W	Filler (porous)
R	Filler (red colouration)		

## Colour distinctions

# Elastic grinding and polishing tools

After a period of intense research, TYROLIT has developed COOL-CUT, a high-performance cool-grinding tool. An overview of the different applications of ELASTIC grinding and polishing tools shall be given in the following section. COOL-CUT also provides an alternative to magnesite wheels (environment).

### Standard grinding tool colours

Green	Bond BD740	Soft
Yellow	Bond BD760	Medium
Red	Bond BD780	Hard

ELASTIC grinding tools are manufactured with Ø from 6 - 800 mm!

### Colours of the COOL- CUT special models

Light grey	Bond BD745	Medium-hard, open-pore
Blue	Bond BD71P	Magnesite wheel replacement (soft)
Grey	Bond BD61P	Magnesite wheel replacement (hard)
Pinkish red	Bond BD22	Scissor machining
Claret	Bond BD33	Knife hollow grinding
White	Bond BD41	Knife grinding

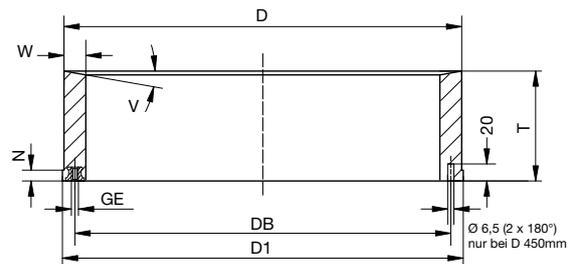
*Only suitable for wet grinding.*

### Advantages of the new system

- + One bond system for the machining of many different types of steel and a variety of knife styles - both forged and steel plate knives
- + Higher productivity due to improved stock removal rates
- + Cool grinding for high feed rates
- + Self-sharpening, no dressing required
- + Environmentally friendly



# COOL-CUT FOR KNIFE GRINDING



Shape 37ST

- Application: Face grinding of cutting tools such as knives, axes, etc.
- Machine types: e.g. Berger, Siepmann
- Peripheral speed: vs up to 40 m/s; BD740 vs 32 m/s
- Grinding wheel shapes: 37 ST with threaded nuts
- For wet grinding only, no dressing required
- Additional specifications and wheel dimensions available on request
- See COOL-CUT brochure for more details

## STANDARD DIMENSIONS



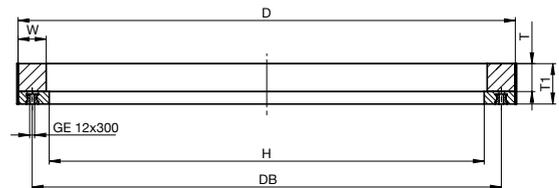
Shape	D/D1	T/N	W	V	DB	GE	A
37ST - 1243A	350/354	125/12	30	22°	25	M8	6
37ST - 1153J	450/454	125/12	25	10°	425	M8	6
37ST - 1153K	450/454	125/12	35	10°	425	M8	6
37ST - 1153N	450/454	125/12	45	10°	425	M8	6
37ST - 1153W	450/454	125/12	45	7°	425	M8	6
37ST - 1260D	500/509	160	25	-	475	M8	8
37ST - 1260B	500/509	125	35	-	475	M8	8
37ST - 1260A	500/509	160	45	-	475	M8	8
37ST - 1186F	710/715	200/12	30	8°	685	M10	10
37ST - 1287A	710	200	45	5°	685	M10	10
37ST - 1186C	710/715	200/12	45	16°	685	M10	10
37ST - 1299A	710	200	45	13°	685	M10	10

## Stock type

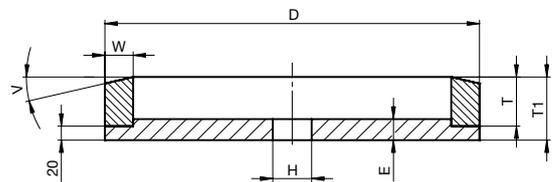
Shape	D x T - W	Specification	Type number
37ST - 1153W	450 x 125 - W45	89A120S14BD745	718161*

\* Stock type

# COOL-CUT FINE CONGLOMERATE POLISHING WHEELS



Shape 37ST



Shape 2

Fine polishing consists of a surface treatment using elastic grinding wheels. The surface receives a matt gloss finish across the knife's longitudinal axis. Fine polishing also makes knives more resistant to corrosion. In addition, fine polishing is employed as an interim processing step after grinding high-quality mirror-finish knives. These wheels require the use of solid or liquid polishing or grinding grease as an additive! (or emulsion)

- Peripheral speed:  $v_s = \text{max. } 20\text{-}25 \text{ m/s}$



## STANDARD DIMENSIONS

	Shape	D/D1	T	T1	W	V	H	E	DB	GE	A
	2 - 1034B	530	50	70	40	15°	35	30	-	-	-
	2 - 1034C	530	60	80	40	15°	35	30	-	-	-
	2 - 1034G	530	50	70	40	10°	55	30	-	-	-
	2 - 1010B	530	55	75	40	15°	51	30	-	-	-
	2 - 1134F	530	50	70	40	5°	55	30	-	-	-
	2 - 1077A	695	70	90	45	5°	50	35	-	-	-
	2 - 1159E	795	60	80	45	5°	50	35	-	-	-
	37ST - 1220D	795	45	65	45	5°	695,5	20	750	M8	12
	2 - 1147A	800	70	90	45	5°	50	35	-	-	-
	37ST - 1220A	800	50	70	45	5°	695,5	20	750	M8	12

\* Stock type

## Recommendation

Application	Standard specification	Machine type
For standard knives	A100-BE14TFK2	Siepmann or Berger machine
For large knives	C100-BE1405FK	Siepmann or Berger machine
For finer surfaces	C150-BE1405FK	Siepmann or Berger machine
For longer tool life	C100-BE15FK	Siepmann or Berger machine

## Stock type

Shape	D x T - W	Specification	Type number
37ST - 1220D	795 x 65 - W45	C100-BE1405FK	475504*

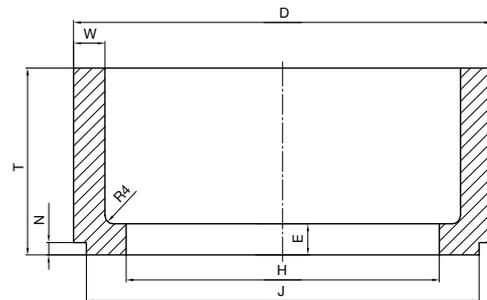
## Popular models

Shape	D x T - W	Specification	Type number
2 - 1034B	530 x 50 - W40	C100-BE1405FK	917129
37ST - 1220A	800 x 70 - W45	C100-BE1405FK	8001
37ST - 1220D	795 x 65 - W45	C100-BE15FK	550577
2 - 1147A	800 x 70 - W45	C100-BE14FK	309097
2 - 1134F	530 x 50 - W40	C100-BE14FK	723544



\* Stock type

# COOL-CUT FOR SCISSOR MACHINING



Shape 6

- Application: Grinding medical scissors & hair scissors
- Machine types: e.g. Berger, Siepmann
- Peripheral speed:  $v_s =$  up to 40 m/s
- Grinding wheel shape: 6
- For wet grinding only, no dressing required
- See COOL-CUT & grinding tools for medical technology brochures for more details



## STANDARD DIMENSIONS

	Shape	D	T	H	W	J	E	N
	6 - 1112D	200	90	150	4	188	17	6
	6 - 1112D	200	90	150	5	188	17	6
	6 - 1112F	200	90	150	6	188	17	6
	6 - 1112A	250	90	150	8	188	17	6
	6 - 1112C	200	90	150	10	188	15	6
	6 - 1112B	200	90	150	15	188	15	6
	6 - 1112E	200	90	150	20	188	22	6
	6 - 1302B	200	110	150	5	188	17	6
	6 - 1302A	200	110	150	8	188	17	6
	6 - 1302C	200	110	150	20	188	22	6
	6 - 1223B	200	120	140	15	190	20	6

### Recommendation

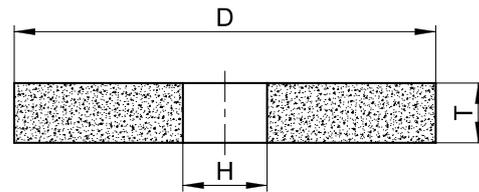
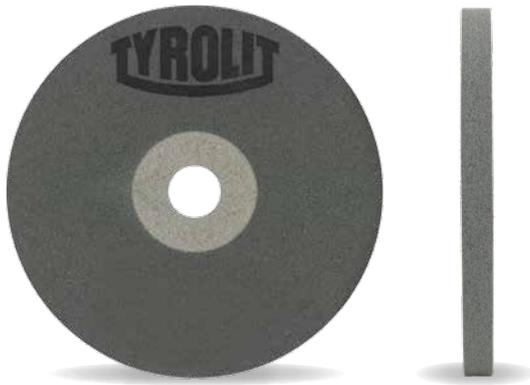
	Specification	Comment
Standard	91A150R14BD800	Resin bonded
Easy cutting	89A180S14BD760	Resin bonded

### Example of order

Shape	D x T x H	Specification
6 - 1112C	200 x 90 x 150	91A150R14BD800

\* Stock type

# ELASTIC FOR SURGICAL INSTRUMENTS AND TITANIUM IMPLANTS



Shape 1

- Application: Hard elastic grinding tools for fine grinding, deburring, matting and polishing of surgical instruments and implants
- Machine types: Portable and stationary machines
- Peripheral speed:  $V_s = 20 - 32$  m/s
- Primarily dry grinding, no dressing required, profiling of the wheel is possible only by using a dressing stone in ceramic bond
- e.g. 50 x 20 x 150, 50C24H10V15, type number 545066 or 50 x 20 x 150, C-COARSE, type number 9009\*
- See grinding tools for medical technology brochure for more details



## STANDARD DIMENSIONS

	Shape	D	T	H	Specification	Vmax	Properties
	1	100	5	25	A80 - BD-W	20	Soft
		125	8	25	A150 - BD-M	25	Medium
		150	10	25	A240 - BD-H	32	Hard

### Grain size recommendation

Pre-grinding	A46, A80
Semi-finish grinding	A150, A240
Fine grinding	A400, A600
Pre-polishing	A800
Polishing	A1200

### Recommendation

Contour-following	BD soft
Standard	BD medium
Contouring	BD hard

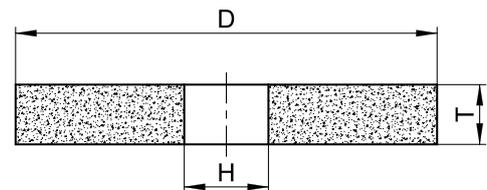
### Example of order

Shape	D x T x H	Specification
1	150 x 8 x 25	A150 - BD-M

\* Stock type

# ELASTIC FOR PRECISION MECHANICAL COMPONENTS

in the clock and watch-making industry, spectacle-manufacturing industry and jewellery industry



Shape 1



- Application: Fine grinding and matting of components
- Machine types: e.g. Witax, Crevoisier, Recomatic
- Peripheral speed:  $v_s =$  up to 32 m/s
- For wet grinding and dry grinding

## STANDARD DIMENSIONS AND RECOMMENDATIONS

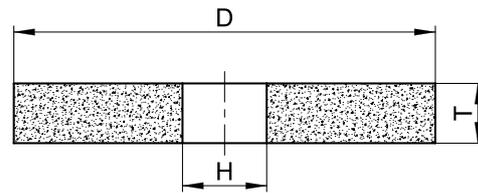
	Shape	D	T	H (S)	Specification	Type number	Comment
	1	150	10	25	C150 - BE13	802276*	Effect grinding
		150	13	25	C150 - BE13	371911	Effect grinding
		150	20	25	C150 - BE13	7197	Effect grinding
		150	14,8	12	C220 - BD-M	34020575	Fine grinding
		150	12	12	C220 - BD-M	34020576	Fine grinding
		150	9,1	12	C220 - BD-M	34020600	Fine grinding
		150	20	10	C240 - BE1407	38679	Spectacle industry
		100	80	32	C80 - BE1202	378453	Needle industry
		40	80	20	C80 - BE1202	307807	Needle industry
		200	15	25	C80 - BE13	672947	Matting
		100	10	25	1C600 - BE18	579845	Pre-polishing
		220	20	32	1C600 - BE18	352623	Pre-polishing
			52ZY	20	30	6x15	A280 - BD-MW

### Example of order

Shape	D x T x H	Specification
1	150 x 10 x 25	C150 - BE13

\* Stock type

# ELASTIC FOR FLOOR STAND GRINDERS



Shape 1

- Application: Fine grinding, polishing and sharpening of cutting tools
- Machine types: Portable and stationary machines
- Peripheral speed:  $V_s = 16 - 32$  m/s
- Grinding wheel shape: 1
- Dry grinding
- No dressing required, profiling of the wheel is possible only by using a dressing stone in ceramic bond, e.g. 50 x 20 x 150, 50C24H10V15, type number: 545066 or 50 x 20 x 150, C-COARSE, type number: 9009\*



## STANDARD DIMENSIONS & BONDING TYPES & GRAIN SIZES

	Shape	D	T	H	Specification	Vmax	Properties
	1	150	20	20	C46 - BE12	20	Very soft
		150	20	20	C80 - BE13	16	Soft
		150	20	20	C150 - BE14	20	Medium
		150	20	20	C240 - BE15	20	Medium-hard
		150	20	20	C400 - BE16	32	Hard
		150	20	20	C800 - BE11	25	Medium-hard

\* Stock type

### Grain size recommendation

Listed grain sizes available in all bonds (BE12 - BE16).	C46	Deburring
	C80	Matting
	C150	Fine grinding
	C240	Ultrafine grinding
	C400	Pre-polishing
BE11 only with grain C800	C800	Whetting (remove grinding wheel)

### Stock type

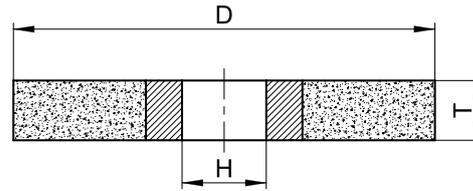
Shape	D	T	H	Stock type	Type number	Recommendation
1	150	20	20	C80 - BE15	7186*	Deburring
	200	25	20	C80 - BE15	7362*	Deburring
1	150	20	20	C150 - BE15	2661*	Matting
	200	25	30	C150 - BE15	32765*	Matting
1	200	25	20	C240 - BE15	320369*	Pre-polishing
1	150	20	32	C150 - BE16	22257*	Fine grinding
1	150	20	20	C400 - BE16	71212*	Ultrafine grinding
1	125	20	20	C400 - BE15	19435*	Sharpening of kitchen knives
	150	20	32	C400 - BE15	7203*	Sharpening of kitchen knives
	200	25	32	C400 - BE15	22411*	Sharpening of kitchen knives
1	125	25	32	C800 - BE11	2540*	Sharpening of whittlers
	150	20	32	C800 - BE11	7204*	Sharpening of whittlers
	175	20	32	C800 - BE11	669109*	Sharpening of whittlers



\* Stock type

# ELASTIC FOR THE TOOL MANUFACTURING INDUSTRY

Effect grinding of circular saws and radiusing of thread rolling dies and rollers



Shape 1

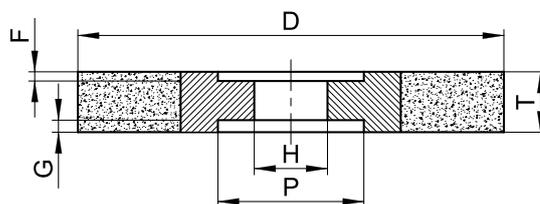


## STANDARD DIMENSIONS AND RECOMMENDATIONS

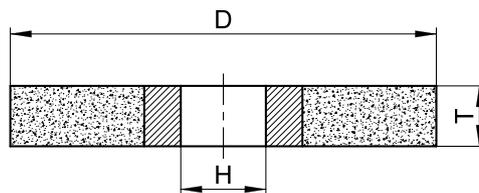
	Shape	D	T	H	Specification	Type number	Comment			
	1	250	25	32	C46 – BE16	491888*	Effect grinding of circular saw blades			
		250	25	32	C46 – BE19F	401616*				
		250	25	32	C24 – BE19F	181806				
		250	30	40	A46 – BE16RTF	252064				
		250	40	25	A46 – BE16RTF	311597				
		250	25	76	C46 – BE19F	874172				
		400	25	127	C46 – BE16	492007				
		200	40	76,2	A46 – BE1307	736451				
		240	50	76,2	A46 – BE1307	760509		Radiusing of thread rolling dies and rollers		
		300	50	76,2	A46 – BE1307	807057				
		400	50	127	A46 – BE1307	761483				
				100	6	6		A60 BD-H	760597	Ultrafine grinding of twist drill notches
				100	10	10		A80 BD-H	180674	
				150	10	20		A120 BD-H	34016982	
150	3			20	A180 BD-H	771526				
200	4			35	A180 BD-H	34016258				

\* Stock type

# ELASTIC CENTERLESS FOR ULTRAFINE GRINDING OF PIPES, RODS AND SHOCK ABSORBERS



Shape 7



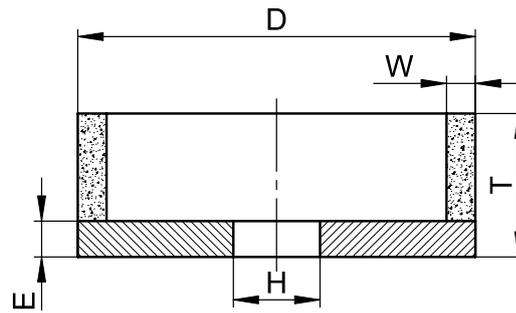
Shape 1

## STANDARD DIMENSIONS AND RECOMMENDATIONS

	Shape	D	T	H	Specification	Type number	Comment
	1	380	230	127	C400-BE1906/25	669633	Inconel tubing for nuclear power plants
		380	230	127	C400-BE1906/25	657271	
	7	450	150	127	91A-46-BE16TFK1/45	555758	Stainless steel tubes
		400	150	127	C150-BE21K	57559	
		400	150	127	C240-BE20	190336	
1	400	150	127	C320-BE20	190337	Shock absorber rods	
	500	200	304,8	89A320-BE18	581049		
	508	150	304,8	89A400-BE18	34031343		
5	508	350	254	604A180-BD850/50	704962	Ultrafine grinding of steel rods at 45 m/s	
	609	254	304,8	604A180-BD850/50	729454		
1	630	250	305	605A180-BD850/50	759650	Ultrafine grinding of steel rods at 45 m/s	
	630	250	305	605A280-BD850/50	34022103		

\* Stock type

# ELASTIC EDGE TUNING FOR THE SKI INDUSTRY



Shape 6

- Application: only suitable for sharpening the steel edges on skis
- For wet grinding only
- Peripheral speed  $v_s = \text{max. } 36 \text{ m/s}$
- Grinding wheel shape: 6 on core
- Grinding wheel shape: 1 in diameter  $\text{\O} 250\text{mm}$  in grain 120 to 150 in bond BD45 also possible (upon request)

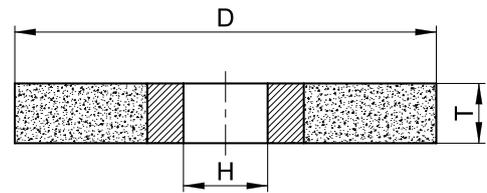


## STANDARD DIMENSIONS AND RECOMMENDATIONS

	Shape	D	T	H	Specification	Type number
	6	154	25	24	A100-180 BD51	Standard type not filled in
		175	35	24		
		175	25	24	A100-150 BD420W	Standard type filled in
		154	40	24	A100-150 BD425W	Hard type filled in
		185	42	24		

\* Stock type

# ELASTIC THERMO FOR REMOVING THE METAL LAYER FROM INSULATION GLASS



Shape 1

- Application: Removing the metal layer from thermo glass
- Damping effect due to elastic bonding
- Machine types: LISEC, HEGLA, BYSTRONIC, BOTTERO, FOREL, LENHARDT, R&R
- Peripheral speed: 20 – 32 m/s
- Wet and dry grinding
- Grinding wheel shape: Shape 1 with solid grain body

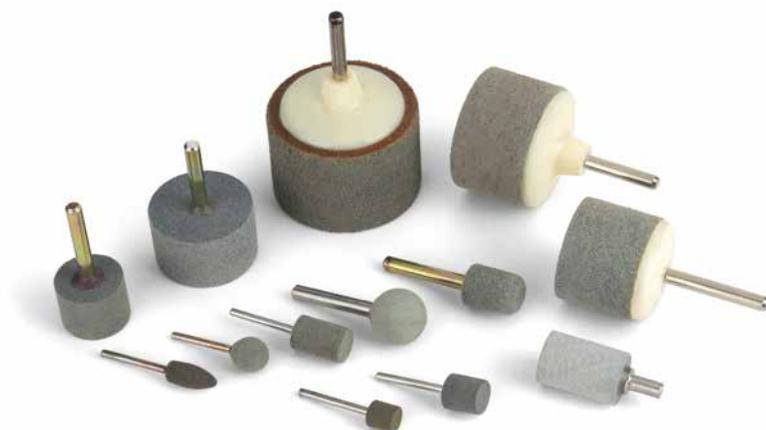


## STANDARD DIMENSIONS AND RECOMMENDATIONS

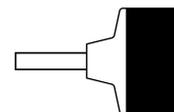
	D	T	H	Specification	Type number	Vmax	Colour	Machine
	125	10	25,4	A80-BE1555/32	197789	32 m/s	Brown	Portable grinding machine
	125	10	76,2	A1507-BE15TF	814865*	20 m/s	Brown	Portable grinding machine
	150	10	25,4	A80-BE1555/32	790107	32 m/s	Brown	Portable grinding machine
	180	10	76,2	A1507-BE15TF	328501	20 m/s	Brown	Portable/stationary grinding machine
	200	10	76,2	A80-BE1556	875523	20 m/s	Blue	Stationary grinding machine
	200	20	76,2	A80-BE1556	892294*	20 m/s	Blue	Bridge grinding machine
	200	25	76,2	A80-BE1556	72799	20 m/s	Blue	Bridge grinding machine
	200	10	76,2	A1507-BE15TF	312972*	20 m/s	Brown	Stationary grinding machine
	200	20	76,2	A1507-BE15TF	834024	20 m/s	Brown	Bridge grinding machine
	200	25	76,2	A1507-BE15TF	782837	20 m/s	Brown	Bridge grinding machine

\* Stock type

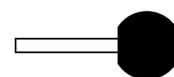
# ELASTIC FINE GRINDING POINTS, MOTTLING POINTS FOR DECORATIVE GRINDING



Shape 52ZY



Shape 52MS



Shape 52KU

- Application: BE13 soft elastic (only for shape 52 MS), BE15 medium elastic, BE16 hard elastic for fine deburring, matting, polishing, removal of rust film and oxidation layers
- Permissible peripheral speeds: BE13 max. 16 m/s, BE15 max. 20 m/s, BE16 max. 32 m/s
- Colour coding on front side of shaft (coloured dot)

## STANDARD DIMENSIONS AND RECOMMENDATIONS

	Shape	Dimension	Specification	Type number	Coloured dot
	52ZY	10x20-6x40	C240-BE15	6884*	●
		10x20-6x40	C240-BE16	938999	●
		16x20-6x40	C150-BE15	6915*	●
		16x20-6x40	C150-BE16	891126	●
		16x30-6x40	C80-BE15	21273*	○
		16x30-6x40	C80-BE16	54072	○
		20x20-6x40	C150-BE15	2155*	●
		20x20-6x40	C46-BE15	2152	●
		25x20-6x40	C80-BE15	6949*	○
		30x30-6x40	C150-BE15	2224*	●
		30x30-6x40	C240-BE15	2226	●
		30x30-6x40	C46-BE15	2221*	●
		20x20-6x40	C46-BE16	582369	●
		30x30-6x40	C80-BE15	2222*	○
		25x20-6x40	C400-BE16	693427	●
	52KU	15-6x40	C240G16BD300	483279	●

\* Stock type

	Shape	Dimension	Specification	Type number	Coloured dot
	52MS	30x30-6x40	C46-BE13	6411	●
		30x30-6x40	C46-BE15	923*	●
		40x30-6x40	C46-BE13	6413	●
		40x30-6x40	C46-BE15	925*	●
		50x30-6x40	C46-BE15	929*	●



Elastic mottling point for decorative rose grinding



#### Usage of mottling points:

- BE 12 very soft elastic for heavily curved surfaces (milk tanks, wine barrels, food containers)
- BE13 soft elastic for soft curves (decorative panelling - food & chemical industry)
- BE15 medium elastic for flat surfaces (machine decoration, outer panelling on carriages & containers)

#### Standard type: C46-BE13

- C24-coarse
- C46-medium (standard)
- C80-fine

#### Colour coding on front side of shaft

Grain	Colour
24	● Orange
46	● Black
80	○ White
150	● Red
240	● Blue
400	● Yellow



\* Stock type

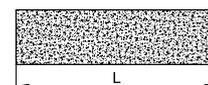
# ELASTIC SHARPENING PLATES & TYFIX ERASERS



Shape 90TY



Shape 9011



Shape 90PS

## STANDARD DIMENSIONS AND RECOMMENDATIONS

	Shape	Specification	Type number	B	C	L	Colour	Comment
TYFIX hand rubbing bricks, shape 90TY	90TY	C60-BE5	1872*	50	20	80	Green	Coarse
		C100-BE5	1870*	40	20	50	Green	Medium
		C100-BE5	1873*	50	20	80	Green	Medium
		C240-BE5	1874*	50	20	80	Green	Fine
		C-Medium	501861*	40	20	80	White	Medium
		C-Medium	502437*	55	30	110	Dark blue	Medium
		C-Fine	502457*	55	30	110	Light blue	Fine
Square files, shape 9011	9011	C80-BE15	35677*	15	15	100	Greenish grey	Coarse
		C400-BE15	6335*	20	20	100	Greenish grey	Very fine (polishing)
		C150-BE15	15788*	15	15	100	Greenish grey	Medium
Sharpening plates, shape 90 PS	90PS	SP1	484672*	320	55	320	Blue	Roughening or grinding of dull saw blades and core drills
		SP1	895466*	160	55	320	Blue	
		SP1	484627*	160	30	320	Blue	
		SP1	497322*	55	25	320	Blue	
		SP3	493171	160	30	320	Red	

\* Stock type

## ELASTIC bond systems

	Description	Grain types	Grain sizes	Hardness	max. vs	Colour	Shapes	Main applications
<b>Elastomers</b>	BE5	C	46,60,100,240,400	Soft	0	Bright green	90-TY	Tyfix erasers
	BE11	C	800	Medium	25	Light green	1,2,5,7, 90-11	Whetting of cutting tools
	BE12	C	24,46,80,150,240,400	Very soft	20	Light green	1,5,7, 52-MS	Standard
	BE13	C	16,24,46,80,150,240,400	Soft	16	Light green	1,5,7, 52-MS	Standard
	BE13 TF	C	150	Porous	32	Light green	1	THERMO turbine blades
	BE13	10A	46,180	Soft	16	Brown	1,5,7	Radiusing
	BE1308F	89A	150	Medium	32	Yellowish	1	THERMO special models
	BE14	C	24,46,80,150,240,400	Medium	20	Light green	1,5,7	Standard
	BE14 TF	89A	80,150	Medium	16	Yellowish	1,5,7, 52-MS	THERMO, wooden strips
	BE14 FK	C	100,150	Medium	25	Conglomerate	2.37ST	Knife polishing
	BE14 TFK2	10A	100	Medium	20	Conglomerate	2.37ST	Knife polishing
	BE15	C	24,46,80,150,240,400	Medium	20	Light green	1,2,5,7,52-ZY,52-MS,90-11	Standard
	BE15	C	120	Medium	20	Light green	1	CHRONO
	BE15 TF	89A	80,150	Medium	20	Yellowish	1,5,7, 52-MS	THERMO, wooden strips
	BE15	10A	80,150	Medium	20	Brown	1,5,7	THERMO
	BE1556	10A	80	Medium	20	Blue	1,5,7	THERMO
	BE15 FK	C	100	Medium	25	Conglomerate	1,2,37ST	Knife polishing
	BE16	C	24,46,80,150,240,400	Hard	32	Light green	1,2,5,7, 52-ZY, 90-11	Standard
	BE16 (SP1)	10A	46	Hard	0	Blue	90-PS	Diamond sharpening plate
	BE16 (SP5)	10A	46	Hard	0	Red	90-PS	Diamond sharpening plate
	BE16 RTF	10A	46	Hard	32	Red	1,2,5,7	Circular wire saws
	BE16 TFK1	91A	46,60,80,120,150,240,320	Very hard	45	Conglomerate	1,7	Centreless pipes
	BE18	C	60,80,150,240,400	Very hard	35	Light green	1,2,5,7, 52-ZY, 90-11	Standard
	BE18	1C	600	Very hard	32	Grey	1,2,5,7	Clock and watch industry
BE18	89A	320,400,600	Very hard	32	Yellowish	1,2,5,7	Centreless shock absorbers	
BE19	C	24,36,46	Hard/porous	32	Light green	1,2,5,7	Circular wire saws	
BE1905/06	C	400	Hard/porous	25	Light green	1,2,5,7	Centreless nuclear	
BE19 F	10A	80,240	Hard/porous	32	Brown	1,2,5,7	Precision mechanics	
BE19 F	89A	80,150	Hard/porous	32	Yellowish	1.2.5.7	THERMO, profiled wood strips	
BE19 FK1	91A	46,80,120,150,240,320	Hard	32	Conglomerate	1,7	Centreless pipes	
<b>Special models</b>	BE30	1C	240,320,400,500,600,800,1200	Porous	16	Grey	35, 90-PS	Printing rolls
	BE41	10A	80,100,120,150,240	Soft	32	Greyish brown	1,5,7, 90-AS,90-PS	Regulating wheel - soft
	BE70	10A	80,100,120,150,180,220	Medium	32	Brown	1,5,7	Regulating wheel for centreless through-feed grinding
	BE73	10A	80,100,120,150,180,220	Hard	32	Brown	1,5,7	Regulating wheel flute
BE800	10A	36,46,60,80,120,150	Hard	32	Brown	1,5,7	Knife back grinding	
<b>Duromers</b>	BD-W	A+C	46,60,80,120,150,180,240	Soft	20	*	1	CHRONO
	BD-MW	A+C	220-1200	Medium soft	25	*	1,35, 52-ZY	CHRONO
	BD-M	A+C	150,180,220	Medium	25	*	1.35, 52-ZY, 90-11	CHRONO
	BD-H	A+C	46-1200	Hard	32	*	1.35, 52-ZY, 90-11	CHRONO Standard
	BD-SH	A+C	36,46,60,80,100,120,150	Very hard	32	*	1.35, 52-ZY, 90-11	CHRONO
	BD22	89A	60,80,120,150,240	Soft	40	Pinkish red	1,2,6,37ST	COOL-CUT
	BD33	93A	60,80,100,120	Hard	32	Claret	1,2,6	Knife hollow grinding
	BD41	89A	54,60,80,120,150,180	Hard	50	White	1,2,6,37ST	COOL-CUT
	BD61 P	89A	36,46,60,80,120	Hard	25	Grey	1,2,5,6,37ST	COOL-CUT, patent
	BD63	89A	36,46,54,80,120,180	Hard	32	Black	1,2,5,6,37ST	COOL-CUT
	BD71 P	89A	36,46,54,60,80,120	Soft	25	Blue	1,2,5,6,7,37ST	COOL-CUT, patent
	BD740	89A	60,120	Soft	32	Green	2,6,36ST,37ST	COOL-CUT
	BD745	89A	60,80,120,150	Medium soft	40	Light grey	2,6,37ST	COOL-CUT Standard
	BD746	89A	60,80,120	Open-pore	40	White	2,6,37ST	COOL-CUT
	BD760	89A	60,80,120,150,180,220	Medium	40	Yellow	2,6,36ST,37ST	COOL-CUT
	BD780	89A	120	Hard	40	Red	2,6,37ST	COOL-CUT
	BD51	89A	46,60,80,120,150,180,240		36	White	1,2,6,37ST	Ski & snowboard
	BD416	455A	100,120		36	Grey	6	S&B
	BD420 W	89A	80,120,150,180,240		36	Orange	6, 3WM1	S&B + salami knives
	BD425 W	89A	100,120,150		36	White	6	S&B
BD800	89A	150	Very hard	40	White	1,2,6,37ST	scalpels	
BD843	10A	80	Hard	35	Brown	1	Drive pulley	
BD850	89A	150,180,220,240,280	Very hard	50	White	1,5,7	Centreless	

\* Colours *Greenish: with grain C*  
*White: with grain 89A*  
*Greyish brown: with grain 10A*

## ELASTIC SOFT WHEEL

+ **Product advantage 1:** A uniform surface structure (design) is made possible for all workpieces. Abrasive belt can be replaced with ELASTIC, should this effect be desired.

+ **Product advantage 2:** ELASTIC tools enable grinding that follows specific shapes, thereby adapting to profiles and contours.



### Elastic wheel, but not used as a grinding tool for once

ELASTIC wheels are also used as drive wheels for sewer cameras. One advantage over rubber wheels is its comparatively large amount of grip due to a coarse abrasive grain filler, which largely prevents wheel slippage.

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