

A large, abstract image of various ceramic components, including rings and discs in white, red, and tan, is shown on the left side of the page. A large red diagonal shape overlaps the bottom right of this image.

STANDARD PRODUCT RANGE

High-Performance Ceramics

www.kyocera-solutions.de

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CONTACT

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TOLERANCES IN HIGH-TEMPERATURE TECHNOLOGY

The dimensional accuracy of the size of the sintered parts essentially depends on the material and the forming method.

Tubes, multi-bore tubes and rods $\varnothing \geq 3$ mm as well as bands:

Diameter $\pm 5\%$ (but not less than $\pm 0,1$ mm); Cut length tolerance: $\pm 1\%$, < 100 mm upon request;
Straightness: maximum crescent height 0.5% of total length

Tubes, multi-bore tubes and rods $\varnothing < 3$ mm:

Diameter $\pm 5\%$ (but not less than $\pm 0,05$ mm); Cut length tolerance: $\pm 1\%$, < 100 mm upon request;
Straightness: maximum crescent height: 0.5% of total length

Crucibles, boats, combustion trays:

Tolerances $\pm 3\%$ (but not less $\pm 0,1$ mm)

Plates:

Tolerances $\pm 3\%$ (but not less $\pm 0,1$ mm); Deflection: maximum 0,5 % of the diagonal

Insulating beads and grinding bodies:

Tolerances $\pm 3\%$ (but not less than $\pm 0,1$ mm)

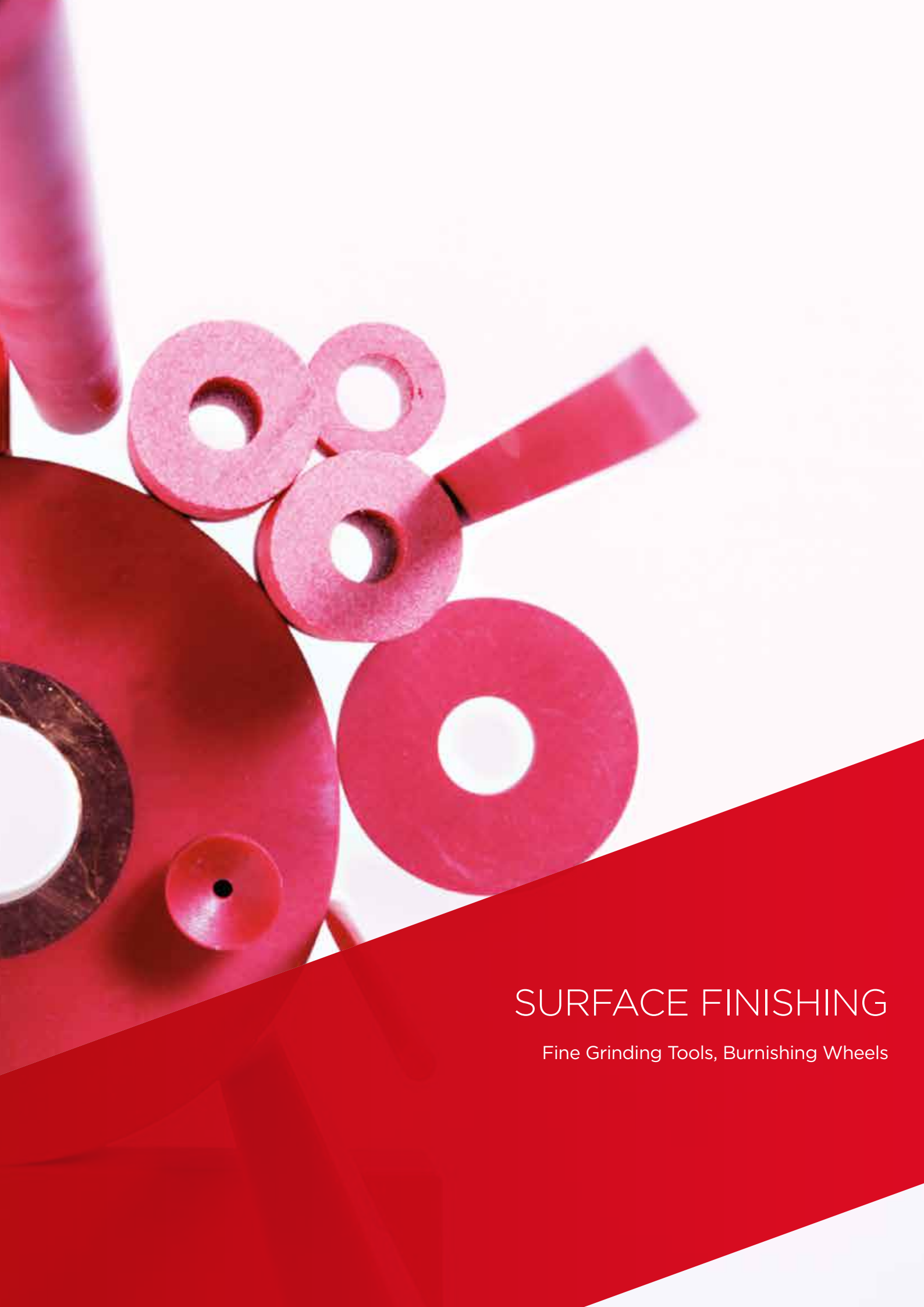
All dimensions in mm

MATERIALS

Material	KYOCERA-Brand	Characterisation
Al ₂ O ₃ Aluminium Oxide	DEGUSSIT AL23	Pure Al ₂ O ₃ , dense, excellent thermal and electrical resistance properties, corrosion resistant, permeable to microwaves
Al ₂ O ₃ Aluminium Oxide	DEGUSSIT AL24	Pure Al ₂ O ₃ , slightly porous, good resistance to thermal shock, extremely good creep strength
Al ₂ O ₃ Aluminium Oxide	DEGUSSIT AL25	Pure Al ₂ O ₃ , very porous, good thermal insulation, highest resistance to thermal shock of all the Al ₂ O ₃ materials
Al ₂ O ₃ Aluminium Oxide	DEGUSSIT DD57	Pure Al ₂ O ₃ , dense, without any binder, red colour, wear resistant and tough, also called 'sintered ruby'
Al ₂ O ₃ Aluminium Oxide	F99,7	Pure Al ₂ O ₃ , dense, extremely resistant to wear and corrosion, very high electrical insulating properties
Al ₂ O ₃ (+ ZrO ₂) Aluminium Oxide, fine grain stabilized	FZT	Al ₂ O ₃ toughened with ZrO ₂ , dense, high strength, good resistance to thermal shock, extremely resistant to wear and corrosion, fine grain size
ZrO ₂ Zirkonium Oxide	FZM	ZrO ₂ partially stabilized with MgO, dense, high strength and highly wear resistant, extremely resistant to corrosion and thermal shock
ZrO ₂ Zirkonium Oxide	DEGUSSIT FZY	Partially stabilized with Y ₂ O ₃ , dense, high purity ZrO ₂ , high temperature and corrosion resistance, ion conducting for measuring oxygen

Available are also parts with different dimensions and in different ceramic materials.

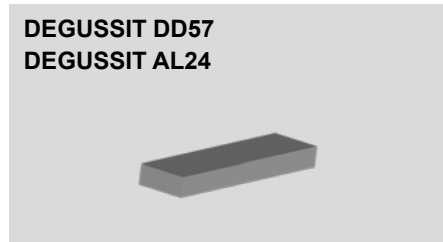




SURFACE FINISHING

Fine Grinding Tools, Burnishing Wheels

FINE-GRINDING TOOL - BENCHSTONE



Dimensions	Colour	Type	Product No. DEGUSSIT DD57
100 x 25 x 10	ruby red	fine	901-41100-0
100 x 25 x 10	ruby red	medium	902-41100-0
150 x 25 x 15	ruby red	fine	901-41101-0
150 x 25 x 15	ruby red	medium	902-41101-0
200 x 50 x 12	ruby red	fine	901-41102-0
200 x 50 x 12	ruby red	medium	902-41102-0

Dimensions	Colour	Type	Product No. DEGUSSIT AL24
100 x 25 x 10	white	coarse	903-21100-0
150 x 25 x 15	white	coarse	903-21101-0

FINE-GRINDING TOOL - BENCHSTONE IN WOODEN CASE, REMOVABLE



Dimensions	Colour	Type	Product No.
120 x 50 x 10	ruby red	fine / medium	904-41111-0

FINE-GRINDING TOOL - BENCHSTONE IN WOODEN CASE, GLUED IN



Dimensions	Colour	Type	Product No. DEGUSSIT DD57
100 x 25 x 10	ruby red	fine	901-41110-0
100 x 25 x 10	ruby red	medium	902-41110-0
120 x 50 x 10	ruby red	fine	901-41111-0
120 x 50 x 10	ruby red	medium	902-41111-0
200 x 50 x 12	ruby red	fine	901-41112-0
200 x 50 x 12	ruby red	medium	902-41112-0

Dimensions	Colour	Type	Product No. DEGUSSIT AL24
100 x 25 x 10	white	coarse	903-21110-0

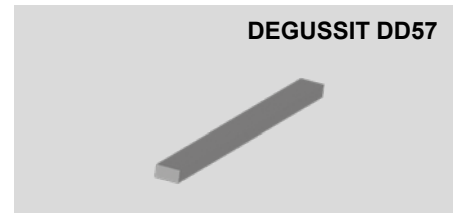
FINE-GRINDING TOOL - TRIANGULAR



Dimensions	Colour	Type	Product No.
100 x 4	ruby red	fine	901-41200-0
100 x 4	ruby red	medium	902-41200-0
100 x 6	ruby red	fine	901-41201-0
100 x 6	ruby red	medium	902-41201-0
100 x 6	ruby red	coarse	903-44201-0
100 x 8	ruby red	fine	901-41202-0
100 x 8	ruby red	medium	902-41202-0
100 x 8	ruby red	coarse	903-44202-0
100 x 10	ruby red	fine	901-41203-0
100 x 10	ruby red	medium	902-41203-0
100 x 10	ruby red	coarse	903-44203-0
120 x 13	ruby red	fine	901-41205-0
120 x 13	ruby red	medium	902-41205-0
120 x 13	ruby red	coarse	903-44205-0

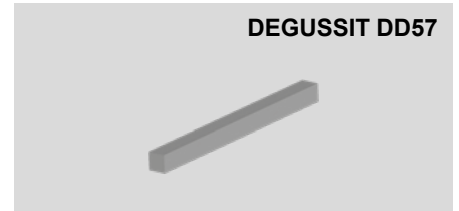
FINE-GRINDING TOOL - RECTANGULAR

Dimensions	Colour	Type	Product No.
100 x 6 x 3	ruby red	fine	901-41220-0
100 x 6 x 3	ruby red	medium	902-41220-0
100 x 8 x 6	ruby red	fine	901-41221-0
100 x 8 x 6	ruby red	medium	902-41221-0
100 x 8 x 6	ruby red	coarse	903-44221-0



FINE-GRINDING TOOL - SQUARE

Dimensions	Colour	Type	Product No.
100 x 4	ruby red	fine	901-41210-0
100 x 4	ruby red	medium	902-41210-0
100 x 6	ruby red	fine	901-41211-0
100 x 6	ruby red	medium	902-41211-0
100 x 6	ruby red	coarse	903-44211-0
100 x 8	ruby red	fine	901-41212-0
100 x 8	ruby red	medium	902-41212-0
100 x 8	ruby red	coarse	903-44212-0
100 x 10	ruby red	fine	901-41213-0
100 x 10	ruby red	medium	902-41213-0
100 x 10	ruby red	coarse	903-44213-0
120 x 13	ruby red	fine	901-41214-0
120 x 13	ruby red	medium	902-41214-0
120 x 12	ruby red	coarse	903-44216-0



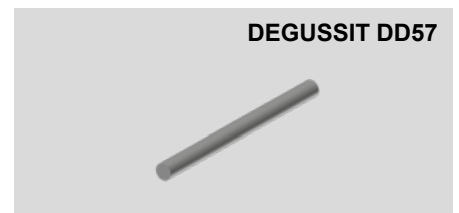
FINE-GRINDING TOOL - SEMI-CIRCULAR

Dimensions	Colour	Type	Product No.
100 x 10	ruby red	medium	902-41231-0
100 x 10	ruby red	coarse	903-44231-0



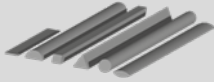
FINE-GRINDING TOOL - CIRCULAR

Dimensions	Colour	Type	Product No.
100 x 4	ruby red	fine	901-41270-0
100 x 4	ruby red	medium	902-41270-0
100 x 6	ruby red	fine	901-41271-0
100 x 6	ruby red	medium	902-41271-0
100 x 6	ruby red	coarse	903-44271-0
100 x 8	ruby red	fine	901-41272-0
100 x 8	ruby red	medium	902-41272-0
100 x 8	ruby red	coarse	903-44272-0
100 x 10	ruby red	fine	901-41273-0
100 x 10	ruby red	medium	902-41273-0
100 x 10	ruby red	coarse	903-44273-0



ASSORTMENT OF FILES

DEGUSSIT DD57



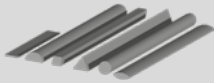
Type	Product No.
Assortment	900-00700-0

Shape	Dimensions	Colour	Type	Product No.
▲	100 x 10	ruby red	medium	902-41203-0
■	100 x 10	ruby red	medium	902-41213-0
■	100 x 8 x 6	ruby red	coarse	903-44221-0
●	100 x 6	ruby red	medium	902-41271-0
◐	100 x 10	ruby red	coarse	903-44231-0

The **assortment of files**, Product No. **900-00700-0**, contains one of each file listed above.
The Files are also available separately

ASSORTMENT OF FILES - MIDGET FILES

DEGUSSIT DD57



Type	Product No.
Assortment	900-41420-0

Shape	Dimensions	Colour	Type	PU pcs.	Product No.
▲	50 x 2	ruby red	fine	20	901-41402-0
▲	100 x 3	ruby red	fine	10	901-41413-0
■	50 x 1	ruby red	fine	20	901-41400-0
■	100 x 2	ruby red	fine	10	901-41403-0
■	50 x 3 x 0,3	ruby red	fine	20	901-41406-0
●	50 x 1	ruby red	fine	20	901-41401-0
●	100 x 2	ruby red	fine	10	901-41404-0
●	100 x 3	ruby red	fine	10	901-41405-0
◐	100 x 4	ruby red	fine	10	901-41407-0
▲	100 x 5 x 1,5	ruby red	fine	10	901-41409-0
●	100 x 4 x 1,5	ruby red	fine	10	901-41411-0

The **assortment of midget files**, Product No. **900-41420-0**, contains 1 holder and 2 collets as well as one of each midget file listed above.

PU= packing unit

The files are also available separately

BLADE SHARPENER

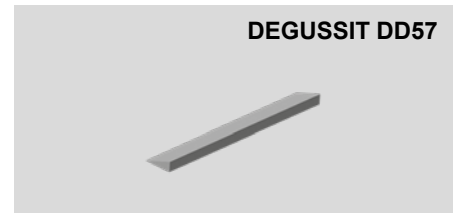
DEGUSSIT DD57



Dimensions	Colour	Type	Product No.
10 x 200	ruby red	fine	991-41273-3

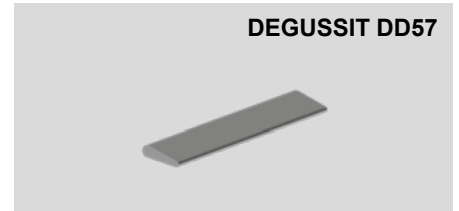
FINE-GRINDING TOOL - BLADE

Dimensions	Colour	Type	Product No.
100 x 15 x 3/0,5	ruby red	fine	901-41291-0
100 x 15 x 3/0,5	ruby red	medium	902-41291-0



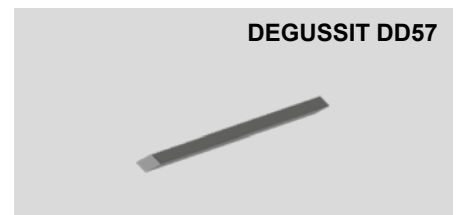
FINE-GRINDING TOOL - TAPERED

Dimensions	Colour	Type	Product No.
100 x 30 x 7/2	ruby red	medium	902-41105-0



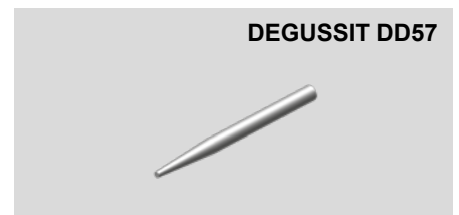
FINE-GRINDING TOOL - RHOMBOID

Dimensions	Colour	Type	Product No.
100 x 13 x 5	ruby red	coarse	903-44240-0



FINE-GRINDING TOOL - CONICAL

Dimensions	Colour	Type	Product No.
100 x 5 x 2	ruby red	fine	901-41255-0
100 x 5 x 2	ruby red	coarse	903-44255-0



FINE-GRINDING TOOL - PENCIL

Dimensions	Colour	Type	Product No.
100 x 5	ruby red	fine	901-41261-0



FINE-GRINDING TOOL - MOUNTED POINT, CYLINDRICAL



Ø D1	Ø D2	H	Type	Product No.
2	2.35	4	fine	921-41002-1
2	3	4	fine	921-41002-0
3	2.35	6	fine	921-41003-1
3	3	6	fine	921-41003-0
4	2.35	8	fine	921-41104-1
4	3	8	fine	921-41104-0
5	3	10	fine	921-41110-0
6	6	12	fine	921-41116-0
8	6	10	fine	921-41128-0
8	6	16	fine	921-41136-0
10	6	12	fine	921-41150-0
2	2.35	4	medium	922-44002-1
2	3	4	medium	922-44002-0
3	2.35	6	medium	922-44003-1
3	3	6	medium	922-44003-0
4	2.35	8	medium	922-44104-1
4	3	8	medium	922-44104-0
5	3	10	medium	922-44110-0
6	6	12	medium	922-44116-0
8	6	10	medium	922-44128-0
8	6	16	medium	922-44136-0
10	6	12	medium	922-44150-0
Order-Related Product				

FINE-GRINDING TOOL - MOUNTED POINT, CYLINDRICAL-CONICAL



Ø D1	Ø D2	H	Type	Product No.
4	2.35	8	fine	921-41204-1
4	3	8	fine	921-41204-0
5	3	10	fine	921-41210-0
6	6	12	fine	921-41216-0
8	6	16	fine	921-41236-0
10	6	20	fine	921-41255-0
4	2.35	8	medium	922-44204-1
4	3	8	medium	922-44204-0
5	3	10	medium	922-44210-0
6	6	12	medium	922-44216-0
8	6	16	medium	922-44236-0
10	6	20	medium	922-44255-0
Order-Related Product				

Length of the shaft 30 upto 35 mm

Ø D1: Ceramics

Ø D2: Metal Shaft

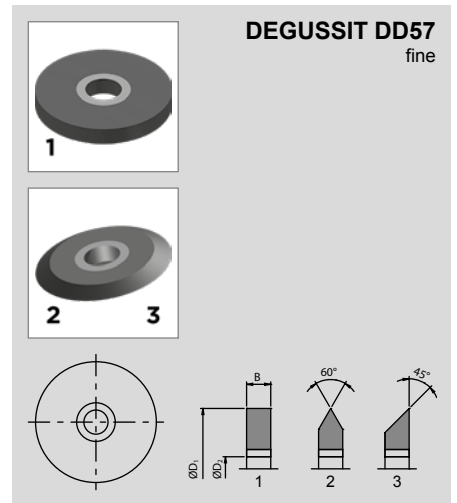
H: Ceramics

FINE-GRINDING WHEELS

Ø D1	Ø D2	B	Design	Product No.
75	20	3	with metal bushing	911-41373-0
75	20	4	with metal bushing	911-41374-0
75	20	6	with metal bushing	911-41376-0
75	20	8	with metal bushing	911-41378-0
75	20	10	with metal bushing	911-41380-0
100	32	8	with metal bushing	911-41488-0
100	32	10	with metal bushing	911-41490-0
75	30	3	without metal bushing	911-41373-7
75	30	4	without metal bushing	911-41374-7
75	30	6	without metal bushing	911-41376-7
75	30	8	without metal bushing	911-41378-7
75	30	10	without metal bushing	911-41380-7
100	42	8	without metal bushing	911-41488-7
100	42	10	without metal bushing	911-41490-7

Order-Related Product

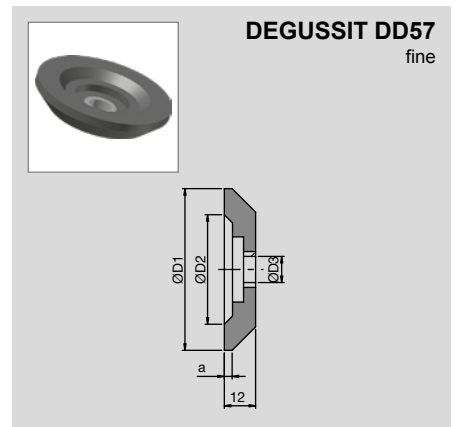
Profile 2 and 3 upon request



BURNISHING WHEELS

Ø D1	Ø D2	Ø D3	a	Product No.
62	42	10	3	931-41906-1
62	42	10	4	931-41906-2
62	42	10	6	931-41906-3

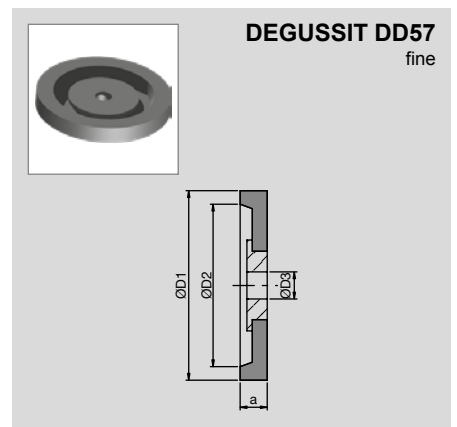
Order-Related Product



BURNISHING WHEELS

Ø D1	Ø D2	Ø D3	a	Product No.
70	60	10	8	931-41970-4
70	60	10	10	931-41970-5
70	60	10	12	931-41970-6
70	60	10	15	931-41970-7
80	60	10	8	931-41980-4
80	60	10	10	931-41980-5
80	60	10	12	931-41980-6
80	60	10	15	931-41980-7

Order-Related Product



COMPETENCE PLUS RESPONSIBILITY

Our customers rightly expect first-class performance with lasting value. Besides the competence to achieve this, we also undertake the responsibility for it. Ask for the evidence: KYOCERA Fineceramis Solutions GmbH is the technological and market leader in ceramic materials for the 21st Century.



- | | |
|--|--|
| 01 Image-intensifier for radiology | 13 Guide strip for the printing industry |
| 02 X-Ray tube for radiology | 14 Isolator for the printing industry |
| 03 Pressure sensor for aerospace | 15 Square tubes for the printing industry |
| 04 Camera housing for aerospace | 16 Tubes, rods and capillaries for high temperature applications |
| 05 Accelerator tube for radiology | 17 Thermal protection tubes for the glass and metallurgical industries |
| 06 Feedthroughs for high-vacuum applications | 18 Crucibles and boats for industry and research |
| 07 High-voltage feedthroughs for vacuum technology | 19 FZY-probes for oxygen measurement in gases |
| 08 Insulating tubes for high-vacuum technology | 20 Dielectric elements for fuel cells |
| 09 High current feedthroughs for energy systems | 21 Dielectric elements for fuel cells |
| 10 Wafer carrier for the semiconductor industry | 22 Thermal protection tubes for high temperature applications |
| 11 Test plates for the semiconductor industry | 23 Shaping roller for the glass industry |
| 12 Sensor elements for the semiconductor industry | 24 Glow-block for heat treatment of lamp filaments |



- 25 Ozone generator for the semiconductor industry
- 26 Control discs for production and laboratory processes
- 27 Dosing pistons with control edge for the food-processing and pharmaceutical industries
- 28 Pump inserts for medical technology
- 29 Float body for flow-measurement in the chemical industry
- 30 Electrode holder for flow-measurement in the chemical industry
- 31 Flow meters for the food-processing industry
- 32 Welding pins for automotive-body manufacture
- 33 Centring pin for automotive-body manufacture
- 34 Metal-forming tools for automotive-body manufacture
- 35 Isolation shells for magnetically-coupled pump in the chemical industry
- 36 Pump impeller for the chemical industry
- 37 Stirrers for the chemical industry
- 38 High-pressure pump piston for the chemical industry
- 39 Adhesive nozzle for the paper industry
- 40 Valve disc for pulp-processing
- 41 Vacuum plate for paper-making
- 42 Protection tubes for the glass industry
- 43 Midget file for the glass-processing industry
- 44 Hand lappers for the glass-processing industry
- 45 Grinding wheel for the glass-processing industry
- 46 Grinding tools for metal working
- 47 Bench-stones for metal working
- 48 Mounted points for metal working



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