

# Qualityabrasives



# The comprehensive Würth blasting abrasive range



Eisenwerk Würth has been manufacturing and selling high-quality, non-toxic, reusable abrasives for more than 90 years. Parallel to the development of blasting technology, Eisenwerk Würth offers the *most comprehensive range of abrasives* for virtually all areas of use. All products manufactured and sold by Eisenwerk Würth comply with the requirements of technical regulations for dangerous materials – and are neither toxic, carcinogenic nor do they contain free silica\*.

#### "Blasting" – a rational necessity.

This calls for the use of an economic blasting material. Economy when blasting means the optimum combined effect of good machine settings and the right blasting abrasive of the right grain size. The long term experience we have gathered enables us to offer the best possible advice. Use our experience and our services to your best possible advantage:

- Screen analyses of blasting abrasive samples to optimize the operating mix and de-dusting settings
- Information about detusting setting.
- Blasting abrasive comparison studies and endurance tests
- Blasting trials on your work pieces to determine the most suitable abrasive
- Proposals for optimizing your blasting system

The quality of Würth blasting abrasives can be seen in practice.

See for yourself!

#### \*(exception: ROBE)

This catalogue is intended purely for information purposes and does not represent a guarantee of specific product characteristics in any way whatsoever. 9. Edition



# Metals 1

to "shot peening".

# Metallic blasting abrasives are available in all types of size, mixture and grain. The range of applications stretches from cleaning castings, through de-rusting and steel de-scaling

# Glass 2

As glass beads, their range of uses stretches from the aviation industry to finishing of stainless steel and non-ferrous metals. In glass grit form, they are an economic cleaning abrasive, for example for cleaning diecasting moulds.



# **Fused Alumina**

A material obtained from alumina and bauxite which is available in various purity grades. The possibilities for use are just as varied and ranges from highly demanding medical technology, through frosting glass surfaces to roughening metals prior to special coating such as with Teflon.



# Ceramics

Available as beads, they are used for hardening surfaces and optical finishing. Their long service life is a particular feature.



# **Plastics**

The variety of applications for plastic abrasives is just as large as the range itself.

They are used anywhere where careful cleaning of sensitive parts is required without any surface removal. Another area of application is for deburring, e.g. in the cryogenic range. 6

# Natural products

Natural products are available in the form of various shell granulates. They are used for careful cleaning of sensitive tools or for restoration work.

# What abrasive for what job?

The index below should help you to find the application you need and

assist in answering the question: "What abrasive for what job?"

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We would be pleased to assist you personally to find the appropriate abrasive!

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# Cast steel shot and grit

Steel shot VERA<sup>®</sup> spherical Code: GS-R



#### Application

**Field of application:** Cleaning, shot peening, roughening **Blasting systems:** Centrifugal wheel and compressed

air systems

# **Special features:**

Cleaning castings, deburring iron and steel, de-rusting, low machine wear, long service life,shot cleaning (4–6 mm)

#### **Product characteristics**

#### Analysis:

C: 0.14–0.18%, Si: 0.65–0.85%, Mn: 0.35–0.55%, S: < 0.015% P: < 0.015% Structure: bainitic Hardness: HV 1.0 approx. 420-480 ≙ HRC 42.7-47.7 - as new grain HV 1.0 approx. 460-520 ≙ HRC 46.1–50.5 - as operating mixture Specific gravity: approx. 7.40 kg/l Bulk density: approx. 4.40 kg/l Screening specification: DIN 8201 part 2 or according to customer specification (tight screening specification or a mixture of specific grain sizes - optimized for your application!)

### Grain classes available

4.00 – 6.00 mm	-
2.00 – 2.80 mm	S780*
1.60 – 2.24 mm	S660*
1.25 – 2.00 mm	S550*
1.00 – 1.60 mm	S390*
0.80 – 1.25 mm	S330*
0.60 – 1.00 mm	S230*
0.40–0.80 mm	S170*
0.30 – 0.60 mm	S110*
0.20 – 0.40 mm	S70*
0.16 – 0.30 mm	-
0.10 – 0.20 mm	-

#### Steel grit **Steelshot angular** Code: GS-K



Application

Field of application: Cleaning, roughening Blasting systems: Centrifugal wheel and compressed air systems

#### **Special features:**

Preparation of surfaces for plastic or rubber-metal combinations, blasting work where specific roughness levels have to be achieved, Sweeping (G-50 and G-80)

## **Product characteristics**

#### Analysis:

C: 0.80–1.20 %, Si: 0.40–1.20 Mn 0.60–1.20 %, S: < 0.05 % P: < 0.05 % Structure: martensitic Hardness:

HV 1.0 approx. 480–550 ≜ HRC 48–52 **Specific gravity:** approx. 7.60 kg/l **Bulk density:** dependent on grain size **Screening specification:** SAE

# Grain classes available

G-14= 1.18 - 2.00 mm
G-16= 1.00- 1.70 mm
G-18= 0.71 - 1.40 mm
G-25=0.42-1.18 mm
G-40=0.30 - 1.00 mm
G-50=0.18 -0.71 mm
G-80=0.12 -0.42 mm

#### Stainless steel **ROBE spherical / ROBE angular** Code: GS-R / GS-K



Application Field of application: Cleaning, shot peening of stainless steel and non-ferrous metals Blasting systems:

Centrifugal wheel and compressed air systems

#### **Special features:**

For all areas of application where the use of stainless abrasives is required

## **Product characteristics**

#### Analysis:

C: < 0.22 %, Si: < 2.60 %, Mn: < 1.80 %, Cr: ca. 18 %, Ni: ca. 10.00 % Structure: austenitic Hardness: HV 1,0 appprox. 300 as new grain

approx. 450 as operating mixture Specific gravity: approx. 7.40 kg/l Bulk density: approx. 4.70 kg/l Screening specification: factory norm

#### Stainless steel grit

**ROBE angular** HV 1.0 approx. 750 <sup>4</sup> HRC 62 **Analysis:** C: 2%, Cr: 30% **remains angular in operating mixture** 

#### Grain classes available

available as spherical shot
 available as angular grit

\* comparable SAE-sizes

# **Cut** wire

#### Steel cut wire **FILGRA cylindrical** Code: StD-Z



Application Field of application: Cleaning, specific roughening

**Blasting systems:** Centrifugal wheel and compressed air systems

#### **Special features:** Cleaning castings, de-scaling iron and steel with exactly defined grain sizes, available in a choice of strengths.

#### **Product characteristics**

Hardness / Tensile strength HV  $450 \approx 1580/1770 \text{ N/mm}^2$ HV  $600 \approx 1970/2160 \text{ N/mm}^2$ Specific gravity: approx. 7.60 kg/l Bulk density: approx. 4.40 kg/l Screening specification: factory norm

#### Steel cut wire **FILGRA spherical** Code: StD-G



Application Field of application: Cleaning, shot peening, VDFI 8001

Blasting systems: Centrifugal wheel and compressed air systems

**Special features:** Shot peening with exactly defined grain sizes and specific selection of greater strengths

#### Cut wire FILGRA special types



Application Field of application: Cleaning, shot peening

Blasting systems: Centrifugal wheel and compressed air systems

**Special features:** Available special types allow assignment to specific materials

#### **Product characteristics**

Hardness / Tensile strength HV 500  $\approx$  1580/1770 N/mm<sup>2</sup> HV 640  $\approx$  1970/2160 N/mm<sup>2</sup> Specific gravity: approx. 7.60 kg/l Bulk density: approx. 4.40 kg/l Screening specification: VDFI 8001 or factory norm

# **Product characteristics**

Hardness / Tensile strength Depends on material (e.g. stainless steel 1.4301, copper, zinc...) Screening specification: factory norm

# Grain classes available

2.00 mm	0.70 mm
1.80 mm	0.60 mm
1.60 mm	0.50 mm
1.50 mm	0.40 mm
1.20 mm	
0.90 mm	
0.80 mm	

# Grain classes available

- 0.90 mm 0.80 mm
- 0.70 mm
- 0.60 mm
- 0.50 mm 0.40 mm

- 1.50 mm 1.20 mm 0.90 mm
- 0.60 mm
- 0.40 mm

# **Chilled iron shot and grit**

# Malleable iron

Chilled iron shot **DIAMANT spherical** Code: GH-R



Application Field of application: Rarely for blasting purposes Blasting systems: Compressed air systems Special features: Back-filling and shielding material as protection against ionizing radiation, shot cleaning

#### **Product characteristics**

#### Analysis:

C: 3.00–3.40 %, Si: 0.80–1.20 %, Mn: 0.80–1.00 %, S: < 0.17 %, P: 0.25–0.45 % **Structure:** martensitic / carbidic **Hardness:** HV 1.0 approx. 680–800  $\triangleq$  HRC 59.2–64.0 **Specific gravity:** approx. 7,40 kg/l **Bulk density:** approx. 4,20 kg/l **Screening specification:** DIN 8201 part 2 or according to customer specification

### Grain classes available

5.00-8.00	mm	0.60- 1.00	mm
4.50 - 6.00	mm	0.40-0.80	mm
2.40-3.15	mm	0.30 - 0.60	mm
2.00-2.80	mm	0.20-0.40	mm
2.00-2.30	mm		
1.60-2.24	mm		
1.25 – 2.00	mm		
1.00- 1.60	mm		
0.80- 1.25	mm		

#### Chilled iron grit **DIAMANT angular** Code: GH-K



#### Application

Field of application: Cleaning, roughening, tarnishing Blasting systems:

Mainly in compressed air systems, fine grain also in centrifugal wheel systems

#### **Special features:**

De-rusting, deburring, roughening, preparing surfaces prior to coating or painting, determination of stone-chip resistance for coatings (grain class 4,00–5,00 mm), as powder for pyrotechnics, Sweeping (0,30–0,60 mm and finer)

# **Product characteristics**

#### Analysis:

C: 3.00-3.40 %, Si: 0.80-1.20 %, Mn: 0.80-1.00 %, S: < 0.17 %, P: < 0.25-0.45 % **Structure:** martensitic / carbidic **Hardness:** HV 1.0 approx.

680–800 ≙ HRC 59,2–64.0 Specific gravity: approx. 7.40 kg/l Bulk density: dependent on grain size Screening specification: DIN 8201 part 3 or according to customer specification

# Grain classes available

 4.00-5.00 mm
 0.60 - 1.00 mm

 2.40-3.15 mm
 0.40-0.80 mm

 2.00-2.80 mm
 0.30-0.60 mm

 1.60-2.24 mm
 0.20-0.40 mm

 1.25-2.00 mm
 0.16-0.30 mm

 1.00-1.60 mm
 0.10-0.20 mm

 0.80-1.25 mm
 0.10-0.20 mm

0 – 200 μm 0 – 140 μm 0 – 80 μm Malleable iron THERMODUR angular Code: GT-K



Application Field of application: Cleaning, roughening Blasting systems: Centrifugal wheel and compressed air systems

#### **Special features:**

Same as angular chilled iron grit but also suitable for centrifugal wheel systems because of the lower hardness, Sweeping (0,30–0,60 mm and finer)

#### **Product characteristics**

#### Analysis:

C: 3.00-3.40 %, Si: 0.80-1.20 %, Mn: 0.80-1.00 %, S: < 0.17 %, P: 0.25-0.45 % **Structure:** ferritic / pearlitic **Hardness:** HV 1.0 approx. 550-650 ≙ HRC 52.3-57.8 **Specific gravity:** ca. 7,40 kg/l **Bulk density:** dependent on grain size **Screening specification:** DIN 8201 part 3

1.60–2.24 mm	0.60– 1.00 mm
1.25 – 2.00 mm	0.40-0.80 mm
1.00– 1.60 mm	0.30–0.60 mm
0.80– 1.25 mm	0.20-0.40 mm



# **Aluminium shot** Ceramics

Soft steel shot VERA<sup>®</sup> Soft Code: GS-R-soft



#### Application

Field of application:

Careful cleaning of sensitive surfaces, mould cleaning in rubber and plastic industry

**Blasting systems:** Centrifugal wheel and compressed air systems

**Special features:** low machine wear, low dust generation, long service life, suitable for temperatures up to 400°C, no hardening of shots

### **Product characteristics**

Analysis, typical: C: 0.14-0.18%, Si: 0.65-0.85%, Mn: 0.35-0.55%, S: < 0.015%, P: < 0.015 % Hardness: HV 1.0 approx. 220-280 ≙ HRB 209–266 as new grain HV 1.0 approx. 220–280 ≙ HRB 209–266 Specific gravity: approx. 7.40 kg/l Bulk density: approx. 4.30 kg/l Screening specification: DIN 8201 part 2 or according to customer

#### Grain classes available

specification

0.80– 1.25 mm 0.60– 1.00 mm 0.40-0.80 mm 0.30-0.60 mm

0.20-0.40 mm 0.16 - 0.30 mm 0.10 – 0.20 mm

#### Aluminium shot GRANAL



**Application Field of application:** Cleaning, surface finishing of lightmetal materials

**Blasting systems:** Centrifugal wheel and compressed air systems

# **Special features:**

Cleaning of aluminium-sand and diecasting parts, visual equalisation of light metal workpieces produced by using different casting processes

# **Product characteristics**

Analysis, typical:

Cu: 6.00-6.50%, Fe: 1.10-1.50%, Zn: 1.00–1.50%, Si: 0.60–1.20%, Mn: 0.30-0.60%, Mg: < 0.30%, Pb: < 0.15% Hardness: HV 0.2 approx. 90–120 Specific gravity: approx. 2.75 kg/l Bulk density: approx. 1.65 kg/l Screening specification: factory norm

#### Grain classes available

S-180 (1,80-2,50 mm) S-100 (1,00-1,80mm) S-80 (0,80-1,20mm) S-401 (0,40-1,00mm) S-20 (0,15 -0,40 mm)

#### **Ceramic beads**



#### **Application**

Field of application: Cleaning, surface finishing, wet blasting, shot peening

**Blasting systems:** Centrifugal wheel and compressed air systems

#### **Special features:**

Careful cleaning of sensitive surfaces (moulds, tools, motor parts, turbine vanes), shot peening of metal surfaces, surface finishing

### **Product characteristics**

Analysis:

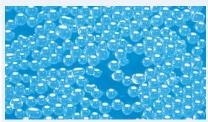
ZrO<sub>2</sub>: 60–70%, SiO<sub>2</sub>: 28-33%, Al\_0: < 10 % Structure: monoclinic zirconcrystal Hardness: HV1.0 approx. 700 ≙ HRC 60-65 **Specific gravity:** approx. 3,85 kg/l Bulk density: approx. 2,30 kg/l Screening specification: factory norm

B20=600-850 μm	B100=125–180 µm
B30= 425–600 μm	B120 = 63 – 125 μm
B40= 250 – 425 μm	B125 = $0 - 125 \mu m$
B60= 125– 250 μm	B205= 0- 63μm

# Glass

# **Natural products**

#### Glass beads BALLOTINI Code: MGL



# Application

Field of application: Cleaning, shot peening, surface finishing

#### **Blasting systems:**

Injection and compressed air systems **Special features:** 

Careful cleaning of sensitive surfaces (moulds, tools, motor parts, turbine vanes), shot peening of non-ferrous metal surfaces, surface finishing of metal and glass workpieces, wet blasting

### **Product characteristics**

#### **Analysis:**

SiO,: < 75%, Na,0: < 15%, CaO: < 12%, MgO: < 5%,  $K_0: \le 1.50\%$  $Fe_0: \le 0.20\%$ , Al\_O\_: 0.50-2.00 % Hardness: Knoop 5.150 N/mm<sup>2</sup> = HRC 47 **≙** Mohs 6 Specific gravity: approx. 2.45 kg/l Bulk density: approx. 1.50 kg/l Screening specification: factory norm

#### Grain classes available

420 – 840 µm	75 – 150 µm
420 – 590 µm	70 – 110 µm
250 – 420 µm	50 – 105 µm
-	
180 – 300 µm	40 – 80 µm
150 – 250 µm	0 – 50 µm
105 – 210 µm	
- 1	

#### **Glass** grit



#### Application

Field of application: Cleaning and tarnishing of a variety of materials

**Blasting systems:** 

Injection and compressed air systems **Special features:** 

Universal blasting material e.g. for cleaning diecasting moulds, blasting wood, can be used anywhere where blasting abrasive losses are unavoidable, Sweeping (300-600 µm and finer)

# **Product characteristics**

#### Analysis:

SiO,: < 70 %, SrO: < 10 %, Na\_0: < 10 %, BaO: approx. 10%,  $K_0: < 7\%$ Al<sub>2</sub>O<sub>2</sub>: < 3%, Fe<sub>2</sub>O<sub>2</sub>: < 0,02 % Hardness: Mohs ca. 6 Specific gravity: approx. 2.50 kg/l Bulk density: approx. 1.50 kg/l Screening specification: factory norm

#### Grain classes available

400–1400 µm 300–800 µm 300–600 µm 200 – 300 µm 100 – 200 µm 80 – 150 µm

### Kernel and shell granulate



Application

Field of application: Surface treatment without removing base material **Blasting systems:** Compressed air systems **Special features:** Careful cleaning of sensitive surfaces

#### **Product characteristics**

#### **Natural product:**

Moisture content:  $\leq$  9.0 % PH-value: ≤ 4.5 % Hardness: Mohs 2.5 **Specific gravity:** approx. 0.95 kg/l Bulk density: approx. 0.72 kg/l Screening specification: factory norm

#### Corncob granulate SAPOL Natural product: Moisture content: approx. < 10 %

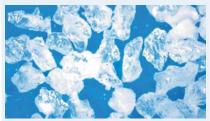
Bulk density: Grain classes:

approx. 0.50 kg/l 1,00– 1,50 mm 0,75 – 1,25 mm 0,40-0,80mm <0,25 mm

1.70 – 2.40 mm	0.80– 1.30 mm
1.30 – 1.70 mm	0.45– 1.00 mm
1.00– 1.70 mm	0.20-0.45 mm

# **Fused** alumina

#### High-grade corundum White fused alumina Code: WFA



Application Field of application: Cleaning, roughening, tarnishing

**Blasting systems:** Compressed air systems

#### Special features:

Blasting applications for which ferrous blasting abrasives are not suitable because of the risk of corrosion and magnetisation, and for extremely hard workpieces, dry and wet blasting methods, Sweeping (F<sub>36</sub> and finer)

#### **Product characteristics**

#### Analysis, typical:

 $Al_2O_3$ : 99.70 %,  $Na_2O$ : 0.20 %,  $Fe_2O_3$ : 0.02 %,  $SiO_2$ :0.02 % **Hardness:** Knoop 21.000 N/mm<sup>2</sup> ≙ Mohs 9

Specific gravity: approx. 3.92 kg/l Bulk density: approx. 1.75 kg/l Screening specification: FEPA

#### High-grade corundum **Pink fused alumina** Code: PFA



Application Field of application:

Cleaning, roughening, tarnishing

**Blasting systems:** Compressed air systems

#### **Special features:**

Blasting applications for which ferrous blasting abrasives are not suitable because of the risk of corrosion and magnetisation, and for extremely hard workpieces, dry and wet blasting methods, Sweeping (F<sub>3</sub>6 and finer)

#### **Product characteristics**

#### Analysis, typical:

Al<sub>2</sub>O<sub>3</sub>: 99.40 %, Cr<sub>2</sub>O<sub>3</sub>: 0.30 %, Na<sub>2</sub>O: 0.20 %, Fe<sub>2</sub>O<sub>3</sub>: 0.02 % Hardness: Knoop 20.500 N/mm<sup>2</sup> <sup>△</sup> Mohs 9 Specific gravity: approx. 3.92 kg/l Bulk density: approx. 1.75 kg/l Screening specification: FEPA

#### Corundum Brown fused alumina NK I Code: BFA



Application

**Field of application:** Cleaning, roughening, tarnishing, de-rusting, deburring

Blasting systems: Compressed air systems

#### **Special features:** Blasting applications as for highgrade corundum but where a low ferrous content is acceptable, Sweeping (F36 and finer)

## **Product characteristics**

Analysis, typical:  $Al_2O_3: 94.50-95.50\%$ ,  $SiO_2: 0.50-0.80\%$ ,  $Fe_2O_3: \le 0.30\%$ ,  $TiO_2: 2.60-3.20\%$ ,  $CaO + MgO: \le 0.30\%$ Hardness: Mohs 9 Specific gravity: approx. 3.96 kg/l Bulk density: approx. 1.75 kg/l Screening specification: FEPA or DIN 8201 part 6

# Grain classes available

Macro range (High-grade corundum white, pink / Electro-corundum NK I):

High-grade corundum white / Electro-corundum NK I

 $\begin{array}{l} F \ 12 \ = \ 1400 \ - \ 2000 \ \mu m \ ^* \\ F \ 14 \ = \ 1180 \ - \ 1700 \ \mu m \\ F \ 16 \ = \ 1000 \ - \ 1400 \ \mu m \\ F \ 20 \ = \ 850 \ - \ 1180 \ \mu m \\ F \ 20 \ = \ 850 \ - \ 1180 \ \mu m \\ F \ 30 \ = \ 500 \ - \ 710 \ \mu m \\ F \ 30 \ = \ 500 \ - \ 710 \ \mu m \\ F \ 36 \ = \ 425 \ - \ 600 \ \mu m \\ F \ 40 \ = \ 355 \ - \ 500 \ \mu m \\ F \ 46 \ = \ 300 \ - \ 425 \ \mu m \\ F \ 46 \ = \ 300 \ - \ 425 \ \mu m \\ F \ 54 \ = \ 250 \ - \ 355 \ \mu m \\ \end{array}$ 

Micro range (High-grade corundum white): F 230 =  $34-82 \mu m$  F  $400 = 8-32 \mu m$ F 240 =  $28-70 \mu m$  F  $500 = 5-25 \mu m$ F 280 =  $22-59 \mu m$  F  $600 = 3-19 \mu m$ F  $320 = 16-49 \mu m$  F  $800 = 2-14 \mu m$ F  $360 = 12-40 \mu m$  F  $1000 = 1-10 \mu m$ 

#### Metrical range (High-grade corundum white / Electro-corundum NK I):

Electro-corundum NK I): 0,50– 1,00 mm 0,25–0,50 mm 0,12–0,25 mm

# Fused alumina

# Silicon carbide

#### Corundum

#### Brown fused alumina NKII/NKIII Code: BFA



#### **Application**

Field of application: Cleaning, roughening, de-rusting, deburring Blasting systems: Compressed air systems Special features: Blasting applications as for highgrade corundum but where a low ferrous content is acceptable

#### **Product characteristics**

Analysis, typical: Al<sub>2</sub>O<sub>3</sub>: 94–96%,SiO2: 1.30%, Fe<sub>2</sub>O<sub>3</sub>: 1.00%, TiO: 2.40%, CaO+MgO: 0.20% Hardness: Mohs 9 Specific gravity: approx. 3.96 kg/l Bulk density: approx. 1.55 kg/l Screening specification: FEPA

#### Brown fused alumina NK III Analysis, typical: $Al_2O^3$ : 39,0%, TiO<sub>2</sub>: 0,9%, SiO<sub>2</sub>: 0,3%, Fe<sub>2</sub>O<sub>3</sub>: 0,3%, Fe: 46.0%, SiZ 2,2%, Ti: 2.0%

Fe: 46,0 %, Si: 7,2 %, Ti: 3,0 % Screening specification: 1–2 mm, 0,5–1 mm, 0,25–0,5 mm, 0,12–0,25 mm

# Grain classes available

Corundum
Special blasting corundum



Application Field of application: Cleaning, roughening, de-rusting, deburring Blasting systems: Compressed air systems Special features: Blasting applications inevitably involving large losses of blasting abrasive where a low ferrous content is acceptable, Sweeping (F36 and finer)

## **Product characteristics**

Analysis, typical:  $Al_2O_3: 80,1\%,$   $TiO_2: 0,7\%,$   $SiO_2: 11,6\%,$   $Fe_2O_3: 0,2\%,$  CaO + MgO: 1,6%, SiC: 5,8%Hardness: Mohs 9 Specific gravity: approx. 3,85 - 3,94 kg/l Bulk density: approx. 1,5 - 1,8 kg/l Screening specification: FEPA Silicon carbide Silicon carbide black Code: SiC



Application

Field of application: Cleaning, roughening Blasting systems: Compressed air systems Special features: Cleaning hardened surfaces

# **Product characteristics**

Analysis, typical: SiC: 98%,  $Fe_2O_3$ : 0.20%, C-frei: 0.15%, Magnetfraktion: 0.10% Hardness: Mohs 9.6 Specific gravity: approx. 3.2 kg/l Bulk density: approx. 1.30 kg/l Screening specification: FEPA

Macro range (Electro-corundum NK II / Special blasting corundum / Silicon carbide):

F 12 = 1400 - 2000  $\mu$ m\* F 14 = 1180 - 1700  $\mu$ m\* F 16 = 1000 - 1400  $\mu$ m F 20 = 850 - 1180  $\mu$ m F 24 = 600 - 850  $\mu$ m F 30 = 500 - 710  $\mu$ m F 36 = 425 - 600  $\mu$ m  $F 40 = 355 - 500 \ \mu m$   $F 46 = 300 - 425 \ \mu m$   $F 54 = 250 - 355 \ \mu m$   $F 60 = 212 - 300 \ \mu m$   $F 70 = 180 - 250 \ \mu m$   $F 80 = 150 - 212 \ \mu m$   $F 90 = 125 - 180 \ \mu m$ 

 $F 100 = 106 - 150 \mu m$   $F 120 = 90 - 125 \mu m$   $F 150 = 63 - 106 \mu m$   $F 180 = 53 - 90 \mu m$  $F 220 = 45 - 75 \mu m$ 

# **Plastics - Duroplasts**

#### Duroplast granulate made of melamine resin **MC Blast cleaning media** Code: MC



#### **Application**

#### Field of application:

Cleaning of steel and chromeplated moulds for the rubber and plastics industry, removal of paint and coating on ground vehicles.

Blasting systems: Compressed air systems

Special features:

# Low dust generation, no surface

changes, no free silica, non-toxic, antistatic pre-treated, suitable for temperatures up to 400 °C.

# **Product characteristics**

#### Structure:

Melamine resin Hardness: Mohs 4 ≙ Barcol 64–72 Specific gravity: approx. 1.47–1.50 kg/l Bulk density: approx. 0.77 kg/l Approved under MIL-P-85891A specification

# Grain classes available

MC-1	(12/16)	=1.68/ 1.19 mm
MC-1.5	(16/20)	=1.19 / 0.84mm
MC-2	(20/30)	=0.84/0.58 mm
MC-3	(30/40)	=0.58/0.42mm
MC-4	(40/60)	=0.42/0.25 mm
MC-5	(60/100	)=0.25/0.15 mm

Duroplast granulate Aminoaldehydic resin **MB Blast cleaning media** Code: MB



Application

#### Field of application:

Deburring aluminium and zinc die-casting, deburring electronic components, paint removal on powder-coated parts, paint removal on automobile parts, sports boats, accessories and aircraft components.

#### **Blasting systems:**

Compressed air and centrifugal wheel systems

#### **Special features:**

Low dust generation, lengthens the service life of expensive moulds and tools, deburs aluminium, zinc and magnesium parts without tolerance changes, non-toxic, no free silica

#### **Product characteristics**

Structure: Aminoaldehydic resin Hardness: Mohs 3.5 ≙ Barcol 54–62 Specific gravity: approx. 1.47–1.52 kg/l Bulk density: approx. 0.77 kg/l Approved under MIL-P-85891A specification

# Grain classes available

MB-1 (12/16) =1.68/ 1.19 mm MB-1.5 (16/20) =1.19 / 0.84mm MB-2 (20/30) =0.84/ 0.58 mm MB-3 (30/40) =0.58/ 0.42 mm MB-4 (40/60) =0.42/ 0.25 mm MB-5 (60/100)=0.25/ 0.15 mm Polyamide cubical / cylindrical **Maxi-Blast PA / PAC** Code: PA / PAC



#### Application

Field of application: Deburring duroplast parts Blasting systems: Compressed air and centrifugal wheel systems

#### **Special features:**

Non-abrasive, dust-free, leaves no residue or marks on shiny surfaces, exact standard size, no blockage of holes and slots.

#### **Product characteristics**

Structure: Polyamide 6 Hardness: HRR 100–105 Specific gravity: approx. 1.12–1.14 kg/l Bulk density: approx. 0.68 kg/l

# Grain classes available

# **Plastic - Thermoplasts**

Polycarbonate **PC Blast cleaning media** Code: PC



#### **Application**

**Field of application:** Deburring duroplast parts and light metal die-cast parts

#### **Blasting systems:**

Compressed air and centrifugal wheel systems

# Special features:

High density, slow grain decomposition, shorter blasting times, nonabrasive, dust-free, leaves no residue, exact grain size prevents blockage of holes and slots, no free silica, non-toxic

# **Product characteristics**

Structure: Polycarbonate Hardness: HRM 70–74 Specific gravity: approx. 1.20 kg/l Bulk density: approx. 0.71 kg/l

#### Polycarbonate Maxi-Blast CG



Application

**Field of application:** Deburring of rubber formed parts within the cryogenic range

# Blasting systems:

Cryogenic deburring systems

# Special features:

The non-abrasive cylindrical grain shape achieves excellent deburring results on all rubber formed parts, high density, slow decomposition achieves short deburring times, less nitrogen consumption, patented plastic mixture, usable up to -176°C  $\triangleq$  -285°F

# **Product characteristics**

Structure: Polycarbonate Hardness: HRM 70-74 ≙ HRR 120 Specific gravity: approx. 1.20 kg/l Bulk density: approx. 0.74 kg/l

#### Polycarbonate **Maxi-Blast BT** Code: BT



# Application

Field of application: Deburring duroplast parts and light metal die-cast parts Blasting systems:

Compressed air and centrifugal wheel systems

### **Special features:**

High density, slow grain decomposition, shorter blasting times, nonabrasive, leaves no residue, exact grain size prevents blockage of holes and slots, no free silica, non-toxic

# **Product characteristics**

Structure: Polycarbonate Hardness: HRM 70–74 <sup>≙</sup> HRR 120 Specific gravity: approx. 1.20 kg/l Bulk density: approx. 0.74 kg/l

# Grain classes available

PC-80= 2.03 x 2.03 mm PC-60= 1.52 x 1.52 mm PC-45= 1.14 x 1.14 mm PC-30= 0.76 x 0.76 mm PC-20= 0.50 x 0.50 mm PC-15= 0.38 x 0.38 mm

# Grain classes available

 $CG-80 = 2.03 \times 2.03 \text{ mm}$  $CG-60 = 1.52 \times 1.52 \text{ mm}$  $CG-45 = 1.14 \times 1.14 \text{ mm}$  $CG-38 = 0.97 \times 0.97 \text{ mm}$  $CG-30 = 0.76 \times 0.76 \text{ mm}$  $CG-20 = 0.50 \times 0.50 \text{ mm}$  $CG-15 = 0.38 \times 0.38 \text{ mm}$ 

### Grain classes available

BT-80 = 2.03 x 2.03 mm BT-60 = 1.52 x 1.52 mm BT-45 = 1.14 x 1.14 mm BT-38 = 0.97 x 0.97 mm BT-30 = 0.76 x 0.76 mm BT-20 = 0.50 x 0.50 mm BT-15 = 0.38 x 0.38 mm

# Quality doesn't just happen on it's own.



DIAMANT chilled iron shot and grit was already being manufactured at Eisenwerk Würth in 1913.

The founder of the company, Julius Würth, was a pioneer in introducing metallic blasting abrasives in place of quartz sand which was an extreme risk to health.

In 1953, the emphasis in production was shifted to the top quality products VERA steel shot and FILGRA steel cut wire because of developments in blasting techniques.

The range of products has been constantly extended to take into account the advance made by blasting techniques into increasingly new fields of application.

The company's product programme now includes all multi-use blasting abrasives in exceptional quality.

### Production

DIAMANT chilled iron shot and grit is produced in a hot-blast cupola furnace and VERA steel shot in modern medium-frequency furnaces.



### Quality assurance

Regular chemical analyses of the materials used and the molten steel and iron, as well as continuous tests on the finished material for hardness, service life, intensity, abrasive force and screen precision guarantee a constant high standard of quality for our abrasives.



# Supply facilities

Several thousand tons of all types of blasting abrasive stored in warehouses of around 5000 sq.m., the easy road access to our factory and the excellent logistics, ensure that our customers get their deliveries on time.











Our products in use throughout the world Our plant is located at a major junction of Europes motorway and railway networks, also we are close to a waterway, which is leading to the North Sea ports.

This guarantees rapid, reliable delivery.

For decades now, our name has been well-know on the international market for blasting abrasives. Our top quality products, an essential factor in modern surface technology, are exported to destinations throughout the world.



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