

**Tool-sets Burrs of HSS, cut 5, shank 3 mm**
*Ordering example: A1239000110*

**Packing unit:**  
1 pc. per type

Description	Shank Ø mm	Cut	Contents	1 piece each	Product-Number	recommended for	
F1	3	Z5	10-pieces	MF 807, MF 813, MF 841, MF 845, MF 850, MF 853, MF 864, MF 866, MF 872, MF 874	A1239000110	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">1</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">2</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">6</span>	■

**Tool-sets Burrs of HSS, cut 3, shank 6 mm**
*Ordering example: A12390003*

**Packing unit:**  
1 pc. per type

Description	Shank Ø mm	Cut	Contents	1 piece each	Product-Number	recommended for	
F3	6	Z3	10-pieces	MFA 0616, MFA 1225, MFC 1225, MFD 0403, MFD 1210, MFE 1220, MFG 1230, MFH 1230, MFK 0620, MFM 0618	A12390003	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">1</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">2</span> <span style="border: 1px solid red; border-radius: 50%; padding: 2px;">6</span>	■

**Tool-sets Burrs of HSS, cut 3 and cut 5, shank 6 mm**
*Ordering example: A12390004*

**Packing unit:**

1 pc. per type

Description	Shank Ø mm	Cut	Contents	1 piece each	Product-Number	recommended for										
F4	6	Z3/Z5	20-pieces	Z3 MFA 0616, MFA 1013, MFA 1225, MFC 1225, MFD 0807, MFD 1210, MFE 1220, MFE 1625, MFG 1220, MFG 1230, MFK 1230, MFL 1630, MFM 0618, MFM 1230, MFN 1213, MFN 1230 Z5 MFA 0304, MFA 0607, MFN 0303, MFN 0606	A12390004	①	②				⑥					■

# Material classification

## 1 STEELS AND CAST STEELS Rm up to 800 N/mm<sup>2</sup>

- common structural steels
- free cutting steels
- case hardened steels
- fine grained structural steels
- extruded steels
- toughened structural steels
- boiler plate
- nitrided steels
- cast steels
- heat treated steels
- heat resistant structural steels

## 2 ALLOYED, TEMPERED STEELS Rm 800 up to 1200 N/mm<sup>2</sup>

- case hardened steels
- spring steels
- fine grained structural steels
- nitrided steels
- heat treated steels
- wear resistant steels
- bearing steels

## 3 TOOL STEELS Rm up to 1300 N/mm<sup>2</sup>

- 60 - 65 HRC
- high-speed steels
- non-alloyed tool steels
- cold working tool steels
- hot working tool steels

## 4 RUST, ACID AND HEAT RESISTANT STEELS AND CAST STEELS

- austenitic
- ferritic
- ferritic-austenitic
- heat-resistant
- martensitic
- stainless, sulphurized

## 5 CAST IRON

## 6 ALUMINIUM, MAGNESIUM AND COPPER ALLOYS

- over 300 HB
- 200-300 HB
- up to 200 HB
- over 15% Si
- 10-15% Si
- 0,5-10% Si
- below 0,5% Si

## 7 TITANIUM AND NICKEL ALLOYS

- Rm 900 up to 1500 N/mm<sup>2</sup>
- Rm up to 900 N/mm<sup>2</sup>

## 8 PLASTICS, WOOD, RUBBER

## 9 GLASS / CARBIDES

## 10 STONE / TILES / GAS CEMENT

## 11 CONCRETE / REINFORCED CONCRETE

## 12 CERAMIC / FLOOR TILES

## 13 MARBLE

## 14 GRANITE

## 15 FRESHLY POURED CONCRETE

## 16 ASPHALT

● best suitable

○ suitable

■ delivery ex-stock

▲ delivery on request

Ⓢ regrind service, please enquire

# Safety Symbols

(Depending on the product these symbols may vary)



Wear eye protection



Wear hearing protection



Wear a respirator



Read the instructions



Wear gloves



Only permitted with a back-up pad



Not permitted for wet grinding



Not permitted for face grinding



Do not use if damaged



Do not use for freehand cutting