



# The accessories.

## Universal Cylindrical Grinding Machine

**S33 - The reasonably priced**  
for individual requirements.

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## External grinding

2413762-Z

Air-filter for wheelhead motor (air-cooling)

## Cut-in ring sensor

2912852-Z

Cut-in ring sensor for external grinding spindle

S33 for cut-in detection in external grinding and cut-in detection on fixed or rotating dressing tools.

Incl. tool set and gauge for customer assembly.

Feeder cable 1.5m and connecting cable 3.1m (plugable)

Note: Electronic cut-in detection Sensitron 2 required

## Wheel adaptor, nominal dia. 63mm/2.48"

2433632-Z

Wheel adaptor dia. 400mm / 15.75"

with bore 127mm / 5". Width 25-63mm / 0.98"-2.48"

form1 (80mm / 3.15" form5) for tapered shaft ends

1:10 nominal dia. 63mm / 2.48".

Incl. balancing segments and graduation

2433605-Z

High precision wheel adaptor dia. 400mm / 15.75"

with bore 127mm / 5". Width 25-63mm / 0.98"-2.48"

form1 (80mm / 3.15" form5) for tapered shaft ends

1:10 nominal dia. 63mm / 2.48".

Incl. balancing segments and graduation

2433604-Z

Wheel adaptor dia. 500mm / 19.69"

with bore 203.2mm / 8". Width 32-63mm / 1.26"-2.48"

form1 (80mm / 3.15" form5) for tapered shaft ends

1:10 nominal dia. 63mm / 2.48".

Incl. balancing segments and graduation

Studer Schaudt GmbH      Dr.-Ing. Ingolf Lammich D-70329 Stuttgart

2433634-Z

Wheel adaptor dia. 500mm/19.69" with bore

203.2mm/8". Width 40-100mm/1.57-3.94" form1

(125mm/3.15" form5) for tapered shaft ends 1:10

nominal dia. 63mm/2.48".

Incl. balancing segments and graduation

2433635-Z

Adaptor for wheel-sets dia. 500mm/19.69"  
with bore 203.2mm/8". Width 40-100mm/1.57"-3.94"  
form1 (125mm/4.92" form5) for tapered shaft ends  
1:10 nominal dia. 63mm/2.48" Incl. balancing  
segments and graduation

### Spacer ring

2713043-Z

Spacer ring 4mm/.16" with bore 127mm/5"

2433060-Z

Spacer ring 10mm/.39" with bore 127mm/5"

2433061-Z

Spacer ring 15mm/.60" with bore 127mm/5"

2433062-Z

Spacer ring 5mm/.20" with bore 203.2mm/8"

2433063-Z

Spacer ring 10mm/.40" with bore 203.2mm/8"

2433064-Z

Spacer ring 15mm/.60" with bore 203.2mm/8"

2433065-Z

Spacer ring 20mm/.80" with bore 203.2mm/8"

### Extraction tool

2912647-Z

Extraction tool for wheel adaptors,  
for shaft end with nominal dia. 63mm / 2.48"

### Wheel changing unit

2237732-Z

Locating pin for more ergonomic grinding wheel change  
for shaft end with nominal dia. 63mm / 2.48"  
(locating pin length 220mm / 8.66"), including  
extractor nut (instead of the extraction tool)

## Static balancing

2416601-Z

Balancing equipment dia. up to 600mm / 24.62"  
for static balancing of the grinding wheel outside  
of the machine.

Note: Requires the respective balancing mandrel for  
grinding wheels

2912648-Z

Balancing arbor for grinding wheels  
with nominal dia. 63mm / 2.48", length 285mm  
/ 11.22" for balancing equipment dia. 400mm  
/ 15.75" or 600mm / 23.62"

## External grinding wheels

General application of abrasives

11C Silicon Carbides for:

Cast iron / tungsten carbide / glass / plastics / non-ferrous  
metals / ceramics / stainless, acid and heat resistant steel /  
hardened steel 63 HRC and higher / nitriding steel.  
hardened steel 63 HRC and higher / nitriding steel.

54A White aluminium oxide for:

Non-alloyed, alloyed, unhardened and hardened steel up to  
63 HRC (carbon content up to 0.5% / stainless, acid and  
heat resistant steel / nitriding steel (untreated) / cast steel  
nodular cast iron / tool steel / hard-chrome plated steel.

81A Ceramic aluminium oxide:

Difficult-to-grind steel and alloys (tool steel, high speed  
steel) from soft state to 64 HRC / cast steel / cast iron

The following abrasives should no longer be used:

42A, 53A, 57A Pure aluminium oxide was replaced by 54A Pure aluminium oxide

## Grinding wheel dia. 500mm/20", bore 203.2mm/8"

5585212-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1, 53A 80 H 8 V. Cutting speed 50m/s /  
9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5585382

5585134-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1, 53A 120 L 15 V PMF. Cutting speed 50m/s /  
9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5585380

5585130-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1, 11C 120 H 5 V. Cutting speed 50m/s /  
9840sfpm

5585380-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1, 54A 120 H 15 VPMF604W. Cutting speed 50m/s  
/  
9840sfpm

5585382-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1, 54A 80 H 8 V604W. Cutting speed 50m/s /  
9840sfpm

5585129-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1, 81A 80 H 8 V601W. Cutting speed 50m/s /  
9840sfpm

5585124-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1N, 53A 120 L 15 V PMF. Cutting speed 50m/s /  
9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5585381

5585126-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1N, 11C 120 H 5 V. Cutting speed 50m/s /  
9840sfpm.

Note: No longer usable for new quotes  
until series 32

5585381-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"  
form 1N  $v=60^\circ$   $x=3$ , 54A 120 H 15 VPMF604W.  
Cutting speed 50m/s / 9840sfpm

5585383-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"

form 1N v=60° x=3, 54A 80 H 8 V604W.

Cutting speed 50m/s / 9840sfpm

5585125-Z

Grinding wheel dia. 500x40x203.2mm / 19.69x1.57x8"

form 1N v=60° x=3, 81A 80 H 8 V601W.

Cutting speed 50m/s / 9840sfpm

5585384-Z

Grinding wheel dia. 500x50x203.2mm / 19.69x1.97x8"

form 1, 54A 120 H 15 VPMF604W. Cutting speed 50m/s

/

9840sfpm

5585385-Z

Grinding wheel dia. 500x50x203.2mm / 19.69x1.97x8"

form 1, 54A 80 H 8 V604W. Cutting speed 50m/s /

9840sfpm

5585131-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"

form 1N, 53A 120 L 15 V PMF. Cutting speed 50m/s /

9840sfpm.

Note: No longer usable for new quotes,

was replaced by selling no 5585386

5585213-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"

form 1, 53A 80 H 8 V. Cutting speed 50m/s /

9840sfpm.

Note: No longer usable for new quotes,

was replaced by selling no 5585388

5585133-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"

form 1, 11C 120 H 5 V. Cutting speed 50m/s /

9840sfpm

5585386-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"

form 1, 54A 120 H 15 VPMF604W. Cutting speed 50m/s

/ 9840sfpm

5585388-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"  
form 1, 54A 80 H 8 V604W. Cutting speed 50m/s  
/ 9840sfpm

5585132-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"  
form 1, 81A 80 H 8 V601W. Cutting speed 50m/s  
/ 9840sfpm

5585387-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"  
form 1N  $v=60^\circ$   $x=3$ , 54A 120 H 15 VPMF604W.  
Cutting speed 50m/s / 9840sfpm

5585389-Z

Grinding wheel dia. 500x63x203.2mm / 19.69x2.48x8"  
form 1N  $v=60^\circ$   $x=3$ , 54A 80 H 8 V604W.  
Cutting speed 50m/s / 9840sfpm

5585216-Z

Grinding wheel dia. 500x80x203.2mm / 19.69x3.15x8"  
form 5, 53A 80 H 8 V. Cutting speed 50m/s /  
9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5585391

5585390-Z

Grinding wheel dia. 500x80x203.2mm / 19.69x3.15x8"  
form 5 P=290 F=20, 54A 120 H 15 VPMF904W.  
Cutting speed 50m/s / 9840sfpm

5585391-Z

Grinding wheel dia. 500x80x203.2mm / 19.69x3.15x8"  
form 5 P=290 F=20, 54A 80 H 8 V904W.  
Cutting speed 50m/s / 9840sfpm

## Internal grinding unit

2417110-Z

Reduction sleeve dia. 120/100mm / 4.72"/3.94".  
For mounting of a spindle dia. 100mm / 3.94"  
in a spindle holder dia. 120mm / 4.72"

5600032-Z

Package consisting of adhesive and hardener  
for mounting of internal grinding wheels on  
threaded bolts

## Internal grinding spindles with belt drive

General note on internal grinding spindles with belt drive for drive motor with frequency converter:  
The specification of the pulley dia. of the drive motor on the internal grinding spindle must coincide with the specification of the drive motor on the wheelhead, according to the sales text in the machine insert

### 2026793-Z

Internal grinding spindle 60'000rpm. with belt drive for drive motor with pulley dia. 164mm / 6.46" with frequency convertor.  
(for bore dia. 6-30mm / .24-1.18").  
Spindle type 102560B, dia. 100mm / 3.94" with oil mist lubrication. With tool holding fixture HJND 42.  
Incl.:1 driving pulley dia. 31mm / 1.22"  
4 medium grinding arbors  
40 bolts  
until series 5

### 2917642-Z

Internal grinding spindle 60'000rpm. with belt drive for drive motor with pulley dia. 105mm / 4.13" with frequency convertor.  
(for bore dia. 6-30mm / .24-1.18").  
Spindle type 102560B, dia. 100mm / 3.94" with oil mist lubrication. With tool holding fixture HJND 42.  
Incl.:1 driving pulley dia. 20.3mm / .79"  
4 medium grinding arbors  
40 bolts

### 2026794-Z

Internal grinding spindle 40'000rpm. with belt drive for drive motor with pulley dia. 164mm / 6.45" with frequency convertor.  
(for bore dia. 13-45mm / .51-1.77").  
Spindle type 102540B, dia. 100mm / 3.94" with oil mist lubrication. With tool holding fixture HJND 35.  
Incl.:1 driving pulley dia. 50mm / 1.97"  
5 medium grinding arbors  
45 bolts  
until series 5

#### 2917640-Z

Internal grinding spindle 40'000rpm. with belt drive for drive motor with pulley dia. 105mm / 4.13" with frequency convertor.

(for bore dia. 13-45mm / .51-1.77").

Spindle type 102540B, dia. 100mm / 3.94" with oil mist lubrication. With tool holding fixture HJND 35.

Incl.:1 driving pulley dia. 31mm / 1.22"

5 medium grinding arbors

45 bolts

#### 2026795-Z

Internal grinding spindle 20'000rpm. with belt drive for drive motor with pulley dia. 164mm / 6.45" with frequency convertor.

(for bore dia. 28-80mm / 1.1-3.15").

Spindle type 102520B, dia. 100mm / 3.94" with oil mist lubrication. With tool holding fixture HJND 21.

Incl.:1 driving pulley dia. 75mm / 2.95"

5 medium grinding arbors

35 bolts

until series 5

#### 2917644-Z

Internal grinding spindle 20'000rpm. with belt drive for drive motor with pulley dia. 105mm / 4.13" with frequency convertor.

(for bore dia. 28-80mm / 1.1-3.15").

Spindle type 102520B, dia. 100mm / 3.94" with oil mist lubrication. With tool holding fixture HJND 21.

Incl.:1 driving pulley dia. 65mm / 2.56"

5 medium grinding arbors

35 bolts

#### HF internal grinding motor spindles with 4 lubrication connections

General notes for HF internal grinding motor spindles:

- Incl. testing and initial lubrication, if spindle is ordered together with the machine
- Machine is to be equipped with internal grinding attachment for HF spindles
- Reduction sleeves required depending on the diameter of the internal grinding attachment and the motor spindles

2667695-Z

Internal grinding motor spindle Fischer MFM 10120 (120'000min-1 / 3.5kW) dia. 100mm / 3.94" according to Studer specification 1330348A with tool holding fixture HJND 60.

Oil-air lubrication with 4 lubrication connections and water cooling.

Note: Machine is to be equipped with oil-air lubrication for 4 lubrication connections

2667666-Z

Internal grinding motor spindle Fischer MFM 1090 (90'000min-1 / 4.2kW) dia. 100mm / 3.94" according to Studer specification 1330348A with tool holding fixture HJND 50.

Oil-air lubrication with 4 lubrication connections and water cooling.

Note: Machine is to be equipped with oil-air lubrication for 4 lubrication connections

2667629-Z

Internal grinding motor spindle Fischer MFM 1242/60 (42000-60000min-1 / 10 kW), multi-range spindle dia. 120mm / 4.72" according to Studer specification 1330348A with tool holding fixture HJND 28.

Oil-air lubrication with 4 lubrication connections and water cooling.

Note: Machine is to be equipped with oil-air lubrication for 4 lubrication connections

2667628-Z

Internal grinding motor spindle Fischer MFM 1224/42 (24'000-42'000min-1 / 15 kW), multi-range spindle dia. 120mm / 4.72" according to Studer specification 1330348A with tool holding fixture HJND 21.

Oil-air lubrication with 4 lubrication connections and water cooling.

Note: Machine is to be equipped with oil-air lubrication for 4 lubrication connections

## Internal grinding arbors HJND 21

5552393-Z

Grinding arbor HJND 21-1220 dia. 12x20mm

5552394-Z

Grinding arbor HJND 21-1235 dia. 12x35mm

5552395-Z  
Grinding arbor HJND 21-1250 dia. 12x50mm

5552325-Z  
Grinding arbor HJND 21-1625 dia. 16x25mm

5552326-Z  
Grinding arbor HJND 21-1645 dia. 16x45mm

5552327-Z  
Grinding arbor HJND 21-1665 dia. 16x65mm

5552328-Z  
Grinding arbor HJND 21-2030 dia. 20x30mm

5552329-Z  
Grinding arbor HJND 21-2060 dia. 20x60mm

5552330-Z  
Grinding arbor HJND 21-2090 dia. 20x90mm

5552331-Z  
Grinding arbor HJND 21-2535 dia. 25x35mm

5552332-Z  
Grinding arbor HJND 21-2575 dia. 25x75mm

5552333-Z  
Grinding arbor HJND 21-25115 dia. 25x115mm

5552334-Z  
Grinding arbor HJND 21-3240 dia. 32x40mm

5552335-Z  
Grinding arbor HJND 21-3290 dia. 32x90mm

5552336-Z  
Grinding arbor HJND 21-32140 dia. 32x140mm

#### **Internal grinding arbors HJND 28**

5552313-Z  
Grinding arbor HJND 28-1220 dia. 12x20mm

5552314-Z  
Grinding arbor HJND 28-1235 dia. 12x35mm

5552315-Z  
Grinding arbor HJND 28-1250 dia. 12x50mm

5552316-Z  
Grinding arbor HJND 28-1625 dia. 16x25mm

5552317-Z  
Grinding arbor HJND 28-1645 dia. 16x45mm

5552318-Z  
Grinding arbor HJND 28-1665 dia. 16x65mm

5552319-Z  
Grinding arbor HJND 28-2030 dia. 20x30mm

5552320-Z  
Grinding arbor HJND 28-2060 dia. 20x60mm

5552321-Z  
Grinding arbor HJND 28-2090 dia. 20x90mm

5552322-Z  
Grinding arbor HJND 28-2535 dia. 25x35mm

5552323-Z  
Grinding arbor HJND 28-2575 dia. 25x75mm

5552324-Z  
Grinding arbor HJND 28-25115 dia. 25x115mm

### **Internal grinding arbors HJND 35**

5552387-Z  
Grinding arbor HJND 35-716 dia. 7x16mm

5552388-Z  
Grinding arbor HJND 35-725 dia. 7x25mm

5552389-Z  
Grinding arbor HJND 35-736 dia. 7x36mm

5552301-Z  
Grinding arbor HJND 35-918 dia. 9x18mm

5552302-Z  
Grinding arbor HJND 35-930 dia. 9x30mm

5552303-Z  
Grinding arbor HJND 35-945 dia. 9x45mm

5552304-Z  
Grinding arbor HJND 35-1220 dia. 12x20mm

5552305-Z  
Grinding arbor HJND 35-1235 dia. 12x35mm

5552306-Z  
Grinding arbor HJND 35-1250 dia. 12x50mm

5552307-Z  
Grinding arbor HJND 35-1625 dia. 16x25mm

5552308-Z  
Grinding arbor HJND 35-1645 dia. 16x45mm

5552309-Z  
Grinding arbor HJND 35-1665 dia. 16x65mm

5552310-Z  
Grinding arbor HJND 35-2030 dia. 20x30mm

5552311-Z  
Grinding arbor HJND 35-2060 dia. 20x60mm

5552312-Z  
Grinding arbor HJND 35-2090 dia. 20x90mm

5552390-Z  
Grinding arbor HJND 35-2535 dia. 25x35mm

5552391-Z  
Grinding arbor HJND 35-2575 dia. 25x75mm

5552392-Z  
Grinding arbor HJND 35-25115 dia. 25x115mm

#### **Internal grinding arbors HJND 42**

5552384-Z  
Grinding arbor HJND 42-514 dia. 5x14mm

5552385-Z  
Grinding arbor HJND 42-520 dia. 5x20mm

5552386-Z  
Grinding arbor HJND 42-528 dia. 5x28mm

5552289-Z  
Grinding arbor HJND 42-716 dia. 7x16mm

5552290-Z  
Grinding arbor HJND 42-725 dia. 7x25mm

5552291-Z  
Grinding arbor HJND 42-736 dia. 7x36mm

5552292-Z  
Grinding arbor HJND 42-918 dia. 9x18mm

5552293-Z  
Grinding arbor HJND 42-930 dia. 9x30mm

5552294-Z  
Grinding arbor HJND 42-945 dia. 9x45mm

5552295-Z  
Grinding arbor HJND 42-1220 dia. 12x20mm

5552296-Z  
Grinding arbor HJND 42-1235 dia. 12x35mm

5552297-Z  
Grinding arbor HJND 42-1250 dia. 12x50mm

5552298-Z  
Grinding arbor HJND 42-1625 dia. 16x25mm

5552299-Z  
Grinding arbor HJND 42-1645 dia. 16x45mm

5552300-Z  
Grinding arbor HJND 42-1665 dia. 16x65mm

#### **Internal grinding arbors HJND 50**

5552277-Z  
Grinding arbor HJND 50-514 dia. 5x14mm

5552278-Z  
Grinding arbor HJND 50-520 dia. 5x20mm

5552279-Z  
Grinding arbor HJND 50-528 dia. 5x28mm

5552280-Z  
Grinding arbor HJND 50-716 dia. 7x16mm

5552281-Z  
Grinding arbor HJND 50-725 dia. 7x25mm

5552282-Z  
Grinding arbor HJND 50-736 dia. 7x36mm

5552283-Z  
Grinding arbor HJND 50-918 dia. 9x18mm

5552284-Z  
Grinding arbor HJND 50-930 dia. 9x30mm

5552285-Z  
Grinding arbor HJND 50-945 dia. 9x45mm

5552286-Z  
Grinding arbor HJND 50-1220 dia. 12x20mm

5552287-Z  
Grinding arbor HJND 50-1235 dia. 12x35mm

5552288-Z  
Grinding arbor HJND 50-1250 dia. 12x50mm

#### **Internal grinding arbors HJND 60**

5552265-Z  
Grinding arbor HJND 60-412 dia. 4x12mm

5552266-Z  
Grinding arbor HJND 60-418 dia. 4x18mm

5552267-Z  
Grinding arbor HJND 60-424 dia. 4x24mm

5552268-Z  
Grinding arbor HJND 60-514 dia. 5x14mm

5552269-Z  
Grinding arbor HJND 60-520 dia. 5x20mm

5552270-Z  
Grinding arbor HJND 60-528 dia. 5x28mm

5552271-Z  
Grinding arbor HJND 60-716 dia. 7x16mm

5552272-Z  
Grinding arbor HJND 60-725 dia. 7x25mm

5552273-Z  
Grinding arbor HJND 60-736 dia. 7x36mm

5552274-Z  
Grinding arbor HJND 60-918 dia. 9x18mm

5552275-Z  
Grinding arbor HJND 60-930 dia. 9x30mm

5552276-Z  
Grinding arbor HJND 60-945 dia. 9x45mm

#### **Face grinding arbor HJNP**

5552221-Z  
Face grinding arbor HJNP 21

5552220-Z  
Face grinding arbor HJNP 28

5552219-Z  
Face grinding arbor HJNP 35

#### **Chuck HJNZ**

5552397-Z  
Chuck HJNZ 21 +2 collets ER25 dia. 3+6mm

5552211-Z  
Chuck HJNZ 28 +2 collets ER20 dia. 3+6mm

5552210-Z  
Chuck HJNZ 35 +2 collets ER16 dia. 3+6mm

5552209-Z  
Chuck HJNZ 42 +2 collets ER12 dia. 3+6mm

5552208-Z  
Chuck HJNZ 50 +2 collets ER11 dia. 3+6mm

5552207-Z  
Chuck HJNZ 60 +2 collets ER11 dia. 3+6mm

### **Collets ER11**

2026510-Z  
Collet ER11 dia. 1mm

2026511-Z  
Collet ER11 dia. 1.5mm

2026512-Z  
Collet ER11 dia. 2mm

2026513-Z  
Collet ER11 dia. 2.5mm

2026514-Z  
Collet ER11 dia. 3mm

2026515-Z  
Collet ER11 dia. 3.5mm

2026516-Z  
Collet ER11 dia. 4mm

2026517-Z  
Collet ER11 dia. 4.5mm

2026518-Z  
Collet ER11 dia. 5mm

2026519-Z  
Collet ER11 dia. 5.5mm

2026520-Z  
Collet ER11 dia. 6mm

### **Collets ER12**

2026521-Z  
Collet ER12 dia. 1mm

2026522-Z  
Collet ER12 dia. 1.5mm

2026523-Z  
Collet ER12 dia. 2mm

2026524-Z  
Collet ER12 dia. 2.5mm

2026525-Z  
Collet ER12 dia. 3mm

2026526-Z  
Collet ER12 dia. 3.5mm

2026527-Z  
Collet ER12 dia. 4mm

2026528-Z  
Collet ER12 dia. 4.5mm

2026529-Z  
Collet ER12 dia. 5mm

2026530-Z  
Collet ER12 dia. 5.5mm

2026531-Z  
Collet ER12 dia. 6mm

2026532-Z  
Collet ER12 dia. 6.5mm

#### **Collets ER16**

2026533-Z  
Collet ER16 dia. 1mm

2026534-Z  
collet ER 16 dia. 1.5mm 0.06"

2026535-Z  
Collet ER16 dia. 2mm

2026536-Z  
Collet ER16 dia. 2.5mm 0.10"

2026537-Z  
Collet ER16 dia. 3mm

2026538-Z  
Collet ER16 dia. 3.5mm

2026539-Z  
Collet ER16 dia. 4mm

2026540-Z  
Collet ER16 dia. 4.5mm

2026541-Z  
Collet ER16 dia. 5mm

2026542-Z  
Collet ER16 dia. 5.5mm

2026543-Z  
Collet ER16 dia. 6mm

2026544-Z  
Collet ER16 dia 6.5mm 0.26"

2026545-Z  
Collet ER16 dia. 7mm

2026546-Z  
Collet ER16 dia. 7.5mm

2026547-Z  
Collet ER16 dia. 8mm

2026548-Z  
Collet ER16 dia. 8.5mm

2026549-Z  
Collet ER16 dia. 9mm

2026550-Z  
Collet ER16 dia. 9.5mm

2026551-Z  
Collet ER16 dia. 10mm

## **Collets ER20**

2026552-Z  
Collet ER20 dia. 2mm

2026553-Z  
Collet ER20 dia. 3mm

2026554-Z  
Collet ER20 dia. 4mm

2026555-Z  
Collet ER20 dia. 5mm

2026556-Z  
Collet ER20 dia. 6mm

2026557-Z  
Collet ER20 dia. 7mm

2026558-Z  
Collet ER20 dia. 8mm

2026559-Z  
Collet ER20 dia. 9mm

2026560-Z  
Collet ER20 dia. 10mm

2026561-Z  
Collet ER20 dia. 11mm

2026562-Z  
Collet ER20 dia. 12mm

2026563-Z  
Collet ER20 dia. 13mm

## Collets ER25

2026564-Z  
Collet ER25 dia. 2mm

2026565-Z  
Collet ER25 dia. 3mm

2026566-Z  
Collet ER25 dia. 4mm

2026567-Z  
Collet ER25 dia. 5mm

2026568-Z  
Collet ER25 dia. 6mm

2026569-Z  
Collet ER25 dia. 7mm

2026570-Z  
Collet ER25 dia. 8mm

2026571-Z  
Collet ER25 dia. 9mm

2026572-Z  
Collet ER25 dia. 10mm

2026573-Z  
Collet ER25 dia. 11mm

2026574-Z  
Collet ER25 dia. 12mm

2026575-Z  
Collet ER25 dia. 13mm

2026576-Z  
Collet ER25 dia. 14mm

2026577-Z  
Collet ER25 dia. 15mm

2026578-Z  
Collet ER25 dia. 16mm

**Additional bolts (wheel adaptors) for internal grinding arbors**

5551918-Z  
Set of 10 bolts dia. 3.5mm

5551944-Z  
Set of 10 bolts dia. 4mm

5551939-Z  
Set of 10 bolts dia. 5mm

5551921-Z  
Set of 10 bolts dia. 7mm

5551922-Z  
Set of 10 bolts dia. 9mm

5551940-Z  
Set of 10 bolts dia. 12mm

5551924-Z  
Set of 10 bolts dia. 16mm

5551941-Z  
Set of 5 bolts dia. 20mm

5551942-Z  
Set of 5 bolts dia. 25mm

5551943-Z  
Set of 5 bolts dia. 32mm

### **Wheels for internal grinding arbors**

General application of abrasives

11C Silicon Carbides for:

Cast iron / tungsten carbide / glass / plastics / non-ferrous metals / ceramics / stainless, acid and heat resistant steel / hardened steel 63 HRC and higher / nitriding steel.

54A Pure aluminium oxide for:

Non-alloyed, alloyed, unhardened and hardened steel up to 63 HRC (carbon content up to 0.5% / stainless, acid and heat resistant steel / nitriding steel (untreated) / cast steel nodular cast iron / tool steel / hard-chrome plated steel.

93A Ceramic aluminium oxide (30%) for:

Difficult-to-grind steel and alloys (tool steel, high speed steel) from soft state to 64 HRC / cast steel / cast iron

The following abrasives should no longer be used:

42A Pure aluminium oxide was replaced by 54A Pure aluminium oxide

64A Pure aluminium oxide was replaced by 93A Ceramic aluminium oxide

5583119-Z  
Set of 10 wheels dia. 6x6x2.5mm 11C 80 G 6 V  
Cutting speed 50m/s / 9840sfpm

5583041-Z  
Set of 10 wheels dia. 6x6x2.5mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583042-Z  
Set of 10 wheels dia. Ø 6x6x2.5mm 93A 120 H 13  
VP601  
Cutting speed 50m/s / 9840sfpm

5583018-Z

Set of 10 wheels dia. 6x6x2.5mm 42A 80 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583041

5583068-Z

Set of 10 wheels dia. 6x6x2.5mm 64A 80 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583042

5583009-Z

Set of 10 Ø 8x8x2.5mm 42A 80 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583043

5583059-Z

Set of 10 wheels Ø 8x8x2.5mm 64A 80 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583044

5583110-Z

Set of 10 wheels dia. 8x8x2.5mm 11C 80 G 6 V  
Cutting speed 50m/s / 9840sfpm

5583043-Z

Set of 10 wheels dia. 8x8x2.5mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583044-Z

Set of 10 wheels dia. 8x8x2.5mm 93A 120 H 13 VP601  
Cutting speed 50m/s / 9840sfpm

5583019-Z

Set of 10 wheels dia. 10x10x4mm 42A 80 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583045

until series 32

5583069-Z

Set of 10 wheels dia. 10x10x4mm 64A 80 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583046

5583120-Z

Set of 10 wheels dia. 10x10x4mm 11C 80 G 6 V  
Cutting speed 50ms/s / 9840sfpm

5583045-Z

Set of 10 wheels dia. 10x10x4mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583046-Z

Set of 10 wheels dia. 10x10x4mm 93A 120 H 13  
VP601  
Cutting speed 50m/s / 9840sfpm

5583011-Z

Set of 10 wheels dia. 13x13x4mm 42A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583047

5583061-Z

Set of 10 wheels dia. 13x13x4mm 64A 60 H 8 V  
cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583048

5583112-Z

Set of 10 wheels dia. 13x13x4mm 11C 60 H 15 VP  
Cutting speed 50m/s / 9840sfpm

5583047-Z

Set of 10 wheels dia. 13x13x4mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583048-Z

Set of 10 wheels dia. 13x13x4mm 93A 120 H 13  
VP601  
Cutting speed 50m/s / 9840sfpm

5583020-Z

Set of 10 wheels dia. 16x16x6mm 42A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583049

5583070-Z

Set of 10 wheels dia. 16x16x6mm 64A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583076

5583121-Z

Set of 10 wheels dia. 16x16x6mm 11C 60 H 15 VP  
Cutting speed 50m/s

5583049-Z

Set of 10 wheels dia. 16x16x6mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583076-Z

Set of 10 wheels dia. 16x16x6mm 93A 120 H 13  
VP601  
Cutting speed 50m/s / 9840sfpm

5583021-Z

Set of 10 wheels dia. 20x20x6mm 42A 60 H 8 V  
cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583077

5583071-Z

Set of 10 wheels dia. 20x20x6mm 64A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583078

5583122-Z

Set of 10 wheels Ø 20x20x6mm 11C 60 H 15 VP  
Cutting speed 50m/s / 9840sfpm

5583077-Z

Set of 10 wheels dia. 20x20x6mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583078-Z

Set of 10 wheels dia. 20x20x6mm 93A 120 H 13  
VP601

Cutting speed 50m/s / 9840sfpm

5583022-Z

Set of 10 wheels dia. 25x25x10mm 42A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583079

5583072-Z

Set of 10 wheels dia. 25x25x10mm 64A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583080

5583123-Z

Set of 10 wheels dia. 25x25x10mm 11C 60 H 15 VP  
Cutting speed 50m/s / 9840sfpm

5583079-Z

Set of 10 wheels dia. 25x25x10mm 54A 80 H 8 V604W  
Cutting speed 50m/ s / 9840sfpm

5583080-Z

Set of 10 wheels dia. 25x25x10mm 93A 120 H 13  
VP601

Cutting speed 50m/s / 9840sfpm

5583023-Z

Set of 5 wheels dia. 32x32x10mm 42A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583081

5583073-Z

Set of 5 wheels dia. 32x32x10mm 64A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583082

5583124-Z

Set of 5 wheels dia. 32x32x10mm 11C 60 H 15 VP  
Cutting speed 50m/s / 9840sfpm

5583081-Z

Set of 5 wheels dia. 32x32x10mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583082-Z

Set of 5 wheels Ø 32x32x10mm 93A 120 H 13 VP601  
Cutting speed 50m/s / 9840sfpm

5583024-Z

Set of 5 wheels dia. 40x40x13mm 42A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583083

5583074-Z

Set of 5 wheels dia. 40x40x13mm 64A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583084

5583125-Z

Set of 5 wheels Ø 40x40x13mm 11C 60 H 15 VP  
Cutting speed 50m/s / 9840sfpm

5583083-Z

Set of 5 wheels dia. 40x40x13mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583084-Z

Set of 5 wheels dia. 40x40x13mm 93A 80 H 13 VP601  
Cutting speed 50m/s / 9840sfpm

5583025-Z

Set of 5 wheels dia. 50x40x16mm 42A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583085

5583075-Z

Set of 5 wheels dia. 50x40x16mm 64A 60 H 8 V  
Cutting speed 50m/s / 9840sfpm.

Note: No longer usable for new quotes,  
was replaced by selling no 5583086

5583126-Z

Set of 5 wheels dia. 50x40x16mm 11C 60 H 15 VP  
Cutting speed 50m/s / 9840sfpm

5583085-Z

Set of 5 wheels dia. 50x40x16mm 54A 80 H 8 V604W  
Cutting speed 50m/s / 9840sfpm

5583086-Z

Set of 5 wheels dia. 50x40x16mm 93A 120 H 13  
VP601  
cutting speed 50m/s / 9840sfpm

### **Weels for chucks**

5583601-Z

Set of 10 wheels SARUBIN 60M dia. 6mm/.24"

5583602-Z

Set of 10 wheels SARUBIN 60M dia. 8mm/.31"

5583603-Z

Set of 10 wheels SARUBIN 60M dia. 10mm/.39"

5583604-Z

Set of 10 wheels SARUBIN 60M dia. 12mm/.47"

### **Wheels for face grinding arbor**

5584008-Z

Cup wheel 64A46 H9V dia. 80mm/3.15"

5584012-Z

Cup wheel 64A46 H9V dia. 100mm/3.94"

### **Workhead**

2439674-Z

Cut-in ring sensor (transmitter ring) for mounting  
on the clamping device for live spindle grinding or  
its adaptors with correspondent interface for use on  
workheads with fitting taper ISO50.

Note: Requires correspondent sensor receiver ring on  
the workhead

### **Adaptors for centres**

1809104-Z

Adaptor for centres MT 1

1809105-Z  
Adaptor for centres MT2 for fitting taper MT5

1809106-Z  
Adaptor for centres MT3 for fitting taper MT5

1809107-Z  
Adaptor for centres MT4 for fitting taper MT5

2439719-Z  
Insert for centers MT3 for universal workhead ISO50  
incl. locking plate and driver (driver pin dia. 10mm  
/ .39")

2439720-Z  
Insert for centers MT4 for universal workhead ISO50  
incl. locking plate and driver (driver pin dia. 10mm  
/ .39")

2439717-Z  
Insert for centers MT3 for chuck workhead ISO50  
incl. driver plate and driver (driver pin dia. 10mm  
/ .39")

2439718-Z  
Insert for centers MT4 for chuck workhead ISO50  
incl. driver plate and driver (driver pin dia. 10mm  
/ .39")

## Zero backlash drivers

2909923-Z  
Simple driving fork for zero backlash driving  
of a lathe dog, instead of a driving pin dia. 8mm  
/ 0.31". Fits drivers of workheads with fitting  
taper MT2, MT3, MT4 or MT5

2439855-Z  
Simple driving fork for zero backlash driving  
of a lathe dog, instead of a driving pin dia. 10mm  
/ 0.39". Fits drivers of workheads with fitting  
taper ISO50

2439854-Z  
Lateral force free driving fork for the backlash  
free driving of a workpiece carrier.  
Note: Requires driving plate for workhead

2439856-Z

Driving plate for workhead with spindle nose dia. 110mm / 4.33" and revolving center for mounting of a tangentially stiff driving fork and/or drawdown springs for steady rest grinding applications

#### applications

2439862-Z

Drawdown spring set for steady rest grinding applications for pressing the workpiece against center of the workhead.

Note: Driving plate required

#### Carrier

1809617-Z

Set of 5 carriers for dia. 10-50mm / .39-1.97"

1809724-Z

Carrier for dia. 50-80mm / 1.97-3.15"

1809725-Z

Carrier for dia. 80-120mm / 3.15-4.72"

#### Collets W20

2439723-Z

Adaptor for collets W20 for fitting taper ISO50

Note: Requires manual draw-bar or clamping cylinder with clamping actuating tube

5558101-Z

Set of 37 collets W20 dia. 2-20mm, in steps of 0.5mm  
Single collets orders possible

1930539-Z

Collet W20 dia. 0.5mm

1930540-Z

Collet W20 dia. 1mm

1930541-Z

Collet W20 dia. 1.5mm

1930400-Z

Collet W20 dia. 2mm

1930401-Z  
Collet W20 dia. 2.5mm

1930402-Z  
Collet W20 dia. 3mm

1930403-Z  
Collet W20 dia. 3.5mm

1930404-Z  
Collet W20 dia. 4mm

1930405-Z  
Collet W20 dia. 4.5mm

1930406-Z  
Collet W20 dia. 5mm

1930407-Z  
Collet W20 dia. 5.5mm

1930408-Z  
Collet W20 dia. 6mm

1930409-Z  
Collet W20 dia. 6.5mm

1930410-Z  
Collet W20 dia. 7mm

1930411-Z  
Collet W20 dia. 7.5mm

1930412-Z  
Collet W20 dia. 8mm

1930413-Z  
Collet W20 dia. 8.5mm

1930414-Z  
Collet W20 dia. 9mm

1930415-Z  
Collet W20 dia. 9.5mm

1930416-Z  
Collet W20 dia. 10mm

1930417-Z  
Collet W20 dia. 10.5mm

1930418-Z  
Collet W20 dia. 11mm

1930419-Z  
Collet W20 dia. 11.5mm

1930420-Z  
Collet W20 dia. 12mm

1930421-Z  
Collet W20 dia. 12.5mm

1930422-Z  
Collet W20 dia. 13mm

1930423-Z  
Collet W20 dia. 13.5mm

1930424-Z  
Collet W20 dia. 14mm

1930425-Z  
Collet W20 dia. 14.5mm

1930426-Z  
Collet W20 dia. 15mm

1930427-Z  
Collet W20 dia. 15.5mm

1930428-Z  
Collet W20 dia. 16mm

1930429-Z  
Collet W20 dia. 16.5mm

1930430-Z  
Collet W20 dia. 17mm

1930431-Z  
Collet W20 dia. 17.5mm

1930432-Z  
Collet W20 dia. 18mm

1930433-Z  
Collet W20 dia. 18.5mm

1930434-Z  
Collet W20 dia. 19mm

1930435-Z  
Collet W20 dia. 19.5mm

1930436-Z  
Collet W20 dia. 20mm

## Collets W25

1809703-Z  
Adaptor for collets W25 for fitting taper MT5

2439724-Z  
Adaptor for collets W25 for fitting taper ISO50

5558201-Z  
Set of 47 collets W25 dia. 2-25mm, in steps of 0.5mm  
Single collets orders possible

5558300-Z  
Set of 59 collets W25 dia. 3/32-1", in steps of 1/64"

1930542-Z  
Collet W25 dia. 0.5mm

1930543-Z  
Collet W25 dia. 1mm

1930544-Z  
Collet W25 dia. 1.5mm

1930437-Z  
Collet W25 dia. 2mm

1930438-Z  
Collet W25 dia. 2.5mm

1930439-Z  
Collet W25 dia. 3mm

1930440-Z  
Collet W25 dia. 3.5mm

1930441-Z  
Collet W25 dia. 4mm

1930442-Z  
Collet W25 dia. 4.5mm

1930443-Z  
Collet W25 dia. 5mm

1930444-Z  
Collet W25 dia. 5.5mm

1930445-Z  
Collet W25 dia. 6mm

1930446-Z  
Collet W25 dia. 6.5mm

1930447-Z  
Collet W25 dia. 7mm

1930448-Z  
Collet W25 dia. 7.5mm

1930449-Z  
Collet W25 dia. 8mm

1930450-Z  
Collet W25 dia. 8.5mm

1930451-Z  
Collet W25 dia. 9mm

1930452-Z  
Collet W25 dia. 9.5mm

1930453-Z  
Collet W25 dia. 10mm

1930454-Z  
Collet W25 dia. 10.5mm

1930455-Z  
Collet W25 dia. 11mm

1930456-Z  
Collet W25 dia. 11.5mm

1930457-Z  
Collet W25 dia. 12mm

1930458-Z  
Collet W25 dia. 12.5mm

1930459-Z  
Collet W25 dia. 13mm

1930460-Z  
Collet W25 dia. 13.5mm

1930461-Z  
Collet W25 dia. 14mm

1930462-Z  
Collet W25 dia. 14.5mm

1930463-Z  
Collet W25 dia. 15mm

1930464-Z  
Collet W25 dia 15.5mm 0.61"

1930465-Z  
Collet W25 dia. 16mm

1930466-Z  
Collet W25 dia. 16.5mm

1930467-Z  
Collet W25 dia. 17mm

1930468-Z  
Collet W25 dia. 17.5mm

1930469-Z  
Collet W25 dia. 18mm

1930470-Z  
Collet W25 dia. 18.5mm

1930471-Z  
Collet W25 dia. 19mm

1930472-Z  
Collet W25 dia. 19.5mm

1930473-Z  
Collet W25 dia. 20mm

1930474-Z  
Collet W25 dia. 20.5mm

1930475-Z  
Collet W25 dia. 21mm

1930476-Z  
Collet W25 dia. 21.5mm

1930477-Z  
Collet W25 dia. 22mm

1930478-Z  
Collet W25 dia. 22.5mm

1930479-Z  
Collet W25 dia. 23mm

1930480-Z  
Collet W25 dia. 23.5mm

1930481-Z  
Collet W25 dia. 24mm

1930482-Z  
Collet W25 dia. 24.5mm

1930483-Z  
Collet W25 dia. 25mm

## Collets B32

2439725-Z  
Adaptor for collets B32 for fitting taper ISO50  
Note: Requires manual draw-bar or clamping cylinder with  
clamping actuating tube

2439644-Z  
Set of 55 collets B32 dia. 3-30mm, in steps of 0.5mm  
Single collets orders possible

1930484-Z  
Collet B32 dia. 3mm

1930485-Z  
Collet B32 dia. 3.5mm

1930486-Z  
Collet B32 dia. 4mm

1930487-Z  
Collet B32 dia. 4.5mm

1930488-Z  
Collet B32 dia. 5mm

1930489-Z  
collet B32 dia. 5.5mm

1930490-Z  
Collet B32 dia. 6mm

1930491-Z  
Collet B32 dia. 6.5mm

1930492-Z  
Collet B32 dia. 7mm

1930493-Z  
Collet B32 dia. 7.5mm

1930494-Z  
Collet B32 dia. 8mm

1930495-Z  
Collet B32 dia. 8.5mm

1930496-Z  
Collet B32 dia. 9mm

1930497-Z  
Collet B32 dia. 9.5mm

1930498-Z  
Collet B32 dia. 10mm

1930499-Z  
Colltet B32 dia. 10.5mm

1930500-Z  
Collet B32 dia. 11mm

1930501-Z  
Collet B32 dia. 11.5mm

1930502-Z  
Collet B32 dia. 12mm

1930503-Z  
Collet B32 dia. 12.5mm

1930504-Z  
Collet B32 dia. 13mm

1930505-Z  
Collet B32 dia. 13.5mm

1930506-Z  
Collet B32 dia. 14mm

1930507-Z  
Collet B32 dia. 14.5mm

1930508-Z  
Collet B32 dia. 15mm

1930509-Z  
Collet B32 dia. 15.5mm

1930510-Z  
Collet B32 dia. 16mm

1930511-Z  
Collet B32 dia. 16.5mm

1930512-Z  
Collet B32 dia. 17mm

1930513-Z  
Collet B32 dia. 17.5mm

1930514-Z  
Collet B32 dia. 18mm

1930515-Z  
Collet B32 dia. 18.5mm

1930516-Z  
Collet B32 dia. 19mm

1930517-Z  
Collet B32 dia. 19.5mm

1930518-Z  
Collet B32 dia. 20mm

1930519-Z  
Collet B32 dia. 20.5mm

1930520-Z  
Collet B32 dia. 21mm

1930521-Z  
Collet B32 dia. 21.5mm

1930522-Z  
Collet B32 dia. 22mm

1930523-Z  
Collet B32 dia. 22.5mm

1930524-Z  
Collet B32 dia. 23mm

1930525-Z  
Collet B32 dia. 23.5mm

1930526-Z  
Collet B32 dia. 24mm

1930527-Z  
Collet B32 dia. 24.5mm

1930528-Z  
Collet B32 dia. 25mm

1930529-Z  
Collet B32 dia. 25.5mm

1930530-Z  
Collet B32 dia. 26mm

1930531-Z  
Collet B32 dia. 26.5mm

1930532-Z  
Collet B32 dia. 27mm

1930533-Z  
Collet B32 dia. 27.5mm

1930534-Z  
Collet B32 dia. 28mm

1930535-Z  
Collet B32 dia. 28.5mm

1930536-Z  
Collet B32 dia. 29mm

1930537-Z  
Collet B32 dia. 29.5mm

1930538-Z  
Collet B32 dia. 30mm

### **Collets Hardinge 5C**

General note on collet insert units:  
Requires hand chuck key or lever operated rapid clamping device for manual actuation or clamp actuating tube with the power chucking cylinder for controlled actuation (see machine booklet)

2909754-Z  
Adaptor for collets Hardinge 5C for fitting taper MT5

Note: Hardinge 5C collets have to be purchased by the representative of the customer

### **Adaptor for chucks**

2439773-Z  
Adaptor for chucks for fitting taper MT5, (with torsion protection) for the installation of flying clamping tools or devices provided with adaptor diam. 85mm / 3.35" by the customer.

Note: The manual draw-bar for fly-grinding security is required

2439678-Z  
Camlock head size 6, DIN 55029 for spindle nose dia. 110mm / 4.33" with interface for mounting of cut-in ring sensor. Enables quick and simple change of clamping devices for live spindle grinding

#### 2439721-Z

Bayonet head size 6, DIN 55027, 55022 for fitting taper ISO50. Enable fast and easy changeover from live chucks. Feeding through clamp actuating tube for use of power chucks possible.

Note: Must be dismantled when using centers

#### 2439870-Z

Combination bayonet head size 6, DIN55027, 55022 with integrated, revolving center attachment MT3 for workhead with fitting taper ISO50.

Incl. driver plate and driver (driving pin dia. 10mm) to use with centers.

Enables quick and simple change of uncontrolled clamping device for live spindle grinding and MT3 centers.

Note: Not for use with power chucks, because feeding clamp actuating tube through is not possible

#### 2439871-Z

Combination bayonet head size 6, DIN55027, 55022 with integrated, revolving center attachment MT4 for workhead with fitting taper ISO50.

Incl. driver plate and driver (driving pin dia. 10mm) to use with centers.

Enables quick and simple change of uncontrolled clamping device for live spindle grinding and MT4 centers.

Note: Not for use with power chucks, because feeding clamp actuating tube through is not possible

#### 2439679-Z

Intermediate flange for bayonet head or combination bayonet head with interface for mounting of a cut-in ring sensor

### **Adaptor for chuck (blank)**

#### 2439743-Z

Flange blank dia. 160mm / 6.30"  
for bayonet head size 6, DIN 55027, 55022  
for mounting of customer clamping devices  
or as face plate (face side unworked).

Material cast iron GC25

2439744-Z

Flange blank dia. 200mm / 7.87"  
for bayonet head size 6, DIN 55027, 55022  
for mounting of customer clamping devices  
or as face plate (face side unworked).  
Material cast iron GC25

2439745-Z

Flange blank dia. 250mm / 9.84"  
for bayonet head size 6, DIN 55027, 55022  
for mounting of customer clamping devices  
or as face plate (face side unworked).  
Material cast iron GC25

2439680-Z

Flange blank dia. 185mm / 7.28"  
for spindle nose dia. 110mm / 4.33" (with interface  
for cut-in ring sensor). Clamping device interface  
is unworked, suitable for holding a chuck up to dia.

Notes:

- Finishing must be carried out for each clamping device through a CO
- Only chucks fastened from the front with screws can be used as clamping devices

### Three-jaw chuck (manually operated)

2439777-Z

Three jaw manual chuck dia. 125mm / 4.92"  
for fitting taper MT5, (with torsion protection),  
spiral chuck, radial precision centering.  
Clamping range: outside dia. 3-125mm / .12-4.92",  
inside dia. 34-115mm / 1.34-4.53".

Repeating accuracy approx. 0.02mm / .000,79".

Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.

Note: Requires hand chuck key for locking  
clamping devices

#### 2439778-Z

Three jaw manual chuck dia. 160mm / 6.3"  
for fitting taper MT5, (with torsion protection),  
spiral chuck, radial precision centering.  
Clamping range: outside dia. 3-160mm / .12-6.3",  
inside dia. 42-154mm / 1.65-6.1".  
Repeating accuracy approx. 0.02mm / .000,79".  
Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.  
Note: Requires hand chuck key for locking clamping  
devices

#### 2439779-Z

Three jaw manual chuck dia. 200mm / 7.87"  
for fitting taper MT5, (with torsion protection),  
spiral chuck, radial precision centering.  
Clamping range: outside dia. 4-200mm / .16-7.87",  
inside dia. 52-202mm / 2.05-7.95".  
Repeating accuracy approx. 0.02mm / .000,79".  
Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.  
Note: Requires hand chuck key for locking clamping  
devices

#### 2439737-Z

Three-jaw manual chuck dia. 160mm / 6.3"  
for bayonet head size 6, DIN 55027, 55022,  
radial precision centering.  
Clamping range: outside dia. 3-160mm / .12-6.3",  
inside dia. 42-154mm / 1.65-6".  
Repeating accuracy approx. 0.02mm / .000,79".  
Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.  
Laying of a coolant tube for internal grinding  
process cooling is possible

#### 2439738-Z

Three-jaw manual chuck dia. 200mm / 7.87"  
for bayonet head size 6, DIN 55027, 55022,  
radial precision centering.  
Clamping range: outside dia. 4-200mm / .16-7.87",  
inside dia. 52-202mm / 2.05-7.95".  
Repeating accuracy approx. 0.02mm / .000,79".  
Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.  
Laying of a coolant tube for internal grinding  
process cooling is possible

### Three-jaw chuck (manually operated) wedge type

2627653-Z

Three jaw manual chuck dia. 125mm / 4.92"  
for Camlock head size 6, DIN 55029,, wedge type.  
Clamping range: Outside dia. 3-126mm / .12-4.96",  
inside dia. 27-128mm / 1.06-5.04", jaw stroke 4.8mm  
/ .19", repeating accuracy <0.02mm / .000,79".  
Incl. 1 set of standard jaws, 1 set of soft jaws  
and chuck key for chuck actuation.  
Laying of a coolant tube for internal grinding  
process cooling is possible

2909264-Z

Soft top jaws for three jaw manual chuck dia. 125mm  
/ 4.92" wedge type (L = 55mm / 2.17", W = 20mm /  
.79",  
H = 27.5mm / 1.08")

2439695-Z

Soft top jaws for three jaw manual chuck dia. 125mm  
/ 4.92" wedge type (L = 54mm / 2.12", W = 20mm  
/ 0.78", H = 27.5mm / 1.08")

2627655-Z

Three jaw manual chuck dia. 160mm / 6.3"  
for Camlock head size 6, DIN 55029,, wedge type.  
Clamping range: Outside dia. 5-162mm / .20-6.37",  
inside dia. 65-179mm / 2.56-7.04", jaw stroke 6.3mm  
/ .25", repeating accuracy <0.02mm / .000,79".  
Incl. 1 set of standard jaws, 1 set of soft jaws  
and chuck key for chuck actuation.  
Laying of a coolant tube for internal grinding  
process cooling is possible

2909265-Z

Soft top jaws for three jaw manual chuck  
dia. 160mm / 6.3" wedge type (L = 85mm / 3.35",  
W = 20mm / 0.79", H = 35.5mm / 1.39")

2439699-Z

Soft top jaws for three jaw manual chuck  
dia. 160mm / 6.3" wedge type (L = 105mm / 4.13",  
W = 20mm / 0.78", H = 35.5mm / 1.39")

2439780-Z

Three jaw manual chuck dia. 200mm / 7.87"  
for fitting taper MT5, (with torsion protection),  
wedge type. Clamping range:  
Outside dia. 7-192mm / .28-7.56",  
inside dia. 70-221mm / 2.76-8.7", jaw stroke  
6.8mm / .26", repeating accuracy <0.02mm / .000,79".  
Incl. 1 set of standard jaws and hard reversing jaws  
for outside or inside chucking and chuck key for chuck  
actuation. Laying of a coolant tube for internal  
grinding process cooling is possible

2627656-Z

Three jaw manual chuck dia. 200mm / 7.87"  
for Camlock head size 6, DIN 55029,, wedge type.  
Clamping range: Outside dia. 7-192mm / .27-7.56",  
inside dia. 70-221mm / 2.76-8.7", jaw stroke 6.8mm  
/ .27", repeating accuracy <0.02mm / .000,79".  
Incl. 1 set of standard jaws, 1 set of soft jaws  
and chuck key for chuck actuation.  
Laying of a coolant tube for internal grinding  
process cooling is possible

2439765-Z

Soft top jaws for three jaw manual chuck dia. 200mm  
/ 7.87" wedge type (L = 105mm / 4.13", W = 22mm /  
0.87",  
H = 42mm / 1.65")

2439764-Z

Soft top jaws for three jaw manual chuck dia. 200mm  
/ 7.87" wedge type (L = 125mm / 4.92", W = 22mm  
/ 0.87", H = 42mm / 1.65")

#### **Four-jaw manually operated chuck (spiral chuck)**

2439781-Z

Four-jaw manual chuck dia. 125mm / 4.92"  
for fitting taper MT5, (with torsion protection),  
spiral chuck. Clamping range: External dia. 3-125mm  
/ .12-4.92", internal dia. 34-115mm / 1.34-4.53".  
The jaws are individually adjustable.  
Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.  
Note: The manual draw-bar for fly-grinding security  
is required

2439782-Z

Four-jaw manual chuck dia. 160mm / 6.29"  
for fitting taper MT5, (with torsion protection),  
spiral chuck. Clamping range: External dia. 3-160mm  
/ .12-6.3", internal dia. 42-160mm / 1.65-6.5".

The jaws are individually adjustable.

Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.

Note: The manual draw-bar for fly-grinding security  
is required

2439739-Z

Four-jaw precision manual chuck dia. 160mm / 6.3"  
for bayonet head size 6, DIN 55027, 55022.

Clamping range: outside dia. 3-160mm / .12-6.3",  
inside dia. 42-160mm / 1.65-6.3".

Incl. hard jaws (1 set for outside and 1 set for  
inside chucking), chuck key and adjusting key.

The jaws are individually adjustable.

Laying of a coolant tube for internal grinding  
process cooling is possible

## Face plate

2439775-Z

Face plate dia. 195mm / 7.67"  
for fitting taper MT5 (with torsion protection).  
Wheel with 4 T-slots and slit-holes to clamp  
workpieces or clamping tools.

Note: The manual draw-bar for fly-grinding security  
is required

2627659-Z

Face plate dia. 180mm / 7.09" for Camolock head  
size 6, DIN 55029 with 4 T-slots and slit-holes  
to clamp workpieces or clamping tools

2439735-Z

Face plate dia. 195mm / 7.68"  
for bayonet head size 6, DIN 55027, 55022.  
Plate with 4 T-slots and slit-holes to  
clamp workpieces or clamping tools

2439736-Z

Face plate dia. 240mm / 9.45"  
for bayonet head size 6, DIN 55027, 55022.  
Plate without T-slots and slit-holes

## Magnetic chuck

2439783-Z

Magnetic chuck dia. 120mm / 4.72"  
for fitting taper MT5 (with torsion protection),  
permanent magnet.

Note: Draw-bar for collet and chuck necessary

2439740-Z

Magnetic chuck dia. 120mm / 4.27"  
for bayonet head size 6, DIN 55027, 55022  
(permement magnet)

2439784-Z

Magnetic chuck dia. 165mm / 6.5"  
for fitting taper MT5 (with torsion protection),  
permanent magnet.

Note: Draw-bar for collet and chuck necessary

2439741-Z

Magnetic chuck dia. 165mm /6.50"  
for bayonet head size 6, DIN 55027, 55022,  
(permement magnet)

2627660-Z

Magnetic chuck dia. 165mm /6.50"  
for Camolock head size 6, DIN 55029

2439785-Z

Magnetic chuck dia. 230mm / 9.06"  
for fitting taper MT5 (with torsion protection),  
permanent magnet.

Note: Draw-bar for collet and chuck necessary

2439742-Z

Magnetic chuck dia. 230mm / 9.06"  
for bayonet head size 6, DIN 55027, 55022  
(permement magnet)

## Power chuck

2439786-Z

3 jaw power chuc dia. 110mm / 4.33"  
for fitting taper MT5 (with torsion protection),  
incl. clamp actuating tube adaptor.  
Clamping range: outside dia. 6-106mm / .24-4.17",  
inside dia. 42-135mm / 1.65-5.31".  
Jaw stroke: 3.2mm / .126", repeating accuracy  
<0.02mm / .000,79".

Incl. 1 set of one-piece hard reversing jaws for  
outside and inside chucking. Jaw holding fixture,  
serrated 1/16"x90°. Laying of a coolant tube for  
internal grinding process cooling is possible.

Notes:

- Conversion to other clamping devices is  
expensive
- Requires pneumatic clamping cylinder

2909643-Z

Soft top jaws for power chuck dia. 110mm / 4.33"  
(L=40 / 1.57", W=26.5 / 1.04", H=32mm / 1.18").

Note: For jaws with a prescribed diameter,  
it is necessary to order a jaw machining per dia.  
by a design order

2409687-Z

Precision power chuck dia. 110mm / 4.33"  
for fitting taper MT5 (with torsion protection),  
incl. clamp actuating tube adaptor. Without jaws.  
Radial fine-centering device.  
Jaw stroke: 1.25mm / .05", repeating accuracy  
<0.002mm / .000,79". Jaw holding fixture with ball  
positioning  
for jaw changing precision within 0.005mm / .000,2".  
Laying of a coolant tube for internal grinding  
process cooling is possible.

Notes:

- Conversion to other clamping devices is  
expensive
- Requires pneumatic clamping cylinder
- Correspondent top jaws for each clamping  
diameter required

#### 2909721-Z

Soft top jaws for precision power chuck  
dia. 110mm / 4.33" (L=49mm / 1.93", W=18mm /  
.71",  
H=28mm / 1.1").

#### Notes:

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order a jaw machining for each dia. by a design order indicating the desired diameter

#### 2909723-Z

Chuck simulator for precision power chuck  
dia. 110mm / 4.33" for precise pre-machining  
of top jaws

#### 2909725-Z

Pretension discs for outside chucking for precision  
power chuck dia. 110mm / 4.33". For precise grinding  
of the clamping diameter on the jaws. Pretension  
disc can be removed without removal of the jaws.  
Set consists of 8 discs, graduation 0.25mm / .010"

#### 2909727-Z

Pretension ring for inside chucking for precision  
power chuck dia. 110mm / 4.33". For precise grinding  
of the clamping diameter on the jaws. The ring can  
be clamped in 4 different positions with a pretension  
diameter difference of 0.5mm / .02" for each. By means  
of 3 cyl. pins dia. 5mm / .2" or 6mm / .24" it is  
possible to cover the whole clamping range  
(supplied without cyl. pins)

#### 2439787-Z

3 jaw power chuck dia. 160mm / 6.3"  
for fitting taper MT5 (with torsion protection),  
incl. clamp actuating tube adaptor.  
Clamping range: outside dia. 6-165mm / .24-6.5",  
inside dia. 36-181mm / 1.42-7.12".  
Jaw stroke: 3.6mm / .14", repeating accuracy  
<0.02mm / .000,79".  
Incl. 1 set of one-piece hard reversing jaws for  
outside and inside chucking. Jaw holding fixture,  
serrated 1/16"x90°. Laying of a coolant tube for

internal grinding process cooling is possible.

Notes:

- Conversion to other clamping devices is expensive
- Requires pneumatic clamping cylinder

2909676-Z

Soft top jaws for power chuck dia. 160mm / 6.3"  
(L=55 / 2.17", W=26.5 / 1.04", H=38mm / 1.5").

Note: For jaws with a prescribed diameter, it is necessary to order a jaw machining for each dia. by a design order indicating the desired diameter

2409686-Z

Precision power chuck dia. 160mm/6.3"  
for fitting taper MT5 (with torsion protection),  
incl. clamp actuating tube adaptor. Without jaws.  
Radial fine-centering device.

Jaw stroke: 2.5mm/.10", repeating accuracy  
<0.002mm /.000,79". Jaw holding fixture with ball  
positioning for jaw changing precision within 0.005mm  
/.000,2". Laying of a coolant tube for internal  
grinding process cooling is possible.

Notes:

- Conversion to other clamping devices is expensive
- Requires pneumatic clamping cylinder
- Correspondent top jaws for each clamping diameter required

2909720-Z

Soft top jaws for precision power chuck dia. 160mm  
/ 6.3" (L=72mm / 2.83", W=26mm / 1.02", H=36mm  
/ 1.42").

Notes:

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order a jaw machining for each dia. by a design order indicating the desired diameter

2909722-Z

Chuck simulator for precision power chuck dia. 160mm  
/ 6.3" for precise pre-machining of top jaws

#### 2909724-Z

Pretension discs for outside chucking for precision power chuck dia. 160mm / 6.3". For precise grinding of the clamping diameter on the jaws. Pretension disc can be removed without removal of the jaws. Set consists of 17 discs, graduation 0.25mm / .010"

#### 2909726-Z

Pretension ring for inside chucking for precision power chuck dia. 160mm / 6.3". For precise grinding of the clamping diameter on the jaws. The ring can be clamped in 4 different positions with a pretension diameter difference of 0.5mm / .02" for each. By means of 3 cyl. pins dia. 5mm / .20" or 6mm / .24" it is possible to cover the whole clamping range (supplied without cyl. pins)

#### 2439685-Z

3 jaw power chuck dia. 200mm / 7.87"  
for bayonet head siz 6, DIN 55027, 55022, radial fine-centering device.  
Clamping range: outside dia. 26-231mm / 1.02-9.1",  
inside dia. 74-270mm / 2.91-10.63".  
Jaw stroke 5.3mm / .20". Repeating accuracy <0.02mm / .000,79". Jaw holding fixture, serrated 1/16"x90 deg.  
Incl. 1 set of one-piece hard reversing jaws for outside and inside chucking. Laying of a coolant tube for internal grinding process cooling is possible.  
Note: Clamping cylinder and clamping actuating tube necessary

#### 2439790-Z

3 jaw power chuck dia. 200mm / 7.87"  
for fitting taper MT5 (with torsion protection),  
incl. clamp actuating tube adaptor.  
Clamping range: outside dia. 26-231mm / 1.02-9.09",  
inside dia. 74-270mm / 2.91-10.62".  
Jaw stroke: 5.3mm / .20", repeating accuracy <0.02mm / .000,79".  
Incl. 1 set of one-piece hard reversing jaws for outside and inside chucking. Jaw holding fixture, serrated 1/16"x90°. Laying of a coolant tube for internal grinding process cooling is possible.  
Notes:  
-- Conversion to other clamping devices is expensive  
-- Clamping cylinder and clamping actuating tube necessary

#### 2439749-Z

Soft top jaws for power chuck dia. 200mm / 7.87"  
(L=80mm / 3.15", W=40mm / 1.57", H=40mm /  
1.57").

Note: For jaws with a prescribed diameter, it  
is necessary to order a jaw machining per dia.  
by a design order

#### 2439755-Z

Chuck simulator for power chuck dia. 200mm / 7.87"  
for precise pre-machining of top jaws

#### 2439686-Z

3 jaw precision power chuck dia. 200mm / 7.87"  
for bayonet head size 6, DIN 55027, 55022, radial  
fine centering. Jaw holding fixture with ball  
positioning for precision jaw changing. Jaw stroke  
2.5 mm / .10".

Repeating accuracy <0.002 mm / .000,079".

Incl. 1 set of soft reversing jaws. Correspondent top  
jaws for each clamping diameter required. Laying of  
a coolant tube for internal grinding process cooling  
is possible.

Notes:

- Clamping cylinder and clamping actuating tube  
necessary
- For jaws with a prescribed diameter, it is neces-  
sary to order a jaw machining by a design order

#### 2409685-Z

3 jaw precision power chuck dia. 200mm / 7.87"  
for fitting taper MT5 (with torsion protection),  
incl. clamp actuating tube adaptor. Without jaws.  
Radial fine-centering device.

Jaw stroke: 2.5mm / .10", repeating accuracy  
<0.002mm / .000,79". Jaw holding fixture with ball  
positioning for jaw changing precision within 0.005mm  
/ .000,2". Laying of a coolant tube for internal  
grinding process cooling is possible.

Notes:

- Conversion to other clamping devices is expensive
- Requires pneumatic clamping cylinder
- Correspondent top jaws for each clamping diameter  
required

2439751-Z

Soft top jaws for precision power chuck  
dia. 200mm / 7.87" (L=90mm / 3.54", W=26mm /  
1.02",  
H=40mm / 1.57").

Notes:

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is  
necessary to order a jaw machining for each  
dia. by a design order indicating the desired  
diameter

2439752-Z

Chuck simulator for precision power chuck dia. 200mm  
/ 7.87" for precise pre-machining of top jaws

2439753-Z

Pretension discs for outside chucking for precision  
power chuck dia. 200mm / 7.87". For precise grinding  
of the clamping diameter on the jaws. Pretension  
disc can be removed without removal of the jaws.  
Set consists of 17 discs, graduation 0.25mm / .010"

2439754-Z

Pretension ring for inside chucking for precision  
power chuck dia. 200mm / 7.87". For precise grinding  
of the clamping diameter on the jaws. The ring can be  
clamped in 4 different positions with a pretension  
diameter difference of 0.5mm/.02" for each. By means  
of 3 cyl. pins dia. 5mm / .20" or 6mm / .24" it is  
possible to cover the whole clamping range (supplied  
without cyl. pins)

2909656-ZK

Working of soft jaws for chuck, dia.: ...mm

Note: 1 x for diameter necessary

## Centres with adaptor MT2

0138004-Z

Full centre long dia. 20mm/.79" MT2

0166025-Z

Full centre short dia. 20mm/.79" MT2

0810052-Z

Half centre short dia. 20/2.5mm/.79/.10" MT2

0138005-Z  
Half centre long dia. 20/2.5mm/.79/.10" MT2

0166026-Z  
Blunt centre long dia. 28mm/1.1" MT2

0166029-Z  
Blunt center long dia. 38mm/1.5" MT2

0166030-Z  
Blunt center long dia. 48mm/1.89" MT2

0138006-Z  
Blunt half centre dia. 28/10mm/1.1/.4" MT2

0809087-Z  
Female full centre short dia. 4mm/.157" MT2

0865023-Z  
Female full centre short dia. 12mm/.47" MT2

0810031-Z  
Female full centre long dia. 4mm/.157" MT2

0810032-Z  
Female half centre dia. 4/2.5mm/.157/.10" MT2

### Centres with adaptor MT3

0709017-Z  
Full centre short dia. 26mm/1.02" MT3

0710020-Z  
Full centre long dia. 26mm/1.02" MT3

0710021-Z  
Half centre short dia. 26/4mm/1.02/.157" MT3

0710045-Z  
Half centre long dia. 26/2mm/1.02/.08" MT3

0709058-Z  
Blunt centre dia. 28mm/1.1" MT3

0709059-Z  
Blunt centre dia. 38mm/1.5" MT3

0709044-Z  
Blunt centre dia. 48mm/1.89" MT3

1865052-Z  
Blunt half centre dia. 28/12mm/1.1/.472" MT3

0709057-Z  
Female full centre dia. 3mm/.118" MT3

1865051-Z  
Female full centre dia. 12mm/.472" MT3

0710048-Z  
Female half centre dia. 3/2mm/.118/.08" MT3

#### **Centres with adaptor MT4**

2810030-Z  
Full centre short dia. 35mm/1.38" MT4

2810182-Z  
Full centre long dia. 35mm/1.38" MT4

2810031-Z  
Half centre short dia. 35/13mm/1.38/.51" MT4

2810183-Z  
Half centre long dia. 35/13mm/1.38/.51" MT4

#### **Tailstock**

2237720-Z  
Tailstock for set-up (set-up aid for setting 3-jaw steady on internal grinding unit)

#### **Steady**

2414618-Z  
Two-point steady for dia. 4-88 mm / 0.16-3.5"  
(centre height 175mm / 6.89")

2414622-Z  
Two-point steady for dia. 10-100mm / 0.4-4"  
(centre height 175mm / 6.89")

2414611-Z  
Three-jaw steady for dia. 5-140mm / .2-5.51",  
(for centre height 175mm / 6.89") with fine adjustment

2414614-Z

Three-jaw steady for dia. 125-230mm / 4.92-9.05"  
(centre height 175mm / 6.89") with fine adjustment

Note: Dial gauging radial see chapter "various"

#### **Prism support**

2414626-Z

Prism support (2 pieces) for dia. 15-150mm  
/ 0.6-5.9" (centre height 175mm / 6.89")

#### **Dressing tool holder for workhead or tailstock**

2915601-Z

Dressing tool holder vertically adjustable  
for workhead or tailstock.

With 3 fitting tapers Morse1 shortened for  
2 dressing tools

2915606-Z

Dressing tool holder vertically adjustable, for  
workhead or tailstock. With 1 taper dia. 9.52mm  
/ .37" for dressing for thread grinding applications  
with one dressing tool

#### **Dressing attachment (non controled)**

2915628-Z

Dressing device attachable to the workpiece  
table center height 175mm/6.89", movable in  
direction X.

Note: Requires dressing tool holder  
vertically adjustable for dressing device

Note: Can be set up for internal grinding with infeed direction  
forward (direction X) or, alternatively, for external grinding  
wheels, but not simultaneously

#### **Dressing tool holder for dressing attachment**

2915609-Z

Dressing tool holder vertically adjustable for dressing  
device on workpiece table, with 2 connecting bores  
oblique MT1 shortened, for 2 dressing tools

#### 2915602-Z

Dressing tool holder vertically adjustable for dressing attachment. With 3 fitting tapers MT1 shortened for 2 dressing tools

Note: Not suitable for use on swiveling dressing device

#### 2915646-Z

Dressing tool holder height adjustable for dressing device on the workpiece table, with 1 connecting bore straight dia. 9.52mm / .37" for dressing while thread grinding with 1 cylindrical dressing tool and 1 connecting bore straight MT1 shortened, for 1 dressing tool

### Dressing turbine

#### 2915666-Z

Dressing spindle 30000min-1 for dressing of internal grinding wheels on live spindle grinding. Power supply 0.32 kW. Spindle dia. 50mm / 1.97" with collet holding fixture type D14, incl. collet dia. 4mm / .16". Connection cable length 4m with axial cable connection on the spindle and Harting plug HAN 6 A with lateral cable output (Spindle according to electrical specification 1330366A).

Notes:

- Requires spindle holder dia. 50mm / 1.97"
- Requires dressing frequency converter
- Dressing tool has to be ordered separately

#### 2915672-Z

Dressing spindle 12'000 min-1 power supply 0.34kW with dressing tool holding fixture Ø 40-h3 (clamping type W). Connection cable length 4.5m and Harting plug HAN-Modul with lateral cable output (spindle according to electrical specification 1330366A).

Conditions:

- Requires spindle holder with clamping type W
- Requires dressing frequency converter
- Dressing tool has to be ordered separately
- Dressing wheel diameter <= 100mm

#### 2915623-Z

Spindle holder on workpiece table dia. 50mm / 1.97" for dressing spindle. Angle range adjustable -6 deg. to +3 deg. (Centre height 175mm / 6.89")

2915636-Z

Spindle holder dia. 50mm / 1.97" for dressing spindle  
(on hinged dressing attachment)

2915670-Z

Spindle holder 5° height adjustable for mounting  
of a dressing spindle type W, either on the  
workhead or on the tailstock

2915671-Z

Spindle holder 0° height adjustable for mounting  
of a dressing spindle type W, either on the workhead  
or on the tailstock; for dressing when thread grinding

### **M-sensor for dressing spindle**

2915682-Z

M-sensor for dressing spindle 12'000min-1  
(clamping type W), for cut-in detection on  
rotating dressing. Incl. sensor holder for  
mounting on the spindle holder and plugable  
connection cable (length 5m)  
(Electronic cut-in detection Sensitron 2 required)

### **Dressing tools with fitting taper MT1 shortened**

2813076-Z

Grain fliese diamond 1.15 mm/.045" with fitting  
taper MT1 shortened

5560732-Z

Needle fliese type DV/10 NX, hight 10mm / .39",  
length 18mm / .71" with fitting taper MT1 shortened

5560731-Z

Needle fliese type DV/20 NX, hight 20mm / .79",  
length 20mm / .79" with fitting taper MT1 shortened

5560511-Z

Needle fliese type MKD-3-0640 DV/10, hight 10mm /  
.39",  
length 18mm / .71" with fitting taper MT1 shortened

5560512-Z

Needle fliese type CVD-3-0640 DV/10, hight 10mm /  
.39",  
length 18mm / .71" with fitting taper MT1 shortened

2813077-Z  
Single point diamond 0.1 carat,  
with fitting taper MT1 shortened

2813079-Z  
Single point diamond 1.5 carat

5560304-Z  
Single point diamond 0.45 carat 55 deg.  
R 0.25mm / .01"

5560305-Z  
Single point diamond 0.45 carat 55 deg.  
R 0.5mm / .02"

2813075-Z  
Impregnated diamond grit 25

2813081-Z  
Impregnated diamond grit 100

5560709-Z  
Impregnated diamond with fitting taper MT1 shortened

#### **PCD-dressing plate with sep. fitting taper**

5560721-Z  
PCD-dressing plate R 0.125mm/.005"

5560722-Z  
PCD-dressing plate R 0.25mm/.01"

5560723-Z  
PCD-dressing plate R 0.5mm/.02"

5560727-Z  
Adaptor for PCD-dressing plates (self-centering)

#### **Grain fliese diamonds with sep. fitting taper**

5560712-Z  
Grain fliese diamond 1.15mm/.045"

5560714-Z  
Grain fliese diamond 0.9mm/.035"

5560719-Z  
Grain fliese diamond 0.75mm/.03"

5560708-Z  
Adaptor MT1 shortened for grain fliese diamonds

#### **Dressing tools with cylindrical shaft dia 9.52x35mm**

2415112-Z  
Single point diamond R 0.125, 40deg.  
(cylindrical shaft dia. 9.52x35mm / .37x1.38")

2415113-Z  
Single point diamond R 0.250, 40deg.  
(cylindrical shaft dia. 9.52x35mm / .37x1.38")

2415114-Z  
Profile diamond R 0.125, 40°, MKD  
(cylindrical shaft dia. 9.52x35mm / .37x1.38")

2415115-Z  
Profile diamond R 0.250, 40°, MKD (cylindrical  
shaft dia. 9.52x35mm/.37x1.38")

#### **dressing motor spindle dia. 50mm / 1.97"**

5560504-Z  
Diamond tipped cupwheel dia. 15x13mm / 0.59x0.51",  
shaft dia. 4mm / 0.16"

5560509-Z  
Diamond tipped cupwheel (10 deg. tapered)  
dia. 16x15mm / 0.63x0.59", shaft dia. 4mm / 0.16"

#### **Auxiliary attachment for the adjustment of the dressing tool height**

2621605-Z  
Auxiliary attachment to adjust stationary dressing  
tools to 175mm/6.89" center height

#### **Footpedal**

2404753-Z  
Approval pedal to carry out movements with open  
operating doors (with switch-off above the stroke).  
Facilitates workpiece alignment in the chucks.  
Connection cable length 3.5m

2404754-Z

Footpedal for clamping devices for electrically controlled clamping devices (hydraulic tailstock retraction, chucks etc.) Double foot pedal (clamping/unclamping) with over-travel switch on the clamping pedal. Connection cable length 3.5m

### First cut recognition

2404770-Z

Electronic cut-in detection Sensitron 2

For customer assembly, consisting of:

- Desktop model with LED display, manual setting of sensitivity and connection possibility of 2 sensors. Plugable interface cables 1.95m and feeder for 24VDC supply from the machine.
- 1 cut-in sensor with magnetic base as set-up assistance and for cut-in detection in grinding between centers, (except with rotating tailstock center) as well as for cut-in detection on non rotating dressing tools. connecting cable length 4m plugable

### Dynamic balancing

2912690-Z

Portable 1-level MPM 3.BMT100M.24 dynamic balancing device with an operating voltage of 24V DC.

Display unit for manual adjustment of the balancing segments on a one-sided grinding wheel adaptor after a dynamic imbalance check.

Note: One device can be used for several machines, if these are equipped with an interface for manual 1-level MPM dynamic balancing and an MPM balancing sensor for each spindle

Note: Requires MPM balancing sensors and ancillary equipment

2912792-Z

MPM balancing sensors and ancillary equipment for portable balancing unit BMT100

for customer assembly, consisting of:

- Balancing sensor dia. 25mm/.98" with magnetic base, plugable feeder cable 1.50m and connecting cable 2.80m
- Revolution sensor (initiator) with plugable connecting cable 3.10m
- Feeder cable 2.8m for 24VDC power supply (plugable) from machine
- Display unit support

Note: Can not be used for several machines

## Input and output units

2404657-Z

External disk unit 3 1/2" (Fanuc Handy File) incl. 7m cable. MS-DOS-compatible

2219605-Z

Discs 3 1/2", 2HD (package with 10 pieces)

1332655-Z

Transmission cable RS 232 C for the connection Fanuc-control <--> personal computer, length 5m.

Note: Not necessary if the machine and PC is equipped with HSSB and optical fiber transmission cable

1389854-Z

Studer Ethernet transmission cable (Crossover) for connecting the Fanuc control system to an external PC, length 10m.

Note: Cannot be used as network cable

## Communication software

1397019-Z

StCom for Windows 4.x software pack for transferring data and grinding programs from Fanuc control system to a PC or vice versa through the serial interface.

Dialog language German / English / French / Italian (switchable), incl. integrated operating instructions.

System requirements:

Personal computer with:

- Operating system: Microsoft Windows 95 or higher
- Pentium processor
- 16MB random access memory (RAM)
- CD-ROM and 3.5" floppy disk drive
- Free serial interface RS 232 C
- MOUSE

Studer grinding machine with:

- Fanuc control system and Studer operating system Release A or higher

Scope of supply:

- Software on CD-ROM and license key on 3.5" floppy disk
- Installation instructions German / English

Note: Requires RS 232 C data cable

## Marposs

2431610-Z

Breaking piece for measuring probe Marposs T25G (spare part)

2429819-Z

Measuring tip for measuring probe Marposs T25G (spare part)

2431688-Z

Support for mounting 2 positioning measuring heads Unimar P50 stacked on one hydraulic retraction unit for measuring of lengths

2431696-Z

Support to hydraulic retraction unit to enable mounting of 2 diameter measuring heads Unimar S20 or S30 side on side on the same retraction unit. Distance of measuring between 8.5mm-50mm/0.33-1.97" with standard measuring feelers

#### 2431697-Z

Support to hydraulic retraction unit to enable mounting of 2 diameter measuring heads Unimar S20 or S30 side on side on the same retraction unit. Distance of measuring between 8.5mm-90mm/0.33-3.54" with standard measuring feelers

#### 2431698-Z

Set of extension parts to Unimar S31 for a dia. range up to 160mm / 6.3"

#### 2431616-Z

Diameter measuring stand Marposs DIRAC 4N for bore control.

- Diameter measuring range 4-50mm/.16-1.97" (vertical measuring arrangement)
- Repeatability <0.0001mm/.000,004"
- Precision <0.0005mm/.000,02
- Thermal drift <0.0001mm/.000,004"/°K
- Measuring depth 20mm/.79" (other measuring depth on request)
- Cable length 3m.

Condition:

- Occupied one measuring circuit
- For each diameter a centering measuring arbor is necessary (evtl. extension cable)

#### 2429651-ZK

Centering arbor for match-measuring tripod DIRAC 4N for measuring inside diameter of .....mm according to drawing No. .... (The diameter must be within the measuring range of the match-measuring tripod).

Note: Workpiece-dependent, 1 x per inside diameter required

#### 2429653-Z

Hand measuring arbor Marposs M1 electron Base:

- Diameter range 9-15mm/.35-.59"
- Precision <0.001mm/.000,04"
- Max. measuring depth 50mm/1.97"
- Cable length 3 m

Note: For each diameter a measuring sleeve is necessary (evtl. extension cable)

2429655-ZK

Measuring sleeve for hand measuring arbor Marposs M1 electron Base dia. 9-15mm / .35-.59", consisting of guiding sleeve and measuring probe for dia. ....mm.  
Remark: Workpiece-dependent, 1 x per inside diameter required

2429657-Z

Hand measuring arbor Marposs M1 electron Base:  
-- Diameter range 15-36mm/.59-1.42"  
-- Precision <0.001mm/.000.04"  
-- Max. measuring depth 50mm/1.97"  
-- Cable length 3m

Note: For each diameter a measuring sleeve is necessary (evtl. extension cable)

2429659-ZK

Measuring sleeve for hand measuring arbor Marposs M1 electron Base dia. 15-36mm / .59-1.42", consisting of guiding sleeve and measuring probe for dia. ....mm.  
Remark: Workpiece dependent, 1x per internal diameter necessary

2429661-Z

Hand measuring arbor Marposs M1 electron Base:  
-- Diameter range 36-120mm/1.42-4.72"  
-- Precision <0.001mm/.000,04"  
-- Max. measuring depth 50mm/1.97"  
-- Cable length 3m

Condition: For each diameter a measuring sleeve is necessary (evtl. extension cable)

2429663-ZK

Measuring sleeve for hand measuring arbor Marposs M1 electron Base dia. 36-120mm / 1.42-4.72", consisting of guiding sleeve and measuring probe for dia. ....mm.  
Remark: Workpiece dependent, 1x per internal diameter necessary

**Movomatic**

2431624-Z

Measuring tip with rated break point for measuring probe Movomatic C25 (spare part)

2431723-Z

Gauging control Movomatic ES124

(table-top version with connection elements for S33 with center distance 650 mm / 25.59") with connection elements. Display and operation on the front panel of the gauging control unit.

The following operation are possible, however, not always simultaneously (see measuring circuit assignment).

- Diameter measurement with head diam. 1 and 2
- Longitudinal positioning, passive, with head TMP91 on stationary or rotating workpiece
- Longitudinal measurement with head TMP91 and the one for longitudinal positioning, passive
- Match-measuring for diameter matching.

The gauging unit features 2 measuring circuits (A, B) for the detectors. Each of them can be assigned only once.

Measuring head	Measuring circuit
CR100 Ø1	A
CR100 Ø2	B
CR257 Ø1	A B
TMP91 LP	B
TMP91 L1	A
CI213	B

Notes:

- The measuring heads have to be ordered separately.

The connection material includes: connection cable, hydraulic pipes and assembly plate with 2 hydraulic valves controlling the 2 measuring soles (1 function yellow, 1 function red).

The cables are plug-in type.

The hydraulic pipes and the valves have to be installed by the customer until series 34

2431734-Z

Gauging control Movomatic ES124

(table-top version with connection elements for S33 with center distance 1000 mm / 39.37") with connection elements. Display and operation on the front panel of the gauging control unit.

The following operation are possible, however, not always simultaneously (see measuring circuit assignment).

- Diameter measurement with head diam. 1 and 2
- Longitudinal positioning, passive, with head TMP91 on stationary or rotating workpiece
- Longitudinal measurement with head TMP91 and the one for longitudinal positioning, passive
- Match-measuring for diameter matching.

The gauging unit features 2 measuring circuits (A, B) for the detectors. Each of them can be assigned only once.

Measuring head	Measuring circuit
CR100 Ø1	A
CR100 Ø2	B
CR257 Ø1	A B
TMP91 LP	B
TMP91 L1	A
CI213	B

Notes:

- The measuring heads have to be ordered separately.

The connection material includes: connection cable, hydraulic pipes and assembly plate with 2 hydraulic valves controlling the 2 measuring soles (1 function yellow, 1 function red).

The cables are plug-in type.

The hydraulic pipes and the valves have to be installed by the customer until series 34

#### 2431724-Z

Length positioning measuring head Movomatic TMP91 for positioning passive for non-interrupted and interrupted surfaces (incl. measuring sole and ancillary equipment for S33).

- Measuring range  $\pm 2.5\text{mm}/.10''$ , thereof evaluatable through in-process gauging  $\pm 1.638\text{mm}/.064''$
- Repeatability  $0.0002\text{mm}/.000,008''$
- Electric probe lift-off.

Measuring sole type A with hydr. retraction, stroke  $60\text{mm}/2.36''$ . Incl. end-position surveillance rear and front. Connection cable length 3m, hydraulic pipes  $0.5\text{ m} / 19.69''$ .

Note: Reserves a measuring circuit until series 34

#### 2431725-Z

Diameter measuring head Movomatic CR100 for non-interrupted surfaces (incl. measuring sole and ancillary equipment for S33).

- Diameter range, dia. 4-100mm
- Measuring range  $\pm 0.7\text{mm}$
- Repeatability  $0.0002\text{mm}$  (without interruptions)
- Repeatability  $0.0003-0.01\text{mm}$  (with interruptions)
- Accuracy  $<0.001\text{mm}$
- With electronic detector lift-off

Measuring sole type A with hydraulic withdrawal, stroke  $\approx 60\text{mm}$ , incl. back/front limit position monitoring. Connection cable length 3m, hydraulic pipes  $0.5\text{ m} / 19.69''$ .

Note: One measuring circuit is assigned until series 34

#### 2431726-Z

Diameter measuring head Movomatic CR257 to measure uninterrupted and interrupted surfaces (incl. measuring sole and ancillary equipment for S33).

- Diameter range, dia. 6-96mm
- Measuring range  $\pm 0.7\text{mm}$
- Repeatability  $0.0002\text{mm}$  (without interruptions)
- Repeatability  $0.0003-0.01\text{mm}$  (with interruptions)
- Accuracy  $<0.001\text{mm}$
- With electronic detector lift-off

Measuring sole type A with hydraulic withdrawal,

stroke =60mm, incl. back/front limit position monitoring. Connection cable length 3m, hydraulic pipes 0.5 m / 19.26".

Note: 2 measuring circuits are assigned until series 34

### Diameter measuring stand

2429683-Z

Diameter measuring stand Movomatic CI213 for bore control (vertical measuring arrangement).

- Measuring range 4-150mm/.16-5.91"
- Repeatability <0.0001mm/.000,004" measuring depth 1 x nominal diameter
- Precision <0.0005mm/.000,2"
- Cable length 3m

Condition:

- Occupied one measuring circuit
- For each diameter a centering measuring arbor is necessary (evtl. extension cable)

### Centering measuring arbor

2429685-ZK

Measuring and centering arbor within dia. 4-20mm / .16-.79" for match-measuring tripod CI213, designed for dia....mm according to drawing No. ....

Measuring depth:

- Minimum 0.5mm / .02"
- Standard = 1 x nominal diameter
- Absolute maximum = 3 x nominal diameter

Note: Workpiece-dependent, 1 x per inside diameter required

2429817-ZK

Measuring and centering arbor within Ø20.1-40mm /079-1.57" for match-measuring tripod CI213, designed for dia....mm according to drawing No. ....

Measuring depth:

- Minimum 0.5mm/.02"
- Standard = 1 x nominal diameter
- Absolute maximum = 3 x nominal diameter

Note: Workpiece-dependent, 1 x per inside diameter required

2429818-ZK

Measuring and centering arbor within dia. 40.1-100mm  
/ 1.57-3.94" for match-measuring tripod CI213,  
designed for dia....mm according to drawing No. ....

Measuring depth:

-- Minimum 0.5mm / .02"

-- Standard = 1 x nominal diameter

-- Absolute maximum = 3 x nominal diameter

Note: Workpiece-dependent, 1 x per inside  
diameter required

### **Hydraulic and lubricating oil**

For X-/Z-axes: Oil Shell Tonna S32

For spindle screw lubrication: Grease Klüber Staburags NBU 8 EP

For internal grinding spindles with belt drive: Oel Mobil DTE 24

For high frequency motor spindles Fischer: Oil Motorex

Spindle Lube ISO VG 68

For tailstock: Oil Shell Tonna S32

For tailstock fine adjustment: Fett Mobilux EP 023

Oil for lubrication in connection with  
pneumatic lifting: Mobil DTE 24

For hydraulic: Oil Shell Tonna S32

### **Oil Shell Tonna S32**

5601806-Z

5 litre can oil Shell Tonna S32

5601807-Z

3 cans at 20 litres oil Shell Tonna S32

### **Grease Klüber Staburags NBU 8 EP**

5601613-Z

1 kg grease KLÜBER Staburags NBU 8 EP

### **Oil Mobil DTE 24**

5601829-Z

5 litre can oil MOBIL DTE 24

5601816-Z

2 cans of 10 litre oil MOBILE DTE 24

5601814-Z

50kg drum oil MOBIL DTE 24

### **Oil Motorex Spindle Lube ISO VG 68**

5601869-Z  
4 litre can oil Motorex Spindle Lube ISO VG 68  
cleanliness class 13/10 according ISO 4406

### **Grease Mobilux EP 023**

5601818-Z  
0.5 kg grease Mobilux EP 023

### **Filter paper**

5490116-Z  
Filter paper medium OL 40, roll of 200 , width 1000mm

5490115-Z  
Filter fleece, fine OL 50, recommended for emulsion;  
roll of 150m, width 1000mm

### **Coolant**

5601412-Z  
5 litre can of coolant CASTROL Hysol R

5601420-Z  
15 litres can of coolant CASTROL Hysol R

### **Corrosion protection agents**

3118613-Z  
Corrosion protection agents. 5 litres can Motorex Coolant  
F for motor spindles internal cooling

2918032-Z  
Can with 0.15 liter fungicide Motorex Antisept for  
the water cooling circuit of the motor spindles

2918695-Z  
Can (1 l) of cleaner for the water coolant circuit  
of motor spindles, Motorex Swisscare SC

### **Filter mat for grinding mist extraction unit**

2422667-Z  
Spare filter mat (10 pcs.) for grinding mist extraction  
unit for emulsion

2422662-Z  
Spare filter mat (10 pces.) for grinding mist extraction  
unit for oil

#### **Machine documentation**

9904256-Z  
Booklet Studer Grinding Data (pocket file)

#### **Dial indicators**

For longitudinal table: Dial gauging radial  
For steady: Dial gauging radial

5530018-Z  
Radial dial gauge, metric (division 0.002mm)

5530118-Z  
Radial dial gauge, inch (division 0.0001")

#### **Auxiliary accessories**

1848602-Z  
Steel tool cabinet

5552514-Z

Measuring instrument Tesatronic with cable and  
1 gauge head, metric + inch