

# favoritCNC

## Accessories

Product: favoritCNC





Edition: 25.09.2018

valid from serie: 1

<b>Contents</b>	<b>Page:</b>
Accessories	3
Tool head / Wheelhead	3
External grinding	3
Contact ring sensor	3
Wheel adaptor, nominal diameter 63mm (2.480")	3
Intermediate ring	4
Extraction tool	6
Grinding wheel changing unit	6
Static balancing	6
External grinding wheels	7
Internal grinding	10
Internal grinding spindles with belt drive	11
Internal grinding quills HJND 42 (clockwise)	11
Internal grinding quills HJND 35 (clockwise)	13
Internal grinding quills HJND 21 (clockwise)	15
Bolts (wheel adaptors) for internal grinding quills (right)	17
Face grinding quill HJNP	19
Chuck HJNZ	19
Internal grinding wheels	19
Workhead	22
Collets to workhead	22
Spring collet W25	22
Collets Hardinge 5C	25
Collet holding fixture SRS for enhanced concentricity	25
Mounting parts for collet holding fixture SRS	25
Adaptor for clamping devices	25
Jaw chuck	26
Three-jaw manually operated chuck (spiral chuck)	26
3-jaw manual chuck (wedge-bar)	26
Four-jaw manually operated chuck (spiral chuck)	27
3 jaw power chuck	27
Magnetic chuck	33
Face plate	33
Driver	34
Zero backlash drivers	34
Inserts for carrying centres	35
Centres for workhead and tailstock	36
Centres for internal holding fixture MT2	36
Centres for internal holding fixture MT3	38
Centres for internal holding fixture MT4	40
Tailstock	40
Steady rests and drawdown equipment	41
Steady rest	41
Insertion aids (prism supports)	42
Dressing	42
Dressing device (non-controlled)	42
Adapter to dressing device	42
Dressing tool holder	42
Dressing tool holding fixture to Adaptor M01	43
Holding arbor for rotary dressing tools	43
Dressing spindle	44
Flange for dressing spindles for collet chucks ER11	44

---

Dressing spindle holder	45
Dressing tools	45
Dressing tools with fitting taper MT1 shortened (clamping length 19mm / 0.748")	45
Dressing plates and holding fixtures	48
Grain fliese diamonds with sep. fitting taper	49
Dressing tools with holding fixture dia.9.52mm (0.375") cylindrical	50
Dressing tools for external dressing motor spindle with dressing tool holding fixture Ø 40-h3 (dia.1.575")	51
Auxiliary attachment for the adjustment of the dressing tool height	52
Collet chucks for internal grinding and dressing spindles	52
Collets ER11	52
Collets ER12	53
Collets ER16	54
Collets ER25	55
Control systems	56
Foot pedal	56
Contact detection	57
Dynamic balancing	57
Input and output units	58
Transmission cable	59
Software	59
Communication software for external PC	59
Accessory to touch probe	60
Marposs	61
Accessories for measuring head Unimar	61
Movomatic	61
Accessories for measuring head digital	61
Hydraulic and lubricating oil	64
Coolant systems and filter units	66
Filter paper	66
Coolant	67
Filter for grinding mist extraction unit	67
Miscellaneous	68
Auxiliary accessories	69
Training	69

---

## Accessories

### Tool head / Wheelhead

#### External grinding

#### Contact ring sensor

A2912852A-O

Contact ring sensor passive with on roller bearings external grinding spindle for contact detection in external grinding and contact detection on fixed or rotating dressing tools.

Incl. adjusting gauge for customer assembly.

Feeder cable 1.5m and connecting cable 3.1m (pluggable, directly on the back

wall of the contact detection device , 3-pin)

**Note: Electronic contact detection Sensitron 2 or Sensitron 6 required**

#### Wheel adaptor, nominal diameter 63mm (2.480")

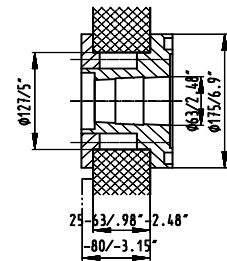
A2432794A-Z

Wheel adaptor dia.400mm / 16" with bore 127mm / 5".

Width 25-63mm / 1-2.5" form1 (80mm / 3" form5)

for tapered shaft ends 1:10 with nominal diameter 63mm (2.480").

Incl. balancing segments and graduation



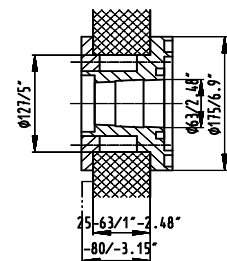
A2433603A-Z

High precision wheel adaptor dia.400mm / 16" with bore 127mm / 5".

Width 25-63mm / 1-2.5" form1 (80mm / 3" form5)

for tapered shaft ends 1:10 with nominal diameter 63mm (2.480").

Incl. balancing segments and graduation



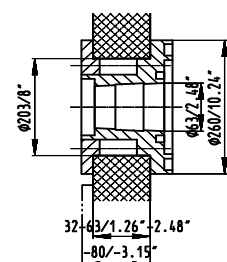
A2432795A-Z

Wheel adaptor dia.500mm / 20" with bore 203.2mm / 8".

Width 32-63mm / 1.25-2.5" form1 (80mm / 3" form5)

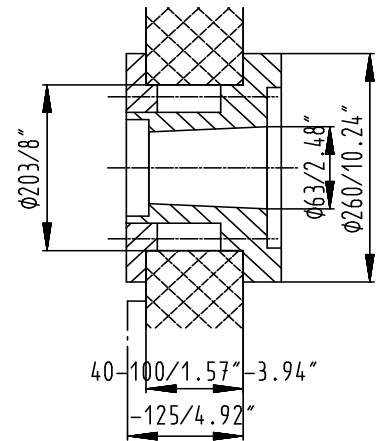
for tapered shaft ends 1:10 with nominal diameter 63mm (2.480").

Incl. balancing segments and graduation



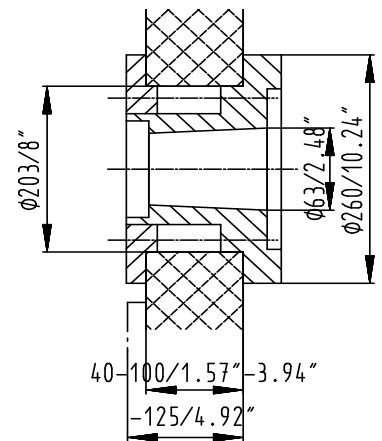
## A2433609A-Z

Wheel adaptor dia.500mm / 20" with bore 203.2mm / 8".  
 Width 40-100mm / 1.6-4" form1 (125mm / 5" form5)  
 for tapered shaft ends 1:10 with nominal diameter 63mm (2.480").  
 Incl. balancing segments and graduation  
 Released for series: 1 - 120



## A2433610A-Z

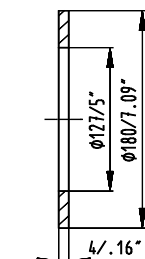
Wheel adaptor (standard or wheel-sets) dia.500mm / 20"  
 with bore 203.2mm / 8".  
 Width 40-100mm / 1.6-4" form1 (125mm / 5" form5)  
 for tapered shaft ends 1:10 with nominal diameter 63mm (2.480")  
 Incl. balancing segments and graduation  
 Released for series: 1 - 120



## Intermediate ring

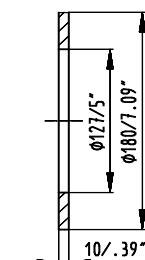
## A2713043A-Z

Spacer ring 4mm (0.157") with bore 127mm (5")



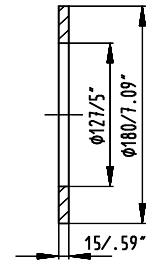
## A2413334-Z

Spacer ring 10mm (0.393") with bore 127mm (5"),  
 external diameter 175mm (6.889")



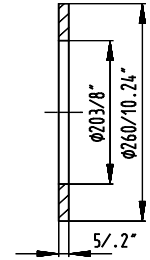
A2413335-Z

Spacer ring 15mm (0.590") with bore 127mm (5")



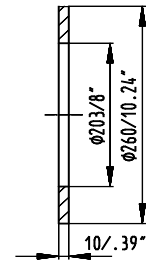
A2012241B-Z

Spacer ring 5mm (0.196") with bore 203.2mm (8")



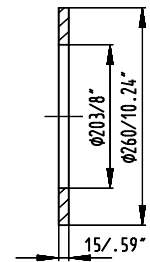
A2012242B-Z

Spacer ring 10mm (0.393") with bore 203.2mm (8")



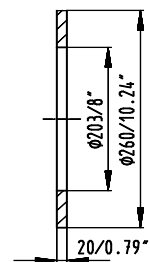
A2012243B-Z

Spacer ring 15mm (0.590") with bore 203.2mm (8")



A2012244B-Z

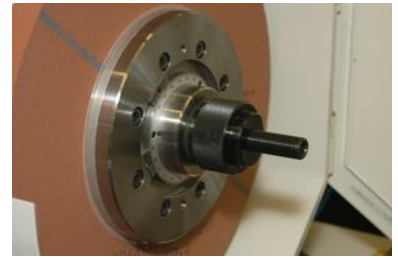
Spacer ring 20mm (0.787") with bore 203.2mm (8")



## Extraction tool

A2422633B-Z

Extraction tool for wheel adaptors for shaft end with nominal diameter 63mm (2.480")



## Grinding wheel changing unit

A2237731A-Z

Wheel changing shaft (length 220mm (8.661")) for more ergonomic grinding wheel change, for shaft end with nominal diameter 63mm (2.480"), including extractor nut (instead of the extraction tool)



A2920667A-Z

Suspension bracket 1203mm high for grinding wheel change with lifting device on the customer side. (e.g. hall crane)  
Maximal weights at Suspension bracket 85kg (187lb)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 10084512

10084512-Z

Suspension bracket 1403mm high for grinding wheel change with lifting device on the customer side. (e.g. hall crane)  
Maximal weights at Suspension bracket 85kg (187lb)

## Static balancing

A2812620-Z

Balancing equipment dia. up to 600mm (24.622") for static balancing of the external grinding wheel outside of the machine.

**Note: Requires the respective balancing arbor for external grinding wheels**



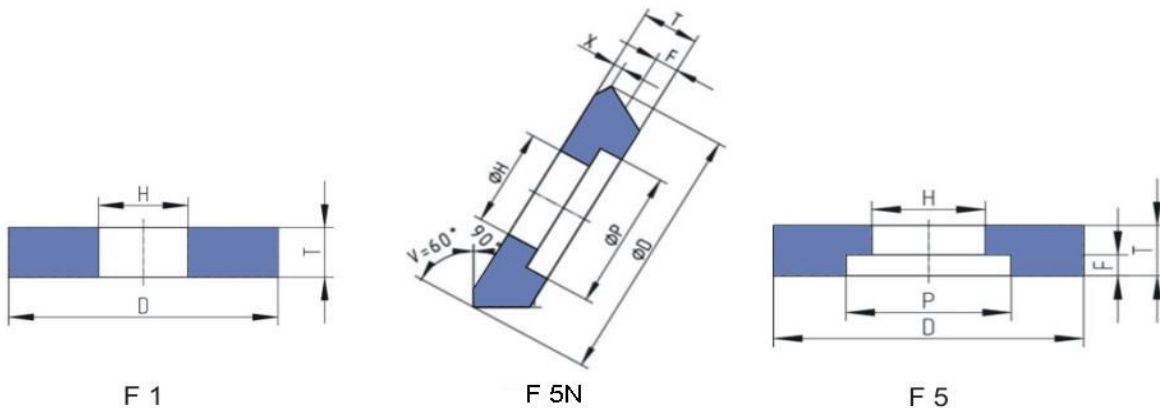


A2812119-Z

Balancing arbor for grinding wheels with nominal dia.63mm (2.480"), length 310mm (11.220"), for balancing equipment dia.400mm (15.748") or dia.600mm (23.622")



### External grinding wheels



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

30012753-Z

Grinding wheel form 1  
dia.500x32x203.2mm / 16x1.25x8",  
CS33A120 HH5VB1, 50m/s (9840sfpm)

A5585114A-Z

Grinding wheel form 1  
dia.500x40x203.2mm / 20x1.6x8",  
11C120 H5V, 50m/s (9840sfpm)

A5585382A-Z

Grinding wheel form 1  
dia.500x40x203.2mm / 20x1.6x8",  
54A80 H8V604W, 50m/s (9840sfpm)

**Note: No longer usable for new quotes,**  
was replaced by selling no 30003813  
Released for series: 1 - 13

A5585380A-Z

Grinding wheel form 1  
dia.500x40x203.2mm / 20x1.6x8",  
54A120 H15VPMF604W, 50m/s (9840sfpm)

**Note: No longer usable for new quotes,**  
was replaced by selling no 30003812

## A5585113A-Z

Grinding wheel form 1  
dia.500x40x203.2mm / 20x1.6x8",  
81A80 H8V601W, 50m/s (9840sfpm)

## 30012754-Z

Grinding wheel form 1  
dia.500x40x203.2mm / 20x1.6x8",  
CS33A120 HH5VB1, 50m/s (9840sfpm)

## A5585385A-Z

Grinding wheel form 1  
dia.500x50x203.2mm / 20x2x8",  
54A80 H8V604W, 50m/s, (9840sfpm)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 30003815  
Released for series: 1 - 7

## A5585384A-Z

Grinding wheel form 1  
dia.500x50x203.2mm / 20x2x8",  
54A120 H15VPMF604W, 50m/s (9840sfpm)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 30003814  
Released for series: 1 - 19

## 30012756-Z

Grinding wheel form 1  
dia.500x50x203.2mm / 20x2x8",  
CS33A120 HH5VB1, 50m/s (9840sfpm)

## 30012767-Z

Grinding wheel form 1  
dia.500x50x203.2mm / 20x2x8",  
CS83A120 I18VK8, 50m/s (9840sfpm)

## A5585117A-Z

Grinding wheel form 1  
dia.500x63x203.2mm / 20x2.5x8",  
11C120 H5V, 50m/s, (9840sfpm)

## A5585388A-Z

Grinding wheel form 1  
dia.500x63x203.2mm / 20x2.5x8",  
54A80 H8V604W, 50m/s, (9840sfpm)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 30003817

## A5585386A-Z

Grinding wheel form 1  
dia.500x63x203.2mm / 20x2.5x8",  
54A120 H15VPMF604W, 50m/s, (9840sfpm)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 30003816

30003816-Z

Grinding wheel form 1  
dia.500x63x203.2mm / 20x2.5x8",  
54A120 H15VPMF904W, 50m/s, (9840sfpm)

A5585116A-Z

Grinding wheel form 1  
dia.500x63x203.2mm / 20x2.5x8",  
81A80 H8V901W, 50m/s, (9840sfpm)

30012757-Z

Grinding wheel form 1  
dia.500x63x203.2mm / 20x2.5x8",  
CS33A120 HH5VB1, 50m/s, (9840sfpm)

A5585391A-Z

Grinding wheel form 5  
dia.500x80x203.2mm / 20x3x8",  
P=290mm (11.417), F=20mm (0.787)  
54A80 H8V904W, (9840sfpm)

30012762-Z

Grinding wheel form 5  
dia.500x80x203.2mm / 20x3x8",  
P=290mm (11.417), F=17mm (0.669)  
CS33A120 HH5VB1, (9840sfpm)

30012763-Z

Grinding wheel form 5N  
dia.500x80x203.2mm / 20x3x8",  
P=290mm (11.417), F=17mm (0.669)  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
CS33A120 HH5VB1, (9840sfpm)

30012758-Z

Grinding wheel form 1N  
dia.500x32x203.2mm / 20x1.25x8",  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
CS33A120 HH5VB1, 50m/s (9840sfpm)

A5585383A-Z

Grinding wheel form 1N  
dia.500x40x203.2mm / 20x1.6x8",  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
54A80 H8V604W, 50m/s (9840sfpm)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 30003828

A5585381A-Z

Grinding wheel form 1N  
dia.500x40x203.2mm / 20x1.6x8",  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
54A120 H15VPMF604W, 50m/s (9840sfpm)  
**Note: No longer usable for new quotes,**  
was replaced by selling no 30003827

30012759-Z

Grinding wheel form 1N  
dia.500x40x203.2mm / 20x1.6x8",  
V=60° X=3mm, (for grinding wheel positions 30deg.)  
CS33A120 HH5VB1, 50m/s (9840sfpm)

30012760-Z

Grinding wheel form 1N  
dia.500x50x203.2mm / 20x2x8",  
V=60° X=3mm, (for grinding wheel positions 30deg.)  
CS33A120 HH5VB1, 50m/s (9840sfpm)

A5585389A-Z

Grinding wheel form 1N  
dia.500x63x203.2mm / 20x2.5x8",  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
54A80 H8V604W, 50m/s, (9840sfpm)

**Note: No longer usable for new quotes,**  
was replaced by selling no 30003830  
Released for series: 1 - 18

30003830-Z

Grinding wheel form 1N  
Ø500x63x203.2mm / 20x2.5x8",  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
54A80 H8V904W, 50m/s, (9840sfpm)

30012761-Z

Grinding wheel form 1N  
dia.500x63x203.2mm / 20x2.5x8",  
V=60° X=3mm (0.118"), (for grinding wheel positions 30deg.)  
CS33A120 HH5VB1, 50m/s, (9840sfpm)

### Internal grinding

A5600032A-Z

Adhesive for mounting of internal grinding wheels on threaded bolts  
Pattex Stabilit Express (Tube of 0.03kg)



30005687-Z

Adhesive for mounting of internal grinding wheels on threaded bolts  
Araldite Rapid 2-component adhesive (double-syringe with 12ml each)

**Note: No longer usable for new quotes,**  
was replaced by selling no A5600032A

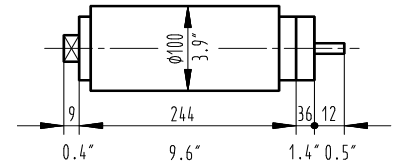
## Internal grinding spindles with belt drive

### General note on internal grinding spindles with belt drive for drive motor with frequency converter:

The specification of the pulley diameter 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

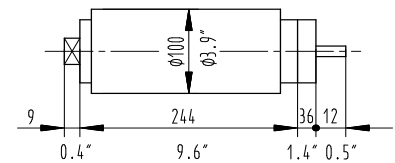
#### A2917642A-Z

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



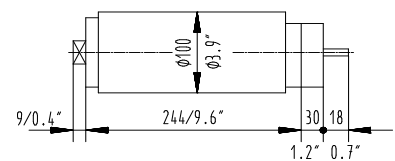
#### A2917640A-Z

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



#### A2917644A-Z

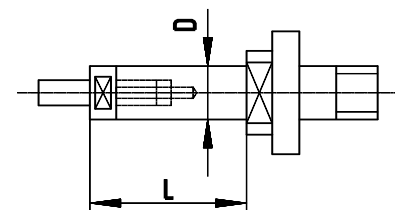
Internal grinding spindle 20'000rpm. with belt drive for drive motor with pulley dia.105mm (4.134") with frequency convertor. (for bore dia.28-80mm (1.102-3.150")). Spindle type 102520B, dia.100mm (3.937") with oil mist lubrication. With tool holding fixture HJND 21. Incl.: 1 driving pulley dia.65mm (2.559") 5 medium grinding arbors 35 bolts



## Internal grinding quills HJND 42 (clockwise)

#### A5552203A-Z

Internal grinding quill HJND 42-514 (clockwise) dia.5x14mm (0.197x0.551") incl. 1 threaded bolt for internal grinding wheel with bore dia.3mm (0.118")



#### A5552204A-Z

Internal grinding quill HJND 42-520 (clockwise) dia.5x20mm (0.197x0.787") incl. 1 threaded bolt for internal grinding wheel with bore dia.3mm (0.118")

**A5552205A-Z**

Internal grinding quill HJND 42-528  
(clockwise) dia.5x28mm (0.197x1.102")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.3mm (0.118")

**A5552289A-Z**

Internal grinding quill HJND 42-716  
(clockwise) dia.7x16mm (0.276x0.630")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.4mm (0.157")

**A5552290A-Z**

Internal grinding quill HJND 42-725  
(clockwise) dia.7x25mm (0.276x0.984")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.4mm (0.157")

**A5552291A-Z**

Internal grinding quill HJND 42-736  
(clockwise) dia.7x36mm (0.276x1.417")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.4mm (0.157")

**A5552292A-Z**

Internal grinding quill HJND 42-918  
(clockwise) dia.9x18mm (0.354x0.709")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.6mm (0.236")

**A5552293A-Z**

Internal grinding quill HJND 42-930  
(clockwise) dia.9x30mm (0.354x1.181")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.6mm (0.236")

**A5552294A-Z**

Internal grinding quill HJND 42-945  
(clockwise) dia.9x45mm (0.354x1.772")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.6mm (0.236")

**A5552295A-Z**

Internal grinding quill HJND 42-1220  
(clockwise) dia.12x20mm (0.472x0.787")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

**A5552296A-Z**

Internal grinding quill HJND 42-1235  
(clockwise) dia.12x35mm (0.472x1.378")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

**A5552297A-Z**

Internal grinding quill HJND 42-1250  
(clockwise) dia.12x50mm (0.472x1.969")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

**A5552298A-Z**

Internal grinding quill HJND 42-1625  
(clockwise) dia.16x25mm (0.630x1.969")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

**A5552299A-Z**

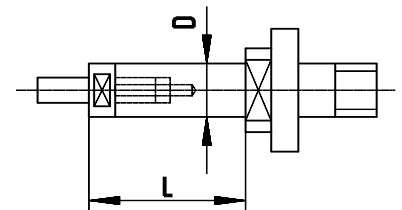
Internal grinding quill HJND 42-1645  
(clockwise) dia.16x45mm (0.630x0.984")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

**A5552300A-Z**

Internal grinding quill HJND 42-1665  
(clockwise) dia.16x65mm (0.630x2.559")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

**Internal grinding quills HJND 35 (clockwise)****A5552378A-Z**

Internal grinding quill HJND 35-716  
(clockwise) dia.7x16mm (0.276x0.630")  
special dimension, threaded bolt must be ordered separately

**A5552379A-Z**

Internal grinding quill HJND 35-725  
(clockwise) dia.7x25mm (0.276x0.984")  
special dimension, threaded bolt must be ordered separately

**A5552380A-Z**

Internal grinding quill HJND 35-736  
(clockwise) dia.7x36mm (0.276x1.417")  
special dimension, threaded bolt must be ordered separately

**A5552301A-Z**

Internal grinding quill HJND 35-918  
(clockwise) dia.9x18mm (0.354x0.709")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.6mm (0.236")

**A5552302A-Z**

Internal grinding quill HJND 35-930  
(clockwise) dia.9x30mm (0.354x1.181")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.6mm (0.236")

---

**A5552303A-Z**

Internal grinding quill HJND 35-945  
(clockwise) dia.9x45mm (0.354x1.772")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.6mm (0.236")

**A5552304A-Z**

Internal grinding quill HJND 35-1220  
(clockwise) dia.12x20mm (0.472x0.787")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

**A5552305A-Z**

Internal grinding quill HJND 35-1235  
(clockwise) dia.12x35mm (0.472x1.378")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

**A5552306A-Z**

Internal grinding quill HJND 35-1250  
(clockwise) dia.12x50mm (0.472x1.969")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

**A5552307A-Z**

Internal grinding quill HJND 35-1625  
(clockwise) dia.16x25mm (0.630x0.984")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

**A5552308A-Z**

Internal grinding quill HJND 35-1645  
(clockwise) dia.16x45mm (0.630x1.772")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

**A5552309A-Z**

Internal grinding quill HJND 35-1665  
(clockwise) dia.16x65mm (0.630x2.559")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

**A5552310A-Z**

Internal grinding quill HJND 35-2030  
(clockwise) dia.20x30mm (0.787x1.181")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.13mm (0.512")

**A5552311A-Z**

Internal grinding quill HJND 35-2060  
(clockwise) dia.20x60mm (0.787x2.362")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.13mm (0.512")

---



## A5552312A-Z

Internal grinding quill HJND 35-2090  
(clockwise) dia.20x90mm (0.787x3.543")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.13mm (0.512")

## A5552381A-Z

Internal grinding quill HJND 35-2535  
(clockwise) dia.25x35mm (0.984x1.378")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.16mm (0.630")

## A5552382A-Z

Internal grinding quill HJND 35-2575  
(clockwise) dia.25x75mm (0.984x2.953")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.16mm (0.630")

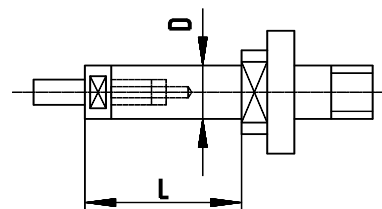
## A5552383A-Z

Internal grinding quill HJND 35-25115  
(clockwise) dia.25x115mm (0.984x4.528")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.16mm (0.630")

**Internal grinding quills HJND 21 (clockwise)**

## A5552218A-Z

Internal grinding quill HJND 21-1220  
(clockwise) dia.12x20mm (0.472x0.787")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")



## A5552376A-Z

Internal grinding quill HJND 21-1235  
(clockwise) dia.12x35mm (0.472x1.378")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

## A5552377A-Z

Internal grinding quill HJND 21-1250  
(clockwise) dia.12x50mm (0.472x1.969")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.8mm (0.315")

## A5552325A-Z

Internal grinding quill HJND 21-1625  
(clockwise) dia.16x25mm (0.630x0.984")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

## A5552326A-Z

Internal grinding quill HJND 21-1645  
(clockwise) dia.16x45mm (0.630x1.772")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

## A5552327A-Z

Internal grinding quill HJND 21-1665  
(clockwise) dia.16x65mm (0.630x2.559")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.10mm (0.394")

## A5552328A-Z

Internal grinding quill HJND 21-2030  
(clockwise) dia.20x30mm (0.787x1.181")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.13mm (0.512")

## A5552329A-Z

Internal grinding quill HJND 21-2060  
(clockwise) dia.20x60mm (0.787x2.362")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.13mm (0.512")

## A5552330A-Z

Internal grinding quill HJND 21-2090  
(clockwise) dia.20x90mm (0.787x3.543")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.13mm (0.512")

## A5552331A-Z

Internal grinding quill HJND 21-2535  
(clockwise) dia.25x35mm (0.984x3.543")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.16mm (0.630")

## A5552332A-Z

Internal grinding quill HJND 21-2575  
(clockwise) dia.25x75mm (0.984x2.953")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.16mm (0.630")

## A5552333A-Z

Internal grinding quill HJND 21-25115  
(clockwise) dia.25x115mm (0.984x4.528")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.16mm (0.630")

## A5552334A-Z

Internal grinding quill HJND 21-3240  
(clockwise) dia.32x40mm (1.260x1.575")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.20mm (0.787")

## A5552335A-Z

Internal grinding quill HJND 21-3290  
(clockwise) dia.32x90mm (1.260x3.543")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.20mm (0.787")

## A5552336A-Z

Internal grinding quill HJND 21-32140  
(clockwise) dia.32x140mm (1.260x5.512")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.20mm (0.787")

## A5545000A-Z

Internal grinding quill HJND 21-4050  
(clockwise) dia.40x50mm (1.575x1.969")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.25mm (0.984")

## A5551501A-Z

Internal grinding quill HJND 21-40110  
(clockwise) dia.40x110mm (1.575x4.331")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.25mm (0.984")

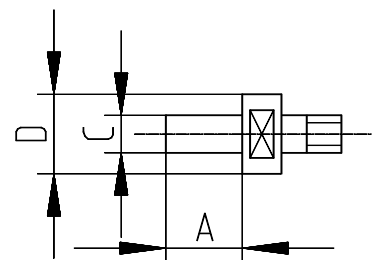
## A5551945A-Z

Internal grinding quill HJND 21-40170  
(clockwise) dia.40x170mm (1.575x6.693")  
incl. 1 threaded bolt for internal  
grinding wheel with bore dia.25mm (0.984")

**Bolts (wheel adaptors) for internal grinding quills (right)**

## A5551934A-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill  
dia.5mm (0.197") for internal  
grinding wheel with bore dia.2.5mm (0.098")  
**Note:** Specially made for internal grinding wheels  
with dia.2.5mm (0.098") bore



## 30047074-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill  
dia.5mm (0.197") for internal grinding wheel with bore dia.3mm (0.118")

## A5551921A-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill  
dia.7mm (0.276") for internal grinding wheel with bore dia.4mm (0.157")

## A5551922A-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill  
dia.9mm (0.354") for internal grinding wheel with bore dia.6mm (0.236")

## A5551935A-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill dia.12mm (0.472") for internal grinding wheel with bore dia.6mm (0.236")

**Note:** Specially made for internal grinding wheels with dia.6mm (0.236") bore

## 30047075-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill dia.12mm (0.472") for internal grinding wheel with bore dia.8mm (0.315")

## A5551924A-Z

Set of 10 threaded bolts (clockwise) to internal grinding quill dia.16mm (0.630") for internal grinding wheel with bore dia.10mm (0.394")

## A5551936A-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.20mm (0.787") for internal grinding wheel with bore dia.10mm (0.394")

**Note:** Specially made for internal grinding wheels with dia.10mm (0.394") bore

## 30047100-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.20mm (0.787") for internal grinding wheel with bore dia.13mm (0.512")

## A5551937A-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.25mm (0.984") for internal grinding wheel with bore dia.13mm (0.512")

**Note:** Specially made for internal grinding wheels with dia.13mm (0.512") bore

## 30048301-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.25mm (0.984") for internal grinding wheel with bore dia.16mm (0.630")

## A5551938A-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.32mm (1.260") for internal grinding wheel with bore dia.16mm (0.630")

**Note:** Specially made for internal grinding wheels with dia.16mm (0.630") bore

## 30047102-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.32mm (1.260") for internal grinding wheel with bore dia.20mm (0.787")

## A5551524A-Z

Set of 5 threaded bolts (clockwise) to internal grinding quill dia.40mm (1.575") for internal grinding wheel with bore dia.25mm (0.984")

## Face grinding quill HJNP

A5552221A-Z

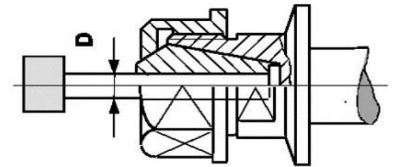
Face grinding quill HJNP 21 for cup grinding wheel  
with bore dia.50.8mm (2")

A5552219A-Z

Face grinding quill HJNP 35 for internal grinding wheel  
with bore dia.40mm (1.575")

## Chuck HJNZ

**General note:** Collet chucks for chucks can be found in the chapter  
Collet chucks for internal grinding and dressing spindles



A5552396A-Z

Chuck HJNZ 21 with 2 collet chucks ER25 Ø3+6mm (0.118+0.236")  
for internal grinding spindles with tool holding fixture HJND 21.  
Includes check key E25

A5552210A-Z

Chuck HJNZ 35 with 2 collet chucks ER16 dia.3+6mm (0.118+0.236")  
for internal grinding spindles with tool holding fixture HJND 35.  
Includes check key E16

A5552209A-Z

Chuck HJNZ 42 with 2 collet chucks ER12 dia.3+6mm (0.118+0.236")  
for internal grinding spindles with tool holding fixture HJND 42.  
Includes check key E12

## Internal grinding wheels

Wheels for internal grinding quills

General application of abrasives:

### 11C Silicon Carbides for:

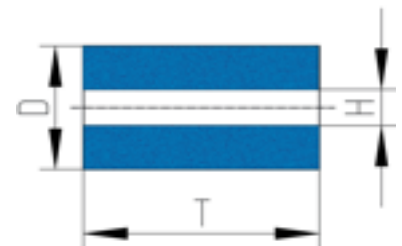
Cast iron / tungsten carbide / glass / plastics / non-ferrous  
metals / ceramics / stainless, acid and heat resistant steel /  
hardened steel 63 HRC and higher / nitriding steel.

### 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 for:

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



A5583119A-Z

Wheel dia.6x6x2.5mm 11C 80 G 6 V,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583041A-Z

Wheel dia.6x6x2.5mm 54A 80 H 8 V604W,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583042A-Z

Wheel dia.Ø6x6x2.5mm 93A 120 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583043A-Z

Wheel dia.8x8x2.5mm 54A 80 H 8 V604W,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583044A-Z

Wheel dia.8x8x2.5mm 93A 120 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583120A-Z

Wheel dia.10x10x4mm 11C 80 G 6 V,  
cutting speed 50ms/s / 9840sfpm. (1 set = 10 pieces)

## A5583045A-Z

Wheel dia.10x10x4mm 54A 80 H 8 V604W,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583046A-Z

Wheel dia.10x10x4mm 93A 120 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583112A-Z

Wheel dia.13x13x4mm 11C 60 H 15 VP,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583121A-Z

Wheel dia.16x16x6mm 11C 60 H 15 VP,  
cutting speed 50m/s. (1 set = 10 pieces)

## A5583076A-Z

Wheel dia.16x16x6mm 93A 120 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583078A-Z

Wheel dia.20x20x6mm 93A 80 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583123A-Z

Wheel dia.25x25x10mm 11C 60 H 15 VP,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583080A-Z

Wheel dia.25x25x10mm 93A 80 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 10 pieces)

## A5583124A-Z

Wheel dia.32x32x10mm 11C 60 H 15 VP,  
cutting speed 50m/s / 9840sfpm. (1 set = 5 pieces)

---

**A5583081A-Z**

Wheel dia.32x32x10mm 54A 120 H 15 VPMF604W,  
cutting speed 50m/s / 9840sfpm. (1 set = 5 pieces)

**A5583082A-Z**

Wheel dia.32x32x10mm 93A 80 H 13 VP601,  
cutting speed 50m/s / 9840sfpm. (1 set = 5 pieces)

**A5583125A-Z**

Wheel dia.40x40x13mm 11C 60 H 15 VP,  
cutting speed 50m/s / 9840sfpm. (1 set = 5 pieces)

**A5583126A-Z**

Wheel dia.50x40x16mm 11C 60 H 15 VP,  
cutting speed 50m/s / 9840sfpm. (1 set = 5 pieces)

**A5583085A-Z**

Wheel dia.50x40x16mm 54A 120 H 15 VPMF604W,  
cutting speed 50m/s / 9840sfpm. (1 set = 5 pieces)

**Grinding pins for chucks****A5583601A-Z**

Grinding pin  
dia.6x8mm (0.236x0.315"), shaft  
diameter 3mm (0.118") SARUBIN 60M  
(1 set = 10 pieces)

**A5583602A-Z**

Grinding pin  
dia.8x10mm (0.315x0.394"),  
shaft diameter 6mm (0.236") SARUBIN 60M  
(1 set = 10 pieces)

**A5583603A-Z**

Grinding pin  
dia.10x10mm (0.394x0.394"),  
shaft diameter 6mm (0.236") SARUBIN 60M  
(1 set = 10 pieces)

**A5583604A-Z**

Grinding pin  
dia.12x12mm (0.472x0.472"),  
shaft diameter 6mm (0.236") SARUBIN 60M  
(1 set = 10 pieces)

---

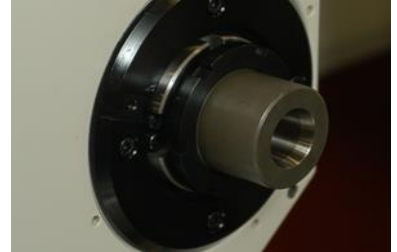
## Workhead

### Collets to workhead

#### Spring collet W25

A1809703A-Z

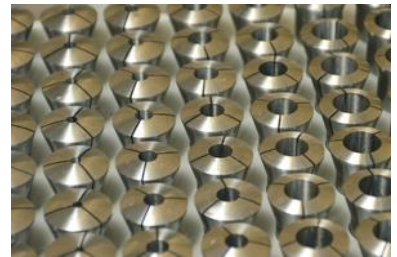
Insert for internal holding fixture MT5 for collets W25



A5558201A-Z

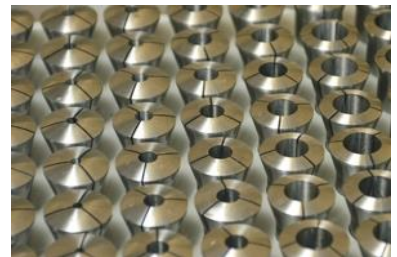
Set of 47 collets W25 dia.2-25mm  
(0.078-0.984"), in steps of 0.5mm (0.019")

**Single collets** orders possible



A5558300A-Z

Set of 59 collets W25 dia.3/32-1", in steps of 1/64"  
Single collets orders possible



A5558202-Z

Spring collet W25 dia.0.5mm (0.0197")

A5558203-Z

Spring collet W25 dia.1mm (0.039")

A5558204-Z

Spring collet W25 dia.1.5mm (0.059")

A5558205-Z

Spring collet W25 dia.2mm (0.078")

A5558206-Z

Spring collet W25 dia.2.5mm (0.098")

A5558207-Z

Spring collet W25 dia.3mm (0.118")



A5558208-Z

Spring collet W25 dia.3.5mm (0.137")

A5558209-Z

Spring collet W25 dia.4mm (0.157")

A5558210-Z

Spring collet W25 dia.4.5mm (0.177")

A5558211-Z

Spring collet W25 dia.5mm (0.196")

A5558212-Z

Spring collet W25 dia.5.5mm (0.216")

A5558213-Z

Spring collet W25 dia.6mm (0.236")

A5558214-Z

Spring collet W25 dia.6.5mm (0.255")

A5558215-Z

Spring collet W25 dia.7mm (0.275")

A5558216-Z

Spring collet W25 dia.7.5mm (0.295")

A5558217-Z

Spring collet W25 dia.8mm (0.314")

A5558218-Z

Spring collet W25 dia.8.5mm (0.334")

A5558219-Z

Spring collet W25 dia.9mm (0.354")

A5558220-Z

Spring collet W25 dia.9.5mm (0.374")

A5558221-Z

Spring collet W25 dia.10mm (0.393")

A5558222-Z

Spring collet W25 dia.10.5mm (0.413")

A5558223-Z

Spring collet W25 dia.11mm (0.433")

A5558224-Z

Spring collet W25 dia.11.5mm (0.452")

A5558225-Z

Spring collet W25 dia.12mm (0.472")

A5558226-Z

Spring collet W25 dia.12.5mm (0.492")

---

---

A5558227-Z	Spring collet W25 dia.13mm (0.511")
A5558228-Z	Spring collet W25 dia.13.5mm (0.531")
A5558229-Z	Spring collet W25 dia.14mm (0.551")
A5558230-Z	Spring collet W25 dia.14.5mm (0.570")
A5558231-Z	Spring collet W25 dia.15mm (0.590")
A5558232-Z	Spring collet W25 dia.15.5mm (0.610")
A5558233-Z	Spring collet W25 dia.16mm (0.630")
A5558234-Z	Spring collet W25 dia.16.5mm (0.650")
A5558235-Z	Spring collet W25 dia.17mm (0.669")
A5558236-Z	Spring collet W25 dia.17.5mm (0.689")
A5558237-Z	Spring collet W25 dia.18mm (0.709")
A5558238-Z	Spring collet W25 dia.18.5mm (0.728")
A5558239-Z	Spring collet W25 dia.19mm (0.748")
A5558240-Z	Spring collet W25 dia.19.5mm (0.768")
A5558241-Z	Spring collet W25 dia.20mm (0.787")
A5558242-Z	Spring collet W25 dia.20.5mm (0.807")
A5558243-Z	Spring collet W25 dia.21mm (0.826")
A5558244-Z	Spring collet W25 dia.21.5mm (0.846")
A5558245-Z	Spring collet W25 dia.22mm (0.866")

---

A5558248-Z

Spring collet W25 dia.23.5mm (0.925")

A5558249-Z

Spring collet W25 dia.24mm (0.944")

A5558250-Z

Spring collet W25 dia.24.5mm (0.964")

A5558251-Z

Spring collet W25 dia.25mm (0.984")

### Collets Hardinge 5C

A2909744A-Z

Adaptor for internal holding fixture MT5 for collets Hardinge 5C

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

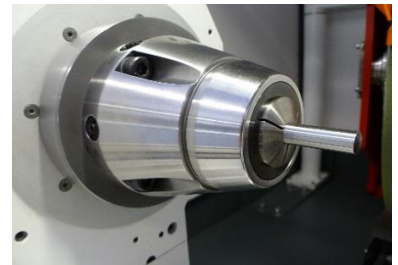
### Collet holding fixture SRS for enhanced concentricity

30030134-Z

Collet holding fixture SRS W25  
with adjustment option for increased radial running-true <0.002mm

Scope of supply:

- SRS collet holding fixture
- Collet with extended nose UP for seating the cylindrical gage
- Cylindrical gage
- Adjusting tools
- USB stick with CAD data of the SRS collet holding fixture



### Mounting parts for collet holding fixture SRS

10068921-Z

Mounting parts for collet holding fixture SRS W25  
for workhead on roller bearings  
with internal holding fixture MT5

### Adaptor for clamping devices

A2409891A-O

Adaptor for internal holding fixture MT5 (with torsion protection)  
with Ø85mm (3.346") cylindrical external holding fixture  
for mounting of customer clamping devices

**Note:** Requires hand chuck key for locking clamping devices



## Jaw chuck

### Three-jaw manually operated chuck (spiral chuck)

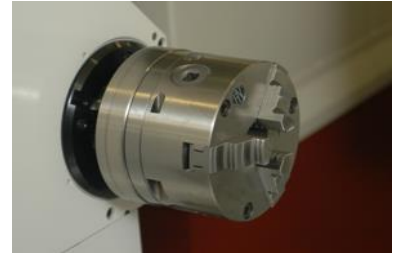
#### A2909856A-Z

3-jaw manual chuck dia.125mm (4.921")  
 with adaptor for internal holding fixture MT5  
 Scroll chuck, radial precision centring  
 Clamping range: External dia.3-125mm (0.118"-4.921"),  
 internal dia.34-115mm (1.339"-4.528")  
 Repeating accuracy: approx. 0.02mm (0.0008")

Including:

- Hard jaws (1 set for outside chucking and 1 set for inside chucking)
- Chuck key/adjusting key
- Torsion protection for adaptor

**Note: Requires hand chuck key for locking clamping devices**



#### A2409892A-Z

3-jaw manual chuck dia.160mm (6.299")  
 with adaptor for internal holding fixture MT5  
 Scroll chuck, radial precision centring  
 Clamping range: External dia.3-160mm (0.118"-6.299"),  
 internal dia.42-154mm (1.654"-6.063")  
 Repeating accuracy: approx. 0.02mm (0.0008")

Including:

- Hard jaws (1 set for outside chucking and 1 set for inside chucking)
- Chuck key/adjusting key
- Torsion protection for adaptor

**Note: Requires hand chuck key for locking clamping devices**

#### A2909857A-Z

3-jaw manual chuck dia.200mm (7.874")  
 with adaptor for internal holding fixture MT5  
 Scroll chuck, radial precision centring  
 Clamping range: External dia.4-200mm (0.157"-7.874"),  
 internal dia.52-202mm (2.047"-7.953")  
 Repeating accuracy: approx. 0.02mm (0.0008")

Including:

- Hard jaws (1 set for outside chucking and 1 set for inside chucking)
- Chuck key/adjusting key
- Torsion protection for adaptor

**Note: Requires hand chuck key for locking clamping devices**



### 3-jaw manual chuck (wedge-bar)

#### A2409897A-Z

3-jaw manual chuck dia.200mm (7.874")  
 with adaptor for internal holding fixture MT5 Wedge bar chuck  
 Clamping range: External dia.7-192mm (0.276"-7.559"),  
 internal dia.70-221mm (2.756"-8.701"), jaw stroke 6.8mm (0.268")  
 Repeating accuracy: <0.02mm (0.0008")  
 Laying of a coolant tube for internal cooling is possible

Including:

- 1 set base jaws
- 1 set of hard reversing jaws for outside and inside chucking
- Chuck key
- Torsion protection for adapter

**A5554014-Z**

Soft top jaws for 3-jaw manual chuck dia.200mm (7.874")  
 (Wedge bar chuck),  
 jaw dimension: L=105mm (4.134"),  
 W=22mm (0.866"), H=42mm (1.654") (1set = 3 jaws)

**A5554019A-Z**

Soft top jaws pointed for 3-jaw manual chuck dia.200mm (7.874")  
 (Wedge bar chuck),  
 jaw dimension: L=125mm (4.921"),  
 W=22mm (0.866"), H=42mm (1.654") (1set = 3 jaws)


**Four-jaw manually operated chuck (spiral chuck)**
**A2909858A-Z**

4-jaw manual chuck dia.125mm (4.921")  
 with adaptor for internal holding fixture MT5  
 Scroll chuck, jaws individually adjustable  
 Clamping range: External dia.3-125mm (0.118"-4.921"),  
 internal dia.34-115mm (1.339"-4.528")

Including:

- Hard jaws (1 set for outside chucking and 1 set for inside chucking)
- Chuck key/adjusting key
- Torsion protection for adaptor

**Note: Requires hand chuck key for locking clamping devices**


**A2409893A-Z**

4-jaw manual chuck dia.160mm (6.299")  
 with adaptor for internal holding fixture MT5  
 Scroll chuck, jaws individually adjustable  
 Clamping range: External dia.3-160mm (0.118"-6.299"),  
 internal dia.42-160mm (1.654"-6.299")

Including:

- Hard jaws (1 set for outside chucking and 1 set for inside chucking)
- Chuck key/adjusting key
- Torsion protection for adaptor

**Note: Requires hand chuck key for locking clamping devices**


**3 jaw power chuck**
**A2909804A-O**

3-jaw power chuck dia.110mm (4.331")  
 with adaptor for internal holding fixture MT5  
 Jaw holding fixture, serrated 1/16"x90deg.  
 Clamping range: External dia.6-106mm (0.236"-4.173"),  
 internal dia.42-135mm (1.654"-5.315"), jaw stroke: 3.2mm (0.126")  
 Repeating accuracy: <0.02mm (0.0008")  
 Laying of a coolant tube for internal cooling is possible  
 Not suitable with ring sensor

Including:

- Clamp actuating tube adaptor

- 1 set of one-piece hard reversing jaws for outside and inside chucking
- Torsion protection for adaptor

**Notes:**

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

## A5554035A-Z

Soft top jaws for 3-jaw manual chuck dia.110mm (4.331")

Jaw dimensions: L=40mm (1.575"), W=26.5mm (1.043"), H=32mm (1.260") (1set = 3 jaws)

**Notes:**

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order a jaw machining per diameter by a CS



## A2228765A-O

3-jaw precision power chuck dia.110mm (4.331")

with adaptor for internal holding fixture MT5

Radial precision centring, jaw holding fixture with ball positioning for jaw changing precision within 0.005mm (0.0002")

Jaw stroke: 1.25mm (0.049")

Repeating accuracy: <0.002mm (0.00008")

Laying of a coolant tube for internal cooling is possible

Not suitable with ring sensor

Including:

- Clamp actuating tube adaptor
- Torsion protection for adaptor

**Notes:**

- Requires pneumatic clamping cylinder
- Top jaws must be ordered separately for each clamping diameter
- Conversion to other clamping devices is expensive

## A5554127A-Z

Soft top jaws for 3-jaw manual chuck dia.110mm (4.331")

Jaw dimensions: L=49mm (1.929"), W=18mm (0.709"), H=28mm (1.102") (1set = 3 jaws)

**Notes:**

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order a jaw machining per diameter by a CS



## A5554123A-O

Chuck simulator for precision power chuck dia.110mm (4.331") for precise pre-machining of top jaws



## A5554128A-Z

Pretension discs for outside chucking  
for precision power chuck dia.110mm (4.331")  
For precise grinding of the clamping diameter on the jaws.  
Pretension disc can be removed without removal of the jaws.  
Diameter steps 0.25mm (0.0984") (1set = 8 discs)



## A5554130A-Z

Pretension ring for inside chucking  
for precision power chuck dia.110mm (4.331")  
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 (0.02") for each.  
The whole clamping range can be  
covered with the help of 3 cylinder pins ,  
dia.5mm (0.197") or dia.6mm (0.027")  
(Scope of supply without cylinder pins)



## A2909808A-O

3-jaw power chuck dia.160mm (6.299")  
with adaptor for internal holding fixture MT5  
Jaw holding fixture, serrated 1/16"x90deg.  
Clamping range: External dia.6-165mm (0.236"-6.496"),  
internal dia.36-181mm (1.417"-7.126"), jaw stroke: 3.6mm (0.142")  
Repeating accuracy: <0.02mm (0.0008")  
Laying of a coolant tube for internal cooling is possible  
Not suitable with ring sensor  
Including:

- Clamp actuating tube adaptor
- 1 set of one-piece hard reversing jaws for outside and inside chucking
- Torsion protection for adaptor

**Notes:**

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

## A5554039A-Z

Soft top jaws for 3-jaw manual chuck dia.160mm (6.299")  
Jaw dimensions: L=55mm (2.165"), W=26.5mm  
(1.043"), H=38mm (1.496") (1set = 3 jaws)

**Notes:**

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order  
a jaw machining per diameter by a CS



## A2228766A-O

3-jaw precision power chuck dia.160mm (6.299")  
with adaptor for internal holding fixture MT5  
Radial precision centring, jaw holding fixture with ball positioning  
for jaw changing precision within 0.005mm (0.0002")  
Jaw stroke: 2.5mm (0.098")  
Repeating accuracy: <0.002mm (0.00008")  
Laying of a coolant tube for internal cooling is possible  
Including:

- Clamp actuating tube adaptor
- Torsion protection for adaptor

**Notes:**

- Requires pneumatic clamping cylinder
- Top jaws must be ordered separately for each clamping diameter
- Conversion to other clamping devices is expensive

## A5554126A-Z

Soft top jaws for 3-jaw manual chuck dia.160mm (6.299")  
Jaw dimensions: L=72mm (2.835"),  
W=26mm (1.024"), H=36mm (1.417") (1set = 3 jaws)

**Notes:**

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order a jaw machining per diameter by a CS



## A5554122A-O

Chuck simulator for precision power chuck dia.160mm (6.299")  
for precise pre-machining of top jaws



## A5554129A-Z

Pretension discs for outside chucking  
for precision power chuck dia.160mm (6.299")  
For precise grinding of the clamping diameter on the jaws.  
Pretension disc can be removed without removal of the jaws.  
Diameter steps 0.25mm (0.0984")  
(1set = 17 discs)





**A5554131A-Z**

Pretension ring for inside chucking  
 for precision power chuck dia.160mm (6.299")  
 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 (0.02") for each.  
 The whole clamping range can be  
 covered with the help of 3 cylinder pins ,  
 dia.5mm (0.197") or dia.6mm (0.027")  
 (Scope of supply without cylinder pins)


**A2228764A-O**

3-jaw power chuck dia.200mm (7.874")  
 with adaptor for internal holding fixture MT5  
 Radial precision centring, jaw holding fixture, serrated 1/16"x90deg.  
 Clamping range: External dia.26-231mm (1.024"-9.094"),  
 internal dia.74-270mm (2.913"-10.630"), jaw stroke 5.3mm (0.209")  
 Repeating accuracy: <0.02mm (0.0008")  
 Laying of a coolant tube for internal cooling is possible  
 Not suitable with ring sensor  
 Including:  
 -- 1 set of hard reversing jaws for outside and inside chucking  
 -- Clamp actuating tube adaptor  
 -- Torsion protection for adaptor  
**Notes:**  
 -- Requires pneumatic clamping cylinder  
 -- Conversion to other clamping devices is expensive

**A5554018-Z**

Soft top jaws for 3-jaw manual chuck dia.200mm (7.874")  
 Jaw dimensions: L=80mm (3.150"),  
 W=40mm (1.575"), H=40mm (1.575") (1set = 3 jaws)

**Notes:**  
 -- 1 set per clamping diameter required  
 -- For jaws with a prescribed diameter, it is necessary to order  
 a jaw machining per diameter by a CS


**A5554114A-O**

Chuck simulator for power chuck dia.200mm (7.874")  
 for precise pre-machining of top jaws

**A2228767A-O**

3-jaw precision power chuck dia.200mm (7.874")  
 with adaptor for internal holding fixture MT5  
 Radial precision centring, jaw holding fixture with ball positioning  
 for jaw changing precision within 0.005mm (0.0002")  
 Jaw stroke: 2.5mm (0.098")  
 Repeating accuracy: <0.002mm (0.00008")  
 Laying of a coolant tube for internal cooling is possible  
 Including:  
 -- Clamp actuating tube adaptor  
 -- Torsion protection for adaptor

**Notes:**

- Requires pneumatic clamping cylinder
- Top jaws must be ordered separately for each clamping diameter
- Conversion to other clamping devices is expensive

#### A5554119A-Z

Soft top jaws for 3-jaw manual chuck dia.200mm (7.874")  
 Jaw dimensions: L=90mm (3.543"),  
 W=26mm (1.024"), H=40mm (1.575") (1set = 3 jaws)

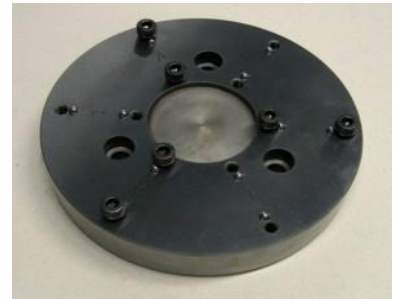
##### Notes:

- 1 set per clamping diameter required
- For jaws with a prescribed diameter, it is necessary to order a jaw machining per diameter by a CS



#### A5554113A-O

Chuck simulator for precision power chuck dia.200mm (7.874")  
 for precise pre-machining of top jaws



#### A5554120A-Z

Pretension discs for outside chucking  
 for precision power chuck dia.200mm (7.874")  
 For precise grinding of the clamping diameter on the jaws.  
 Pretension disc can be removed without removal of the jaws.  
 Diameter steps 0.25mm (0.0984")  
 (1set = 17 discs)



#### A5554121A-Z

Pretension ring for inside chucking  
 for precision power chuck dia.200mm (7.874")  
 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 (0.02") for each.  
 The whole clamping range can be  
 covered with the help of 3 cylinder pins ,  
 dia.5mm (0.197") or dia.6mm (0.027")  
 (Scope of supply without cylinder pins)



## Magnetic chuck

### General notes for magnetic chock:

Acceptance pedal for set-up recommended  
(see chapter Control systems in the Accessories section)

#### A2409895A-Z

Magnetic chuck dia.120mm (4.724")  
with adaptor for internal holding fixture MT5  
Permanent magnet with parallel pole pitch,  
Nominal clamping force approx. 61N/cm<sup>2</sup>, infinitely variable  
Including: Torsion protection for adaptor  
**Note:** Requires hand chuck key for locking clamping devices



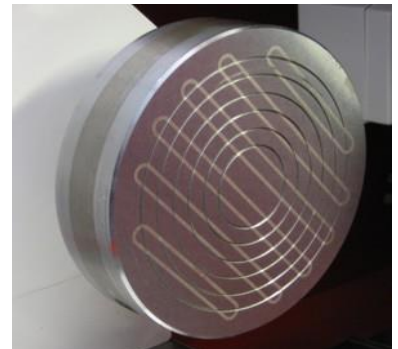
#### A2409896A-Z

Magnetic chuck dia.165mm (6.496")  
with adaptor for internal holding fixture MT5  
Permanent magnet with parallel pole pitch,  
Nominal clamping force approx. 52N/cm<sup>2</sup>, infinitely variable  
Including: Torsion protection for adaptor  
**Note:** Requires hand chuck key for locking clamping devices



#### A2409899A-O

Magnetic chuck dia.230mm (9.055")  
with adaptor for internal holding fixture MT5  
Permanent magnet with parallel pole pitch,  
Nominal clamping force approx. 73N/cm<sup>2</sup>, infinitely variable  
Including: Torsion protection for adaptor  
**Note:** Requires hand chuck key for locking clamping devices



## Face plate

#### A2409894A-Z

Face plate dia.195mm (7.677")  
with adaptor for internal holding fixture MT5  
Plate with 4 T-grooves and slotted holes for clamping workpieces  
or chucking devices  
Including: Torsion protection for adaptor  
**Note:** Requires hand chuck key for locking clamping devices



## Driver

### A1809617A-Z

Drivers for dia. 10-50mm (0.394"-1.969"),  
set consisting of 1 piece of each  
for workpiece diameter up to max.  
dia.10mm (0.394"), dia.16mm (0.630") ,  
dia.25mm (0.984") , dia.40mm (1.575") , dia.50mm (1.969")



### A1809724A-Z

Driver for dia.50-80mm (1.969"-3.150")



### A1809725A-Z

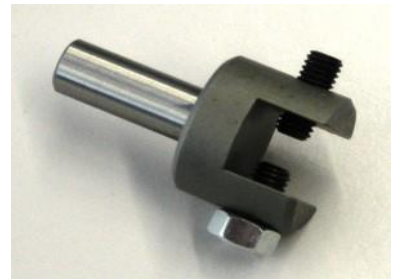
Driver for dia.80-120mm (3.150"-4.724")



## Zero backlash drivers

### A2909923A-Z

Simple driving fork for zero-backlash driving of a carrier,  
in place of the dia.8mm (0.315") driving pin.  
Suitable for drivers of workheads  
with internal holding fixture MT3, MT4 or MT5



**Inserts for carrying centres**

A2030026A-Z

MT2 centre adaptor for internal holding fixture MT4  
Incl. extractor nut M35x1.5



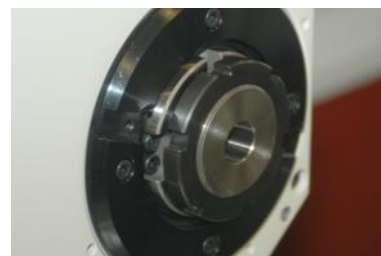
A2805017A-Z

MT3 centre adaptor for internal holding fixture MT4  
Incl. extractor nut M35x1.5



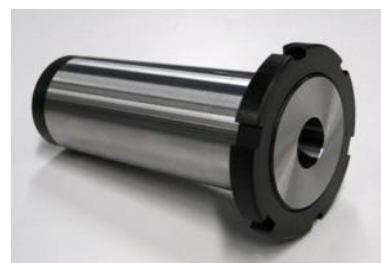
A1809104A-Z

MT1 centre adaptor for internal holding fixture MT5  
Incl. extractor nut M48x1.5



A1809105A-Z

MT2 centre adaptor for internal holding fixture MT5  
Incl. extractor nut M48x1.5



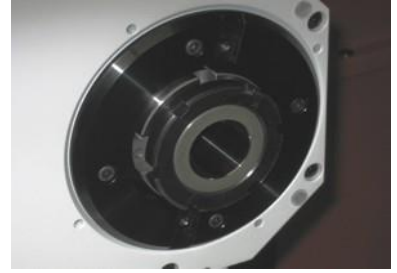
A1809106A-Z

MT3 centre adaptor for internal holding fixture MT5  
Incl. extractor nut M48x1.5



A1809107A-Z

MT4 centre adaptor for internal holding fixture MT5  
Incl. extractor nut M48x1.5

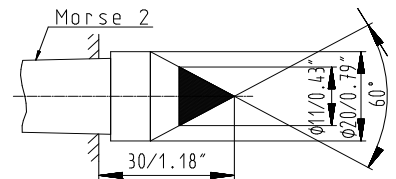


## Centres for workhead and tailstock

### Centres for internal holding fixture MT2

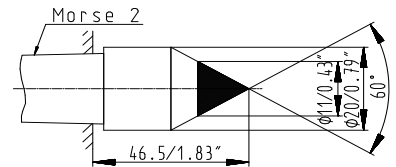
A0166025A-Z

Full centre A short dia.20mm (0.787") for internal holding fixture MT2



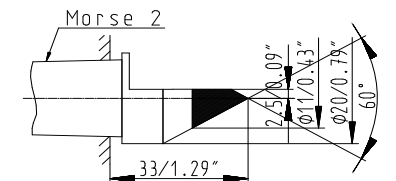
A0138004A-Z

Full centre A long dia.20mm (0.787") for internal holding fixture MT2



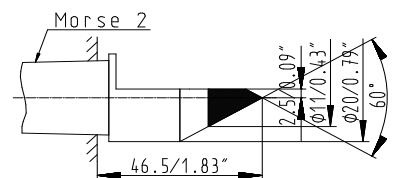
A0810052A-Z

Half centre short dia.20/2.5mm (0.787"/0.098")  
for internal holding fixture MT2



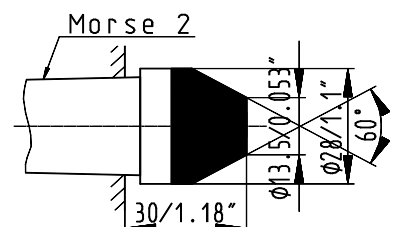
A0138005A-Z

Half centre long dia.20/2.5mm (0.787"/0.098")  
for internal holding fixture MT2



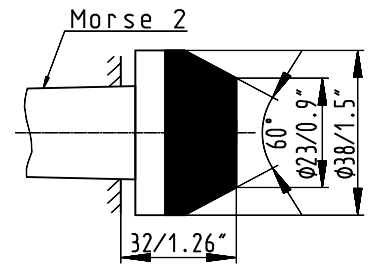
A0166026A-Z

Blunt full centre long dia.28mm (1.102") for internal holding fixture MT2



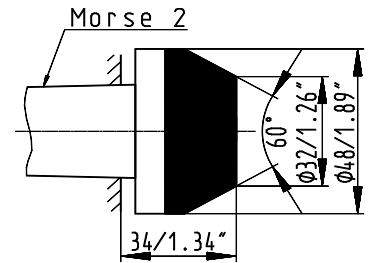
A0166029A-Z

Blunt full centre long dia.38mm (1.496") for internal holding fixture MT2

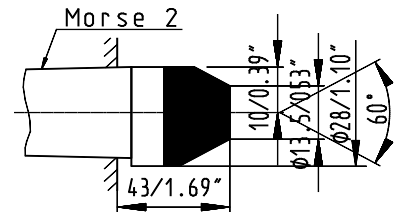


A0166030A-Z

Blunt full centre long dia.48mm (1.890") for internal holding fixture MT2

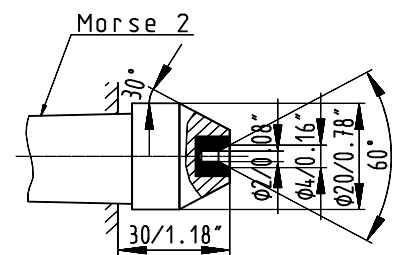


A0138006A-Z

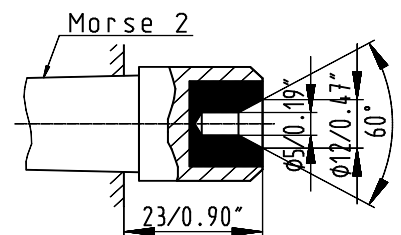
 Blunt half centre dia.28/10mm (1.102-0.394")  
for internal holding fixture MT2


A0809087A-Z

Hollow full centre short dia.4mm (0.157") for internal holding fixture MT2

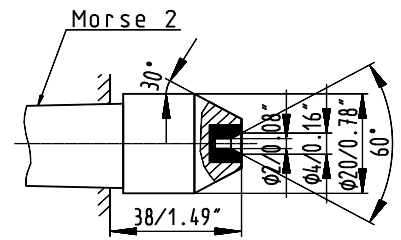


A0865023A-Z

 Hollow full centre short dia.12mm  
(0.472") for internal holding fixture MT2


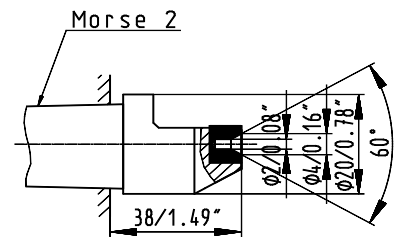
A0810031A-Z

Hollow full centre long dia.4mm (0.157") for internal holding fixture MT2



A0810032A-Z

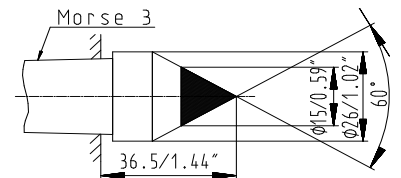
Hollow half centre dia.4/2.5mm (0.157"/0.098") for internal holding fixture MT2



### Centres for internal holding fixture MT3

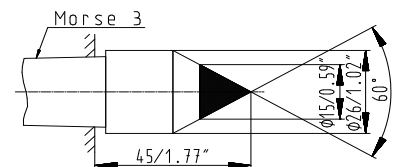
A0709017A-Z

Full centre A short dia.26mm (1.024") for internal holding fixture MT3



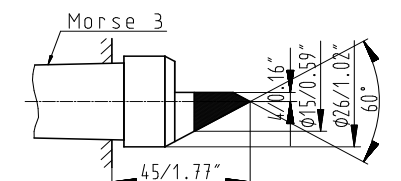
A0710020A-Z

Full centre A long dia.26mm (1.024") for internal holding fixture MT3



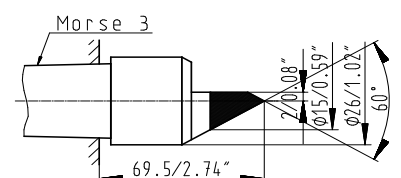
A0710021A-Z

Half centre short dia.26/4mm (1.024"/0.157") for internal holding fixture MT3



A0710045A-Z

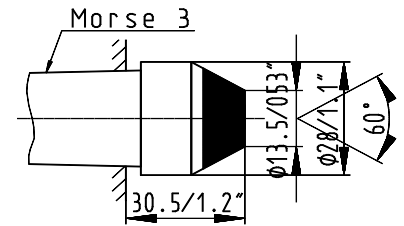
Half centre long dia.26/2mm (1.024"/0.079") for internal holding fixture MT3





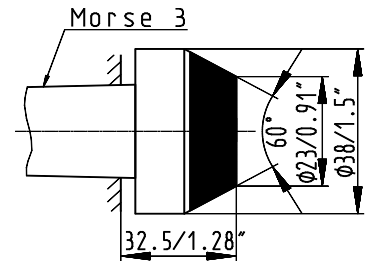
A0709058A-Z

Blunt full centre long dia.28mm (1.102") for internal holding fixture MT3



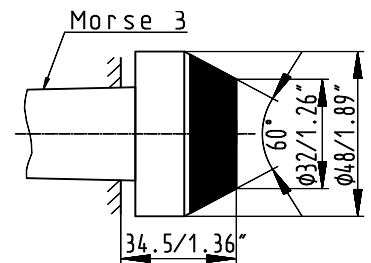
A0709059A-Z

Blunt full centre long dia.38mm (1.496") for internal holding fixture MT3



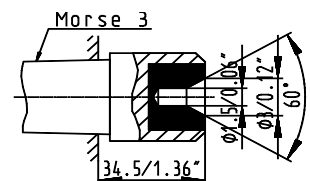
A0709044A-Z

Blunt full centre long dia.48mm (1.890") for internal holding fixture MT3



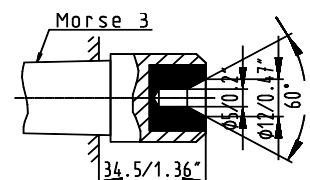
A0709057A-Z

Hollow full centre dia.3mm (0.118") for internal holding fixture MT3



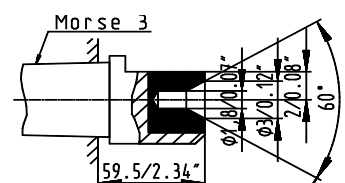
A1865051A-Z

Hollow full centre dia.12mm (0.472") for internal holding fixture MT3



A0710048A-Z

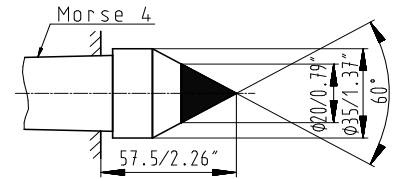
Hollow half centre dia.3/2mm (0.118"/0.079") for internal holding fixture MT3



## Centres for internal holding fixture MT4

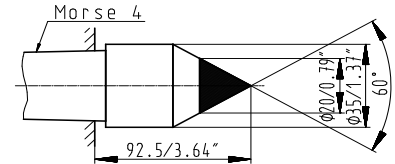
A2810030A-Z

Full centre A short dia.35mm (1.378") for internal holding fixture MT4



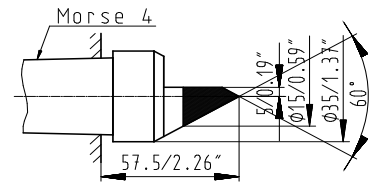
A2810182A-Z

Full centre A long dia.35mm (1.378") for internal holding fixture MT4



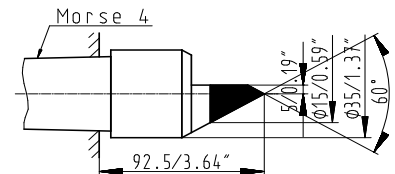
A2810031A-Z

Half centre short dia.35/13mm (1.378"/0.512") for internal holding fixture MT4



A2810183A-Z

Half centre long dia.35/13mm (1.378"/0.512") for internal holding fixture MT4



## Tailstock

A2237721A-O

Setting-up tailstock with fitting taper MT3 (CH 175mm/6.89") (set-up aid for setting 3-jaw steady rest)



## Steady rests and drawdown equipment

### Steady rest

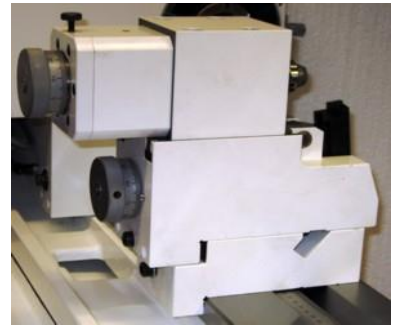
#### A2414714A-Z

Two-point steady for dia.4-88mm (0.157-3.468")  
(centre height 175mm (6.890"))



#### A2414718A-Z

Two-point steady for dia.10-100mm (0.393-3.937")  
(centre height 175mm (6.890"))



#### A2414676A-Z

Steady rest closed for dia.5-140mm (0.196-5.511")  
(centre height 175mm (6.890"))  
with cylindricity correction and fine adjustment for jaws



#### A2414674A-Z

Steady rest closed for dia.90-230mm (3.543-9.055")  
(centre height 175mm (6.890"))  
with cylindricity correction and fine adjustment for jaws



## Insertion aids (prism supports)

A2414722A-Z

Prism support (2 pieces) for dia.15-150mm (0.590-5.905")  
(centre height 175mm (6.889"))



## Dressing

### Dressing device (non-controlled)

10041581-O

Dressing device with interface G01 attachable to the workpiece table ,  
center height 175mm (6.890"), movable in direction X.

**Note:** Requires dressing tool holder with interface G01.

Released for series: 1 - 51

Note: Can be set up for:

- external grinding wheels
- internal grinding wheels with infeed direction forward (direction -X)
- internal grinding wheels with infeed direction backward (direction +X)

### Adapter to dressing device

A3015625A-O

Adapter to dressing device with interfaces E01/G01  
for mounting a dressing tool holder on the front and/or back.  
(External grinding / Internal grinding)

**Note:** Requires dressing tool holder with interface G01

Released for series: 52 - ...

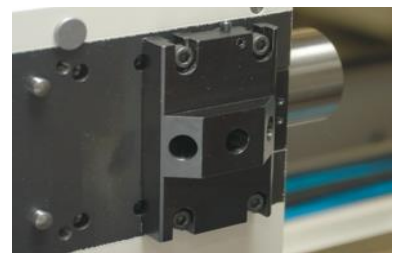
A3015637A-O

Adapter for dressing tool holder with interface G01/M01  
for 1 or 2 horizontal swiveling dressing tool holders.  
Angle setting for each holding fixture up to max. 55°

### Dressing tool holder

A2915701A-O

Dressing tool holder vertically adjustable with interface G01.  
With 3 fitting tapers Morse1 shortened for 2 dressing tools



**A2915705A-O**

Dressing tool holder vertically adjustable with interface G01,  
With 1 bore dia.9.52mm (0.375") for dressing while thread grinding  
with one dressing tool


**A2915706A-O**

Dressing tool holder vertically adjustable with interface G02 for  
dressing device on workpiece  
table, with 2 connecting bores oblique MT1  
shortened, (clamping length 19mm (0.748")) for 2 dressing tools  
Released for series: 1 - 51


**A2915702A-O**

Dressing tool holder vertically adjustable with interface G02  
for dressing device on workpiece table,  
with 3 connecting bores oblique MT1 shortened  
(clamping length 19mm / 0.748") for 2 dressing tools  
Released for series: 1 - 51


**Dressing tool holding fixture to Adaptor M01**
**A3015082A-O**

Swiveling dressing-tool holder horizontal to interface M01  
with mounting hole, shortened for dressing tool MT1  
(length 19mm (0.748"))

**A3015638A-O**

Swiveling dressing-tool holder horizontal to interface M01  
with dia.9.52mm (0.375") cylindrical mounting hole for dressing tools

**Holding arbor for rotary dressing tools**
**A2915652A-Z**

Dressing shaft dia.50x187mm (1.969"x7.362")  
for holding silicon carbide dressing tools dia.200mm (7.874")  
and 15-25mm (0.591-0.984") width.  
Incl. driving lathe dog for shafts of diameter 50mm (1.969"),  
driven through workhead  
Dressing shaft can be clamped  
between centers instead of the workpiece  
for dressing of CBN and diamond external grinding wheels.

**Note:**

-- Dressing tool has to be ordered separately



## Dressing spindle

10025869-O

Dressing spindle type S 22'420rpm  
Rpm-range 5'000-22'420rpm, Power supply 0.044-0.2kW (0.06-0.27hp)  
Spindle dia.58mm (2.283")  
with cylindrical dressing tool holding fixture dia.20-h2 (0.787").  
Connection cable length 5m with radial cable connection on the spindle  
and Harting plug HAN-module with lateral cable output.  
(Spindle according to electrical specification 1330366A).

Conditions:

- Requires spindle holder dia.58mm (2.283")
- Requires dressing frequency converter
- Dressing tool has to be checked by technical clarification and subsequently ordered by a design order

Released for series: 52 - ...



10039262-O

Dressing spindle type M 16'340rpm, power supply 0.45kW (0.612hp)  
with dressing tool holding fixture  
dia.40-h3 (1.575"), clamping interface I04.  
Connection cable length 5m and Harting plug HAN-Modul with lateral  
cable output. (Spindle according to electrical specification 1330366A).

Conditions:

- Requires spindle holder with clamping interface I04
- Requires dressing frequency converter
- Dressing tool has to be ordered separately

Released for series: 40 - ...

**Note: If the dressing spindle with dressing wheel diameter**

100mm (3.937") is used on the workhead, is reduced the  
max. dressable grinding wheel dia. when:

- wheelhead with 0° to 30° adjustment
  - 490mm (19.291") with workhead ISO50 in the grinding head position 0°
  - 460mm (18.110") with workhead ISO50 in the grinding head position 30°
- wheelhead with B-axis
  - 490mm (19.291") with workhead ISO50 in the grinding head position 0°
  - 470mm (18.504") with workh. MT4 or MT5 in the grinding h.position 30°
  - 400mm (15.748") with workhead ISO50 in the grinding head position 30°

## Flange for dressing spindles for collet chucks ER11

**General note:** Collet chucks can be found in the following chapter  
Collet chucks for internal grinding and dressing spindles

10027483-O

Flange for dressing spindle with tool holding fixture dia.20-h2 (0.787")  
for collet chucks ER11 for holding dressing tools  
Released for series: 52 - ...

10026749-O

Flange for dressing spindle with tool holding fixture dia.40-h3 (1.575")  
for collet chucks ER11 for holding dressing tools  
Released for series: 40 - ...

## Dressing spindle holder

10041968-O

Spindle holder with interface E01  
for dressing spindle dia. 58mm (2.283"),  
for horizontal mounting of the dressing spindle,  
parallel or right-angled to the workpiece table  
angle setting range  $-5^{\circ}$  to  $+5^{\circ}$   
Released for series: 52 - ...

10042077-O

Spindle holder with interface E01 for dressing spindle with clamping  
interface I04 for horizontal mounting of the dressing spindle,  
parallel or right-angled to the workpiece table,  
angle setting range  $-5^{\circ}$  to  $+5^{\circ}$   
Released for series: 52 - ...

A2915718A-O

Spindle holder 5deg. height adjustable with interface G01 for mounting  
of a dressing spindle with clamping interface I04.  
(21.7mm (0.854") distance between interface G01 und I04).  
Note: Can also be used for spindles with type of mounting W  
Released for series: 40 - ...



A2915719A-O

Spindle holder 0deg. height adjustable with interface G01  
for mounting a dressing spindle with mounting interface I04.  
Suitable for dressing for thread grinding  
(18mm distance between interface G01 and I04)  
**Note:** Can also be used for spindles with mounting type W  
Released for series: 40 - ...

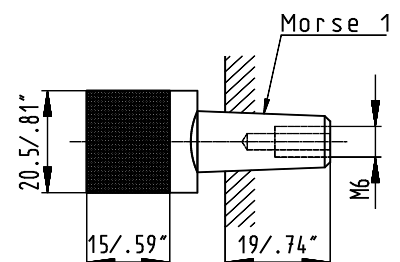


## Dressing tools

### Dressing tools with fitting taper MT1 shortened (clamping length 19mm / 0.748")

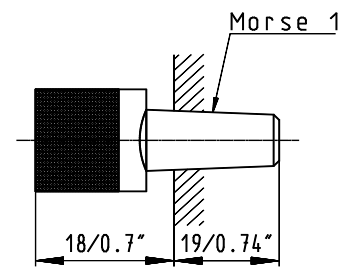
A2813076A-Z

Grain fliese diamond 1.15 mm (0.045") with fitting taper MT1 shortened  
(clamping length 19mm (0.748"))



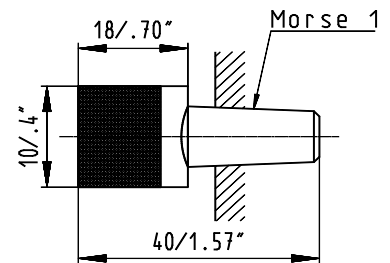
## A2230036A-Z

Grain fliese diamond FCS 115 W, height 10mm (0.394"), length 15mm (0.591") with fitting taper MT1 shortened (clamping length 19mm (0.748"))



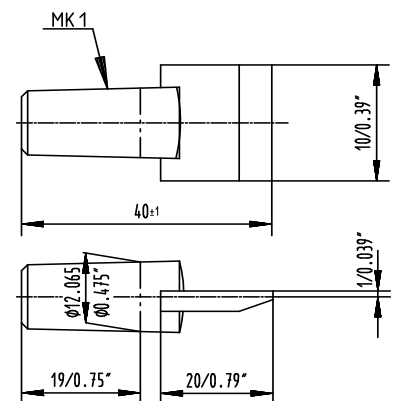
## A5560730A-Z

Needle fliese type DV/10 NX, height 10mm (0.394"), length 18mm (0.709") with fitting taper MT1 shortened (clamping length 19mm (0.748"))



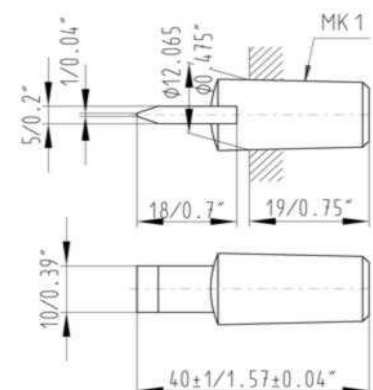
## A5560731A-Z

Needle fliese type DV/20 NX, height 20mm (0.787"), length 20mm (0.787") with fitting taper MT1 shortened (clamping length 19mm (0.748"))



## A5560511A-Z

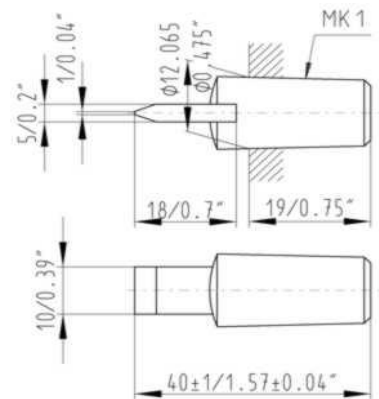
Needle fliese type MKD-3-0640 DV/10, height 10mm (0.394"), length 18mm (0.709") with fitting taper MT1 shortened (clamping length 19mm (0.748"))



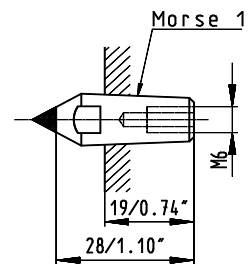


**A5560512A-Z**

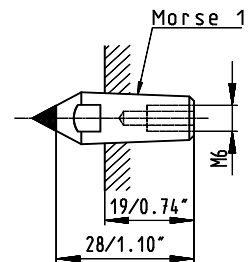
Needle fliese type LCVD-3-0640 DV/10, height 10mm (0.394"), length 18mm (0.709") with fitting taper MT1 shortened (clamping length 19mm (0.748"))


**A2813077A-Z**

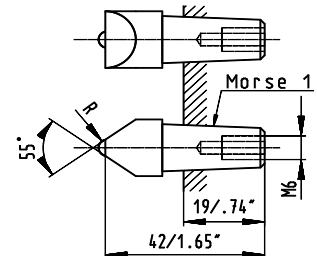
Single point diamond 0.1 carat, with fitting taper MT1 shortened (clamping length 19mm (0.748"))


**A2813079A-Z**

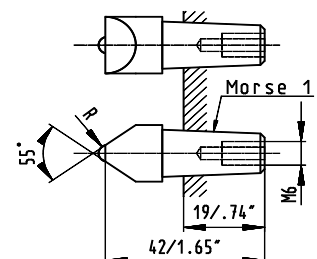
Single point diamond 1.5 carat, with fitting taper MT1 shortened (clamping length 19mm (0.748"))


**A5560304A-Z**

Single point diamond 0.45carat 55deg. R 0.25mm (0.009") with fitting taper MT1 shortened (clamping length 19mm (0.748"))

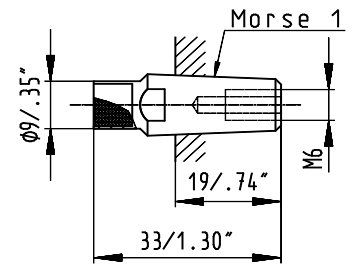

**A5560305A-Z**

Single point diamond 0.45carat 55deg. R 0.5mm (0.019") with fitting taper MT1 shortened (clamping length 19mm (0.748"))



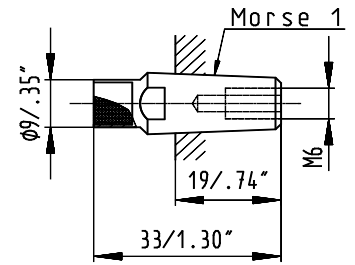
A2813075A-Z

Impregnated diamond grit 25 with fitting taper MT1 shortened  
(clamping length 19mm (0.748"))



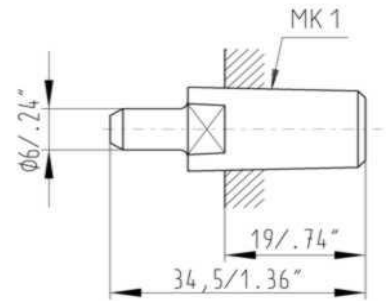
A2813081A-Z

Impregnated diamond grit 100 with fitting taper MT1 shortened  
(clamping length 19mm (0.748"))



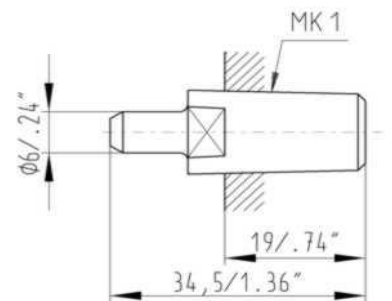
A5560009A-Z

Impregnated diamond for grinding wheel grit 60-100  
with fitting taper MT1 shortened (clamping length 19mm (0.748"))



A5560012A-Z

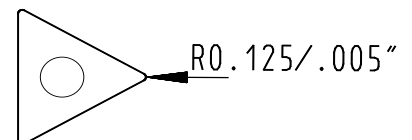
Impregnated diamond for grinding wheel grit 120-320  
with fitting taper MT1 shortened (clamping length 19mm (0.748"))



**Dressing plates and holding fixtures**

A5560541A-Z

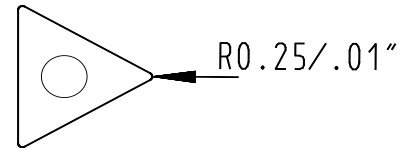
CVD-dressing plate R 0.125mm / 0.005" for the dressing of profiles  
**Note:** Requires holding fixture for PCD/CVD-dressing plates



A5560542A-Z

CVD-dressing plate R 0.25mm / 0.010" for the dressing of profiles

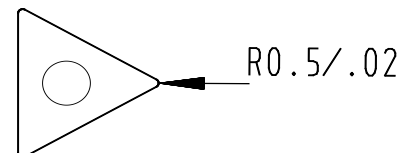
**Note:** Requires holding fixture for PCD/CVD-dressing plates



A5560543A-Z

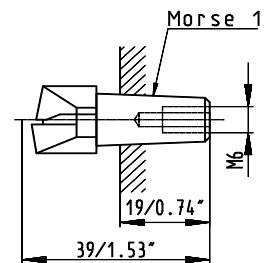
CVD-dressing plate R 0.5mm / 0.020" for the dressing of profiles

**Note:** Requires holding fixture for PCD/CVD-dressing plates



A5560727A-Z

Holding fixture for PCD-dressing or CVD-dressing plates (self-centering) to dressing tool holder with shortened MT1 or MT1

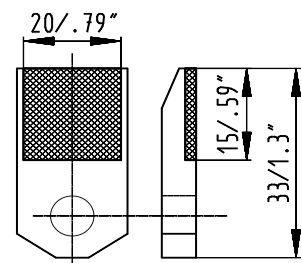


### Grain fliese diamonds with sep. fitting taper

A5560712A-Z

Grain fliese diamond 1.15mm / 0.045", height 10mm / 0.394", length 15mm / 0.591"

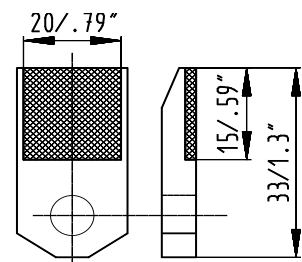
**Note:** Requires correspondent adaptor for grain fliese diamond



A5560714A-Z

Grain fliese diamond 0.9mm / 0.035", height 10mm / 0.394", length 15mm / 0.591"

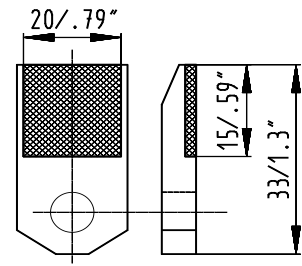
**Note:** Requires correspondent adaptor for grain fliese diamond



## A5560719A-Z

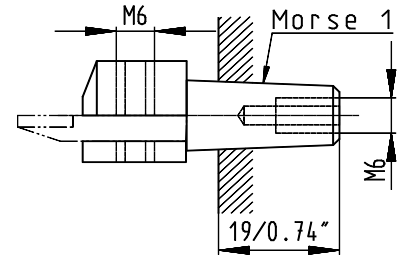
Grain fliese diamond 0.75mm /0.029", height 10mm /0.394",  
length 15mm / 0.591"

**Note:** Requires correspondent adaptor for grain fliese diamond



## A5560708A-Z

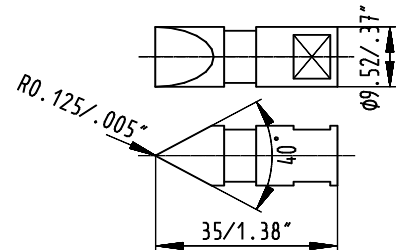
Holding fixture for diamond grain plates for dressing tool holder  
with MT1 shortened



### Dressing tools with holding fixture dia.9.52mm (0.375") cylindrical

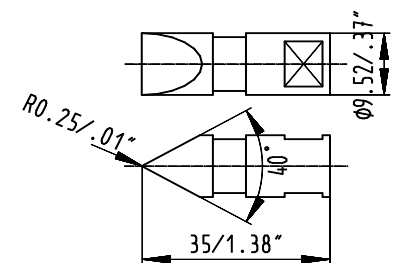
## A5560204A-Z

Profile diamond, R0.125, 40deg., single grain  
with holding fixture dia.9.52mm (0.375") cylindrical



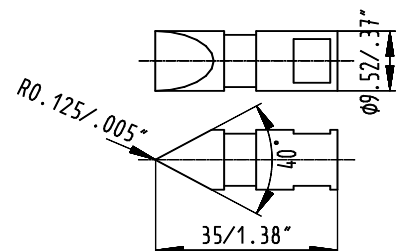
## A5560205A-Z

Profile diamond, R0.250, 40deg., single grain  
with holding fixture dia.9.52mm (0.375") cylindrical



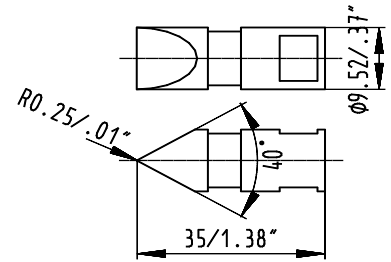
## A5560206A-Z

Profile diamond, R0.125, 40deg., MCD  
with holding fixture dia.9.52mm (0.375") cylindrical



A5560207A-Z

Profile diamond, R0.250, 40deg., MCD  
with holding fixture dia.9.52mm (0.375") cylindrical



**Dressing tools for external dressing motor spindle with dressing tool holding fixture Ø 40-h3 (dia.1.575")**

A5560361A-Z

Diamond dressing cup wheel dia.100mm (3.937") for external dressing motor spindle with dressing tool holding fixture dia.40-h3 (1.575") for the grinding of corundum / silicon carbide or ceramic bonded CBN wheels (cannot be resharpened)



A5560360A-Z

CVD dressing disk dia.100mm (3.937") R0.1mm (0.004") for dressing spindles with dressing tool holding fixture dia.40-h3 (1.575") for the dressing of corundum / silicon carbide or ceramic bonded CBN wheels (can be resharpened)

**Note:** Particularly suitable for the dressing of thread profiles on the grinding wheel



A5560356A-Z

CVD dressing disk dia.100mm (3.937") R0.25mm (0.001") for dressing spindles with dressing tool holding fixture dia.40-h3 (1.575") for the dressing of corundum / silicon carbide or ceramic bonded CBN wheels (can be resharpened)



**A5560357A-Z**

CVD dressing disk dia.100mm (3.937") R0.5mm (0.002") for dressing spindles with dressing tool holding fixture dia.40-h3 (1.575") for the dressing of corundum / silicon carbide or ceramic bonded CBN wheels (can be resharpened)

**Auxiliary attachment for the adjustment of the dressing tool height****A2621602A-Z**

To adjust auxiliary stationary dressing tools attachment 175mm (6.889") over the workpiece table

**Collet chucks for internal grinding and dressing spindles****Collets ER11****A5557800A-Z**

Collet ER11 dia.1mm (0.039")  
Released for series: 40 - ...

**A5557816A-Z**

Collet ER11 dia.1.5mm (0.059")  
Released for series: 40 - ...

**A5557817A-Z**

Collet ER11 dia.2mm (0.078")  
Released for series: 40 - ...

**A5557818A-Z**

Collet ER11 dia.2.5mm (0.098")  
Released for series: 40 - ...

**A5557411-Z**

Collet ER11 dia.3mm (0.118")  
Released for series: 40 - ...

**A5557819A-Z**

Collet ER11 dia.3.5mm (0.137")  
Released for series: 40 - ...

**A5557832A-Z**

Collet ER11 dia.4mm (0.157")  
Released for series: 40 - ...

A5557833A-Z

Collet ER11 dia.4.5mm (0.177")  
Released for series: 40 - ...

A5557834A-Z

Collet ER11 dia.5mm (0.196")  
Released for series: 40 - ...

A5557857A-Z

Collet ER11 dia.5.5mm (0.216")  
Released for series: 40 - ...

A5557410-Z

Collet ER11 dia.6mm (0.236")  
Released for series: 40 - ...

### **Collets ER12**

A5557845A-Z

Collet ER12 dia.1mm (0.039")

A5557846A-Z

Collet ER12 dia.1.5mm (0.059")

A5557847A-Z

Collet ER12 dia.2mm (0.078")

A5557848A-Z

Collet ER12 dia.2.5mm (0.098")

A5557849A-Z

Collet ER12 dia.3mm (0.118")

A5557850A-Z

Collet ER12 dia.3.5mm (0.137")

A5557851A-Z

Collet ER12 dia.4mm (0.157")

A5557852A-Z

Collet ER12 dia.4.5mm (0.177")

A5557853A-Z

Collet ER12 dia.5mm (0.196")

A5557854A-Z

Collet ER12 dia.5.5mm (0.216")

A5557855A-Z

Collet ER12 dia.6mm (0.236")

A5557856A-Z

Collet ER12 dia.6.5mm (0.255")

---

---

**Collets ER16**

A5557835A-Z

Collet ER16 dia.1mm (0.039")

A5557836A-Z

Collet ER16 dia.1.5mm (0.059")

A5557837A-Z

Collet ER16 dia.2mm (0.078")

A5557838A-Z

Collet ER16 dia.2.5mm (0.098")

A5557839A-Z

Collet ER16 dia.3mm (0.118")

A5557840A-Z

Collet ER16 dia.3.5mm (0.137")

A5557841A-Z

Collet ER16 dia.4mm (0.157")

A5557842A-Z

Collet ER16 dia.4.5mm (0.177")

A5557843A-Z

Collet ER16 dia.5mm (0.196")

A5557844A-Z

Collet ER16 dia.5.5mm (0.216")

A5557858A-Z

Collet ER16 dia.6mm (0.236")

A5557859A-Z

Collet ER16 dia.6.5mm (0.255")

A5557860A-Z

Collet ER16 dia.7mm (0.275")

A5557861A-Z

Collet ER16 dia.7.5mm (0.295")

A5557862A-Z

Collet ER16 dia.8mm (0.314")

A5557863A-Z

Collet ER16 dia.8.5mm (0.334")

A5557864A-Z

Collet ER16 dia.9mm (0.354")

A5557865A-Z

Collet ER16 dia.9.5mm (0.374")

A5557866A-Z

Collet ER16 dia.10mm (0.393")

---



**Collets ER25**

A5557801A-Z

Collet ER25 dia.2mm (0.078")

A5557802A-Z

Collet ER25 dia.3mm (0.118")

A5557803A-Z

Collet ER25 dia.4mm (0.157")

A5557804A-Z

Collet ER25 dia.5mm (0.196")

A5557805A-Z

Collet ER25 dia.6mm (0.236")

A5557806A-Z

Collet ER25 dia.7mm (0.275")

A5557807A-Z

Collet ER25 dia.8mm (0.314")

A5557808A-Z

Collet ER25 dia.9mm (0.354")

A5557809A-Z

Collet ER25 dia.10mm (0.393")

A5557810A-Z

Collet ER25 dia.11mm (0.433")

A5557811A-Z

Collet ER25 dia.12mm (0.472")

A5557812A-Z

Collet ER25 dia.13mm (0.511")

A5557813A-Z

Collet ER25 dia.14mm (0.551")

A5557814A-Z

Collet ER25 dia.15mm (0.590")

A5557815A-Z

Collet ER25 dia.16mm (0.629")

---

## Control systems

### Foot pedal

#### A1390739A-O

Acceptance foot pedal for carrying out movements with service doors open (with over-travel switch-off).

Simplifies the setting-up of internal grinding spindles and the alignment of workpieces in chucks.

Connection cable length 4m

**Notes:**

- No longer available, has been replaced by A1390791A
  - If foot pedal A1390791A is used as a substitute for A1390739A, only 1 channel is evaluated on the machine side
- Released for series: 1 - 39



#### A1390791A-O

Approval foot pedal (2-channel) for the execution of movements with open operating doors (with overtravel switched off). Facilitates the set-up of internal grinding spindles and the alignment of workpieces in the chucks.

Connection cable length 4m

Released for series: 1 - ...

**Note:** Only 1 channel is evaluated on the machine side



#### A1390740A-O

Foot-pedal for clamping device in the case of electrically controlled clamping devices (hydr. quill retraction, chuck, etc.).

Double foot pedal (clamping, unclamping) with over-travel switch-off on the clamping pedal. Connection cable length 4m.

**Notes:**

- No longer available, has been replaced by A1390792A
  - If foot pedal A1390740A is used as a substitute for A1390792A, only 1 channel is evaluated on the machine side
- Released for series: 1 - 39



#### A1390792A-O

Foot pedal (dual channel) 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 4m

Released for series: 1 - ...

**Note:** Only 1 channel is evaluated on the machine side



## Contact detection

### A2902641B-O

Electronic contact detection Sensitron 2 for customer assembly, consisting of:

- Desktop model with LED display, manual setting of sensitivity and connection possibility of 2 sensors with manual selection.
- Pluggable interface cables 1.95m and feeder for 24VDC supply from the machine.
- 1 contact sensor passive with magnetic base as set-up assistance and for contact detection in grinding between centers, (except with rotating tailstock center) as well as for contact detection on non-rotating dressing tools. Connecting cable length 5m pluggable directly on the back wall of the contact detection device (3-pole)

**Note: Do not use for new products, replaced by selling no A2902758A**

Released for series: 1 - 19



### A2902758A-O

Electronic contact detection Sensitron 6 consisting of:

- Desktop model with LED display, manual selection of frequency band, setting of sensitivity and connection possibility of 2 sensors with manual selection.
- Pluggable interface cables 1.95m and feeder for 24VDC supply from the machine.
- 1 contact sensor passive with magnetic base as set-up assistance and for contact detection in grinding between centers, (except with rotating tailstock center) as well as for contact detection on non-rotating dressing tools. Connecting cable length 5m pluggable directly on the back wall of the contact detection device (3-pole)

## Dynamic balancing

### A2912654B-O

Portable 1-plane 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. (including transport case)

#### Notes:

- 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
  - No longer usable for new quotes, was replaced by selling no A5549233A
- Released for series: 1 - 39

**Note:** Requires MPM balancing sensors and ancillary equipment



## A5549233A-O

Portable MPM 3.BMT230-2.M.24 2-plane balancing unit with 24V DC operating voltage, display unit (with freely selectable manual adjustment of the balancing plane) for manual adjustment of the balancing segments on 2 grinding wheel flanges (one-sided with 2 grinding wheels on a single spindle, or two-sided in connection with a wide grinding wheel) after dynamic unbalancing check (including transport case).

**Notes:**

- 1 device can be used for several machines which are equipped with an interface for manual balancing MPM and the necessary balancing sensors MPM.



## A2912793B-O

MPM balancing sensors and ancillary equipment for portable balancing unit for 1-plane balancing with BMT100 or BMT230 for customer assembly, consisting of:

- Balancing sensor dia.25mm (0.984") with magnetic base, pluggable feeder cable 1.50m and connecting cable 2.80m
- Revolution sensor (initiator) with pluggable connecting cable 3.80m
- Feeder cable 2.8m for 24VDC power supply (pluggable) from machine
- Display unit support

**Note: Can not be used for several machines**

Released for series: 1 - 115



## 10145441-O

Balancing sensor technology MPM and connecting parts to portable balancing unit for the 1-plane balancing with BMT100 or BMT230 for the mounting by the customer, consisting of:

- Balancing sensor Ø25mm (0.984") with magnetic base, plug-in connection cable 1.50m and connection cable 2.80m
- Connection cable for rotational speed signal 2.8m
- Supply cable 2.8m for 24VDC supply (plug-in) from the machine
- Holder for display device

**Note: Cannot be used for multiple machines**

Released for series: 116 - ...

**Input and output units**

## A2404658A-Z

External disk unit 3 1/2" (Fanuc Handy File) incl. 7m cable. MS-DOS-compatible  
Released for series: 1 - 39



**A2219700-Z**

Discs 3 1/2", 2HD (package with 10 pieces)  
Released for series: 1 - 39


**Transmission cable**
**A1332656A-Z**

Transmission cable RS 232 C for the connection  
Fanuc-control <--> personal computer, length 5m  
Released for series: 1 - 39


**A1389853A-Z**

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

**Note:** Cannot be used as a network cable

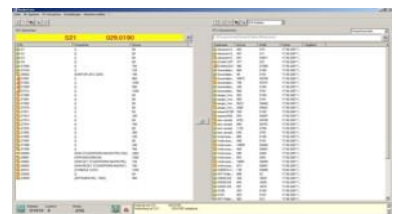
Released for series: 40 - ...


**Software**
**Communication software for external PC**
**A1397086A-Z**

StCom 4.x for Windows, 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:
    - CNC-Control Fanuc 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



**Notes:**

- Requires RS 232 C data cable
- No longer usable for new quotes,  
was replaced by StuderCom 5.x (selling no 10032281)  
Released for series: 1 - 30

## 10032281-Z

## StuderCom 5.x

Software module for transfer  
of data and ISO grinding programs (Release  
F, only ISO grinding programs)  
from the CNC controller to a PC and vice  
versa via the serial interface, Ethernet or HSSB.

## Dialog language (switchable):

German / English / French / Italian,  
incl. integrated operating instructions

## System requirements:

- A personal computer with:
  - Microsoft Windows 98 to Windows 7 operating system
  - CD-ROM drive
  - free serial port for RS-232-C or Ethernet-  
or HSSB Interface
- Studer grinding machine with:
  - Fanuc control system and Studer  
operating system Release A or higher
  - free serial port for RS-232-C or Ethernet-  
or HSSB Interface

## Scope of delivery:

- Software and license key on CD-ROM
- Installation instructions German / English / French / Italian

**Notes:**

- Transmission cable RS-232-C or Ethernet or HSSB required.
- Not required for offline programming software StuderGRIND Basic  
since full functionality of StuderCom included
- Not required for Studer operating system Release F (StuderWIN  
or StuderWINfocus), since transfer ensured through operating system

**Accessory to touch probe**

## 30005258-Z

Probe arm with sphere dia.2mm (0.079"), length 21mm (0.827")  
for touch probe TS ... with M3 thread (spare part)  
Released for series: 40 - ...



**A5552868A-Z**

Probe arm with sphere dia.2mm (0.079"), length 21mm (0.827"), including breaking location for touch probe C25 with M3 thread (spare part)  
Released for series: 1 - 39


**A5552873A-O**

Probe arm with tungsten carbide sphere dia.2mm (0.079"), length 20mm (0.787") for touch probe T25. and TL25. with M4 thread (spare part)  
Released for series: 1 - 39


**A5552805A-O**

Breaking piece M4, length 8mm (0.315") for touch probe T25. and T25L. (spare part)  
Released for series: 1 - 39


**Marposs**
**Accessories for measuring head Unimar**
**A5552936A-O**

Support for mounting 2 positioning measuring heads Unimar P50, P56 stacked on one hydraulic retraction unit for measuring of lengths

**A5552943A-O**

Diameter measuring range extension up to dia.160mm / (6.299") to measuring head Marposs UNIMAR S31, S37  
(1 set consists of 2 parts to one diameter measuring head)

**Movomatic**
**Accessories for measuring head digital**
**A5548526A-O**

Measuring head support (80mm (3.150") width) for more than one digital measuring head per hydraulic gauge slide

**A5548527A-O**

Measuring head support (100mm (3.937") width) for more than one digital measuring head per hydraulic gauge slide

## A5548528A-O

Measuring head support (130mm (5.118") width) for more than one digital measuring head per hydraulic gauge slide

## A5548518A-O

Tungsten carbide-measuring tip dia.4mm (0.157")  
for probe arm of length positioning measuring heads DP200



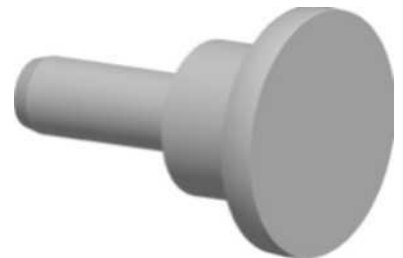
## A5548519A-O

Tungsten carbide-measuring tip dia.6mm (0.236")  
for probe arm of length positioning measuring heads DP200



## A5548517A-O

Tungsten carbide-measuring tip dia.8mm (0.315")  
for probe arm of length positioning measuring heads DP200



## A5548506A-O

Tungsten carbide-measuring tip dia.3x25mm (0.118x0.984")  
for probe arm 1.5-60mm (0.059-2.362")  
for diameter measuring heads DMxxx  
(must be ordered per diameter two times)



## A5548507A-O

PCD-measuring tip dia.3x25mm (0.118x0.984")  
for probe arm 1.5-60mm (0.059-2.362")  
for diameter measuring heads DMxxx  
(must be ordered per diameter two times)



## A5548510A-O

Tungsten carbide-measuring tip dia.3x47mm (0.118x1.850")  
for probe arm 20-100mm (0.787-3.937")  
for diameter measuring heads DMxxx  
(must be ordered per diameter two times)





**A5548511A-O**

PCD-measuring tip dia.3x47mm (0.118x1.850")  
 for probe arm 20-100mm (0.787-3.937")  
 for diameter measuring heads DMxxx  
 (must be ordered per diameter two times)


**A5548514A-O**

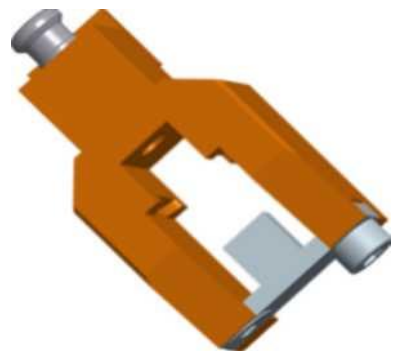
Tungsten carbide-measuring tip dia.4x40mm (0.157x1.575")  
 for probe arm for diameter measuring heads DUxxx  
 (must be ordered per diameter two times)


**A5548515A-O**

PCD-measuring tip dia.4x40mm (0.157x1.575")  
 for probe arm for diameter measuring heads DUxxx  
 (must be ordered per diameter two times)


**A5548513A-O**

Diameter measuring range extension  
 unit for dia.78-110mm (3.071-4.331")  
 to diameter measuring head Movomatic DU2xx


**A5548540A-O**

Fine adjustment for retracted measuring head position per gauge slide  
**Note:** Recommended for each gauge slide with measuring head DP200  
 (especially for low shoulder height) and/or DU200

## A5552521A-O

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

- Measuring range 4-150mm (0.157 - 5.906")
- Repeatability <0.0001mm (0.0000039") measuring depth 1 x nominal diameter
- Precision <0.0005mm (0.0000197")
- Cable length 3m

Note:

- Uses a measuring circuit analog
- Requires test mandrel and centering pin for match-measuring tripod CI213 for each diameter to be measured (extension cable might be required)



## A2429845A-OK

Measuring and centering arbor within dia.4-20mm (0.157-0.787") to pairing measuring support CI213 or DI200, designed for dia. ...mm according to drawing No. ....

Measuring depth:

- Minimum 0.5mm (0.0197")
- Standard = 1x nominal diameter
- Absolute maximum = 3x nominal diameter

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

## A2429839A-OK

Measuring and centering arbor within Ø20.1-40mm (0.791-1.575") to pairing measuring support CI213 or DI200, designed for dia. ...mm according to drawing No. ....

Measuring depth:

- Minimum 0.5mm (0.0197")
- Standard = 1x nominal diameter
- Absolute maximum = 3x nominal diameter

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

## A2429840A-OK

Measuring and centering arbor within dia.40.1-100mm (1.578-3.937") to pairing measuring support CI213 or DI200, designed for dia. ...mm according to drawing No. ....

Measuring depth:

- Minimum 0.5mm (0.0197")
- Standard = 1x nominal diameter
- Absolute maximum = 3x nominal diameter

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

## Hydraulic and lubricating oil

### Oil StuderGlide 32

- for X-/Z-axes
- for tailstock
- **for hydraulic**

30007231-Z

Oil StuderGlide 32 (1 can of 5 litre)

**Note:** replacement for Shell Tonna S32

30003752-Z

Oil StuderGlide 32 (1 can of 20 litres)

**Note:** replacement for Shell Tonna S32

Oil Mobil DTE 24

- for internal grinding spindles with belt drive
- for lubrication in connection with pneumatic air (oiler)  
E.g. for pneumatic lift-off, power chucking cylinder

A5601829A-Z

Oil Mobil DTE 24 (1 Can of 5 litre)



A5601816A-Z

Oil Mobil DTE 24 (2 Cans of 10 litres)



A5601814A-Z

Oil Mobil DTE 24 (Barrel of 60 litres)



Grease Mobilux EP 004

-- for tailstock fine adjustment

A5601818A-Z

Grease Mobilux EP 004 (0.5 kg can)

**Notes:**

- Substitute for Mobilux EP 023
- Do not use for new quotations/orders, replaced by Total Multis ZS 000 (article no. 30011650)
- Released for series: 1 - 37



Grease Multis ZS 000

-- for tailstock fine adjustment

30011650-Z

Semifluid grease Total Multis ZS 000 (can of 0.8kg (1.763lb))

Note: replacement for Mobilux EP 023 and EP 004



Grease Klüber Staburags NBU 8 EP

-- for spindle screw lubrication

A5601612A-Z

Grease Klüber STABURAGS NBU 8 EP (can of 1kg (2.204lb))



## Coolant systems and filter units

### Filter paper

A5490115A-Z

Filter fleece, fine OL 50, recommended for emulsion, roll of 150m, width 1000mm/39.370"



A5490152A-Z

Filter fleece "finest" 260/100,  
recommended for finest filtering of emulsion.  
Roll of 60m, width 1000mm/39.370"



### Coolant

A5601412A-Z

Coolant concentrate CASTROL Hysol R  
Mixing proportion approx. 4% (= 1 can to 125 litres water)  
(Can of 5 liters)  
**Note:** No longer available, replaced by no. 30006110  
Castrol Hysol RD in 20L can  
Released for series: 1 - 18



30006110-Z

Coolant concentrate CASTROL Hysol RD  
Mixing proportion approx. 4% (= 1 can to 500 litres water)  
(Can of 20 liters)  
**Note: Do not use anymore for new quotations/orders,**  
replaced by selling no 30050135  
(Castrol Hysol MB 50 in 20L can)  
Released for series: 1 - 93



30050135-Z

Coolant concentrate CASTROL Hysol MB 50  
Mixing proportion approx. 5-7% (= 1 can to 285-400 litres water)  
(Can of 20 liters)

### Filter for grinding mist extraction unit

30013603-Z

Spare filter mat for grinding mist extraction 370x315x35mm  
(14.567x12.402x1.378") small, emulsion with 5 levels filter and  
adjustable suction output 900-1300m<sup>3</sup>/h  
**Note:** Approx April 2012 is contained off in the set of  
wear parts 2000 hours of 1 pieces

30013315-Z

Spare filter mat for grinding mist extraction 460x460x35mm  
(18.110x18.110x1.378") grand, emulsion  
with 4 levels filter and adjustable suction output 900-1500m<sup>3</sup>/h  
or 5 levels filter and adjustable suction output 900-1300m<sup>3</sup>/h  
**Note:** Approx April 2012 is contained off in the set of  
wear parts 2000 hours of 1 pieces

A5490918A-Z

Replacement submicron particulate air filter box for grinding mist extraction unit, emulsion with 4 levels filter and adjustable suction output 900-1500m<sup>3</sup>/h or 5 levels filter and adjustable suction output 900-1300m<sup>3</sup>/h

**Note:** 1 piece is already included in the set of spare parts A



## Miscellaneous

Dial indicators

**For longitudinal table:** Dial indicator radial

**For steady rest:** Dial indicator radial

A5530018A-Z

Dial indicator radial, metric (division 0.002mm)



A5530118A-Z

Dial indicator radial, inch (division 0.0001")



## Auxiliary accessories

10109267-Z

Simple grinding wheel stand for holding:

- max. 6 flanged-on external grinding wheels:
  - with wheel flange for conical shaft ends with a nominal diameter of 63-73mm (2.480"-2.874")
  - wheel diameter max. 500mm / 20"
  - width max. 120mm (4.724") incl. flange
  - weight max. 60kg (132lb) per wheel incl. flange.
- one wheel changing shaft (max. length 500mm (20")) for grinding wheel change

Each grinding wheel lies horizontally on a an arm that swivels out with swivel lock.

Stand dimensions: Basic area 700x700mm (27.559"x27.559"), height 1300mm (54.181").

Stand can be transported/moved with a pallet lifting truck

**Note: Grind wheels stored horizontally cannot be picked up or deposited directly from or in the stand with the suspension brackets of our grinding wheel change aids.**



A5552514A-Z

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



## Training



A9904557

Basic course on cylindrical grinding

- Target group: Operators and programmers of cylindrical grinding machine.
- Preconditions: Participants having a basic technical training.
- Objectives: Basic knowledge in cylindrical grinding.
- Course contents: Corundum, CBN and diamond grinding wheels, flange-mounting, balancing, safety regulations, dressing, cooling lubricants, clamping workpieces, measuring technology, grinding errors, grinding data, grinding menus,

steady rest, internal grinding.

- Language (subject to agreement): German, English, French, Italian
- Number of participants: 4 to max. 6 persons.
- Location: Fritz Studer AG, Thunstrasse 15, CH-3612 Steffisburg
- Course duration: 4 days
- Services: Course, course documents, 4 lunches.
- Price: Per course and per person,  
without traveling and accommodation costs

#### A9904333

Course for operating and programming  
of the CNC-control Fanuc 0i

with Studer operating system Release D or E or 16TB/16i/160i/21i  
for external grinding

- Target group: Operators and programmers of CNC machine tools.
- Preconditions: Each participant must have knowledge in the areas  
of cylindrical grinding and NC-programming.  
Knowledge in the area of ISO-Code  
programming language advantageous.
- Objectives: Basic knowledge of the control within the area  
of external grinding.
- Course contents: Operating components and control system.  
Programming of the workpiece programm, programming of the grinding  
wheel programm, programming of the contour programm.  
Mechanical handling, set-up, grinding, QuickSet (option)
- Language (subject to agreement): German, English, French, Italian
- Number of participants: 2 to max. 5 persons.
- Location: Fritz Studer AG, Thunstrasse 15, CH-3612 Steffisburg
- Course duration: 4 days. (Course takes place prior to course on  
"internal grinding with universal machines" selling no A9904280).
- Services: Course, course documents, 4 lunches.
- Price: Per course and per person,  
without traveling and accommodation costs.

#### A9904280

Course for operating and programming of CNC-control Fanuc 0i  
with Studer operating system Release D or E or 16TB/16i/160i/21i  
for "internal grinding with universal grinding machines"

- Target group: Operators and programmers of CNC machine tools.
- Preconditions: Each participant must have knowledge in the areas  
of Fanuc control 16TB/16i/160i/21i on Studer grinding machines.  
Knowledge in the area of ISO-Code  
programming language advantageous.
- Objectives: Basic knowledge of the control within the area  
of internal grinding.
- Course contents: Programming of the workpiece program for  
internal grinding. Set-up, grinding.
- Language (subject to agreement): German, English, French, Italian
- Number of participants: 2 to max. 5 persons.
- Location: Fritz Studer AG, Thunstrasse 15, CH-3612 Steffisburg
- Course duration: 1/2 day (Course proceeds afterwards to the course  
"External grinding" selling no A9904333).
- Services: Course and course documents.
- Price: Per course and per person,  
without traveling and accommodation costs



## A9904338

- Course for operating and programming of "StuderGRIND basic program"
- Target group: Operators and programmers of Studer CNC cylindrical grinding machines with Fanuc control.
  - Preconditions: Familiarity with operating PC with Windows desktop. Each participant must already have operating and programming knowledge of Studer CNC cylindrical grinding machines. Knowledge in the area of ISO-Code programming language advantageous.
  - Objectives: Basic knowledge for creating of workpiece program with StuderGRIND.
  - Course contents: Operating of "StuderGRIND basic program". Workpiece-oriented program creation and data management. Working out of examples. Data transfer from the PC to the CNC controls.
  - Language (subject to agreement): German, English, French, Italian
  - Number of participants: 2 to max. 4 persons.
  - Location: Fritz Studer AG, Thunstrasse 15, CH-3612 Steffisburg.
  - Course duration: 1/2 day
  - Services: Course, course documents.  
Price: Per course and per person, without traveling and accommodation costs

## A9904341

- Course for operating and programming of "StuderDress 2.x"
- Target group: Operators and programmers of Studer CNC cylindrical grinding machines with Fanuc controls.
  - Preconditions: Knowledge "StuderGRIND basic program". Familiarity with operating PC with Windows desktop. Each participant must already have operating and programming knowledge of Studer CNC cylindrical grinding machines with Fanuc control system. The course is also required when the "StuderDress integrated" course has already been completed.
  - Objectives: Basic knowledge in operating "StuderDress 2.x". Independent creation of programs for grinding wheel contours and reprofiling of a grinding wheel.
  - Course contents: Operating "StuderDress 2.x", Contour Editor, Geo-Import for importing DXF files from a CAD system (e.g. Vector, see also "Vector CAD program" course). Working out examples.
  - Language (subject to agreement): German, English, French, Italian
  - Number of participants: 2 to max. 4 persons.
  - Location: Fritz Studer AG, Thunstrasse 15, CH-3612 Steffisburg
  - Course duration: 1 Day.
  - Services: Course, course documents, 1 lunch  
Price: Per course and per person, without traveling and accommodation costs

## A9904358

- Course for operating and programming of "StuderContour"
- Target group: Operators and programmers of Studer CNC cylindrical grinding machines with Fanuc control.
  - Preconditions: Knowledge "StuderGRIND basic program".  
Familiarity with operating PC with Windows desktop.  
Each participant must already have operating and programming knowledge of Studer CNC cylindrical grinding machines.  
The course is unnecessary if the "StuderGRIND basic program" and "StuderContour integrated" courses have already completed
  - Objectives: Basic knowledge of "StuderContour".  
Independent creation of a workpiece contour program.
  - Course contents: Operating of "StuderContour", macros for finished part geometries, Contour Editor, Geo-Import for importing DXF files from a CAD system (e.g. Vector, see also "Vector CAD program" course).  
Working out examples.
  - Language (subject to agreement): German, English, French, Italian
  - Number of participants: 2 to max. 4 persons.
  - Location: Fritz Studer AG, Thunstrasse 15, CH-3612 Steffisburg
  - Course duration: 1 day. (can be supplemented with course "CAD program vector" sales number 60008138)
  - Services: Course, course documents, 1 lunch  
Price: Per course and per person, without traveling and accommodation costs

## 60017812

- Individual instruction/advice at Fritz Studer AG, from the areas programming / operating / maintenance / grinding technology.
- Language: English, German, French or Italian (in arrangement)
  - Order specific detailed description of the topic in accordance with the instructor.:  
.....
  - Number of participants: 1 to max. 4 persons.
  - Location: ..... (in arrangement)
  - Course duration: 2 days
  - Services: Documentation on course (if available) and 2 lunches.  
Price: Per course and per person, without traveling and accommodation costs

## 60017813

- Individual instruction/advice at Fritz Studer AG, from the areas programming / operating / maintenance / grinding technology.
- Language: English, German, French or Italian (in arrangement)
  - Order specific detailed description of the topic in accordance with the instructor.:  
.....
  - Number of participants: 1 to max. 4 persons.
  - Location: ..... (in arrangement)
  - Course duration: 3 days costs
  - Services: Documentation on course (if available) and 3 lunches.  
Price: Per course and per person, without traveling and accommodation

A9700392-KA

Customer specific course by Fritz Studer AG,  
Thunstrasse 15, CH-3612 Steffisburg

-- Language: English, German, French or Italian (in arrangement).

-- Order-specific description:

.....

---



Fritz Studer AG  
3602 Thun  
Switzerland  
Tel. +41 439 11 11  
Fax. +41 439 11 12  
info@studer.com  
www.studer.com



**ISO 9001**  
**VDA6.4**  
certified

