

✓ Achievable surface roughness $Rz < 1\mu m / Ra < 0,16\mu m$

COMPACT DESIGN

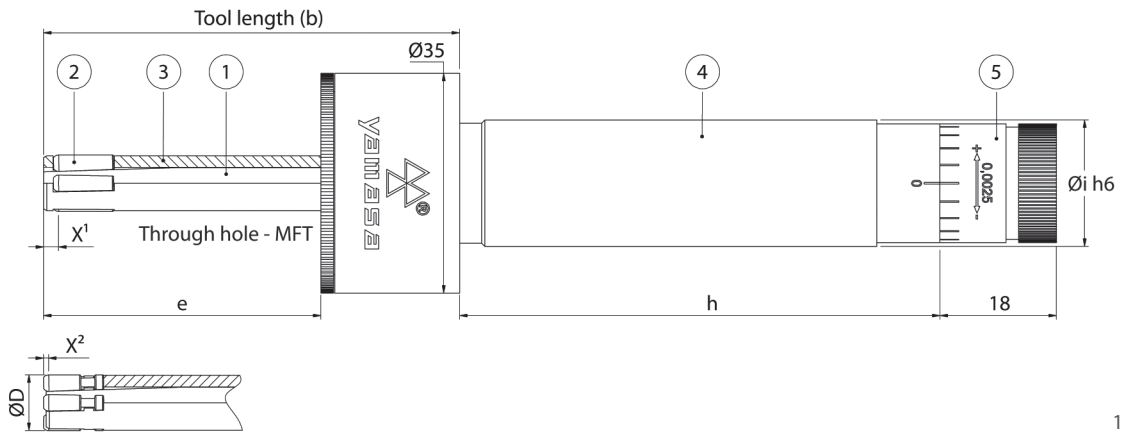
For swiss and multi-spindle automatic type machines.

Circumferential speed: max. 250 m/min.
 Feed rate: 0,05 - 0,3 mm/rev. per roller
 Machinable hardness: max. 42 - 45 HRC
 Adjustment precision: 0,0025 mm



| Rolling length | Tool length (b) | e |
|----------------|-----------------|----|
| 30 (25*) | 50 | 32 |
| 50 (45*) | 70 | 52 |

*rolling length for through hole tool



- 1- Cone
- 2- Roller
- 3- Cage
- 4- Shank
- 5- Adjusting housing

Minimum edge

| Diameter range | X¹ / MFT | X² / MFB |
|----------------|----------|----------|
| 05,00 | 2,4 | - |
| 06,00 - 14,00 | 2,6 | 0,8 |

X²: It is possible to come to near the edge more. Please ask for special situations.

Setting range

| Diameter range | MFT | MFB |
|----------------|---------------|---------------|
| 05,00 | -0,05 / +0,10 | - |
| 06,00 - 08,00 | -0,05 / +0,20 | -0,05 / +0,20 |
| 09,00 - 14,00 | -0,10 / +0,40 | -0,05 / +0,40 |

Recommended machining parameters

| Diameter range (mm) | Revolution (rev/min) | Feed rate (mm/rev) | Feeding (mm/min) | Rotation direc. | Rolling share | Pre-machining roughness | Pre-machining | Coolant |
|---------------------|----------------------|--------------------|------------------|-----------------|---------------|-------------------------|------------------|-----------------|
| | | | | Retreat | Tool preload | | | |
| 05,00 | 1000 | 0,30 | 300 | CCW (M3) | up to 0,02 mm | Rz = 5 - 15 μm | Reaming or lathe | Oil or emulsion |
| 06,00 - 07,00 | 1000 | 0,45 | 450 | | | | | |
| 08,00 - 14,00 | 1000 | 0,60 | 600 | Rapidly (G0) | up to 0,05 mm | | | |

Product selection

| MDX Tool selection (complete) | | | | | | | Spare part selection | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|------------------------|---------|-----|----------------|-----|-----------------------------------|------------------------|---------|----------------|----|------------------------|---------|----------------|---|--------|----|--------|--------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tool type | Dia. \varnothing -mm | Version | | Rolling length | | Cyl. shank ZA(\varnothing ixh) | MDX Cage | | | | MDX Cone | | | | Roller | | Qua. | | | | | | | | | | | | | | | |
| | | MFT | MFB | MFT | MFB | | Dia. \varnothing -mm | Version | Rolling length | | Dia. \varnothing -mm | Version | Rolling length | | Code | | | | | | | | | | | | | | | | | |
| MDX | 5,00 | 2 | 3 | 25 | 30 | ZA19,05x76 | 5,00 | 2 | 3 | 25 | 30 | 5,00 | 2 | 3 | 25 | 30 | 500115 | - | 3 | | | | | | | | | | | | | |
| | 6,00 | | | | | ZA19,05x115 | 6,00 | | | | | 6,00 | | | | | 500100 | 500308 | | | | | | | | | | | | | | |
| | 7,00 | | | | | ZA20x76 | 7,00 | | | | | 7,00 | | | | | | | | | | | | | | | | | | | | |
| | 8,00 | | | | | ZA20x115 | 8,00 | | | | | 8,00 | | | | | | | 4 | | | | | | | | | | | | | |
| | 9,00 | | | | | ZA22x76 | 9,00 | | | | | 9,00 | | | | | 50108 | 500300 | | | | | | | | | | | | | | |
| | 10,00 | | | | | ZA22x115 | 10,00 | | | | | 10,00 | | | | | | | | | | | | | | | | | | | | |
| | 11,00 | | | | | ZA25x76 | 11,00 | | | | | 11,00 | | | | | | | | | | | | | | | | | | | | |
| | 12,00 | | | | | ZA25x115 | 12,00 | | | | | 12,00 | | | | | | | | | | | | | | | | | | | | |
| | 13,00 | | | | | ZA25,40x76 | 13,00 | | | | | 13,00 | | | | | | | | | | | | | | | | | | | | |
| | 14,00 | | | | | ZA25,40x115 | 14,00 | | | | | 14,00 | | | | | | | | | | | | | | | | | | | | |

How to order | Order samples

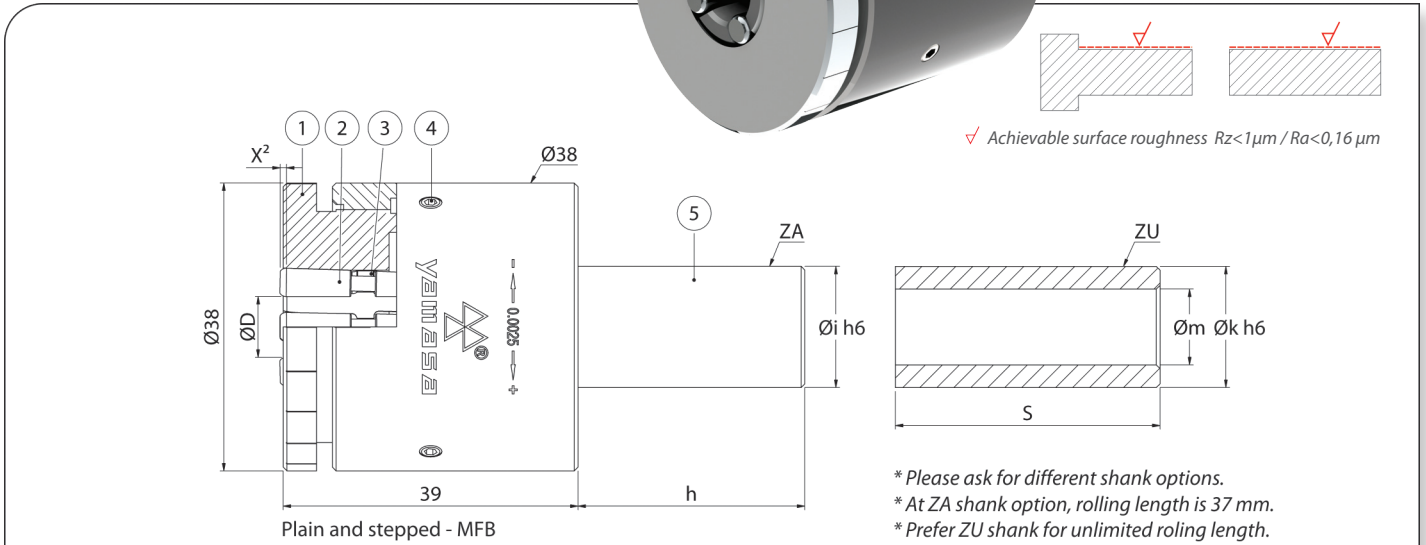
| | | | |
|--|--------------------|--------------------|---------------|
| MDX-6,00-3-30-ZA20x76 Roller Burnishing Tool | 6,00-3-30 MDX Cage | 6,00-3-30 MDX Cone | 500308 Roller |
|--|--------------------|--------------------|---------------|

You can create order codes of the tool and spare parts by looking at the product selection table. For this, please rank the requested product features side by side. All dimensions in mm. **MFT(2)**: Machine feeding - through hole **MFB(3)**: Machine feeding - blind hole

External Micro Burnishing Tools

COMPACT DESIGN - internal coolant
For swiss and multi-spindle automatic type machines.

Circumferential speed: max.250 m/min.
 Feed rate: 0,05 - 0,3 mm/rev. per roller
 Machinable hardness: max. 42 - 45 HRC
 Adjustment precision: 0,0025 mm



Minimum edge

| Diameter range | X ² / MFB |
|----------------|----------------------|
| 01,00 - 14,00 | 0,8 |

X²: It is possible to come to near the edge more. Please ask for special situations.

Setting range

| Diameter range | MFB |
|----------------|---------------|
| 01,00 - 014,00 | -0,10 / +0,05 |

- 1- Cone
- 2- Roller
- 3- Cage
- 4- Screw
- 5- Shank

Recommended machining parameters

| Diameter range (mm) | Revolution (rev/min) | Feed rate (mm/rev) | Feeding (mm/min) | Rotation direc. | Rolling share | Pre-machining roughness | Pre-machining | Coolant |
|---------------------|----------------------|--------------------|------------------|-----------------|----------------|-------------------------|-------------------|-----------------|
| | | | | Retreat | Tool preload | | | |
| 01,00 - 05,00 | 1000 | 0,45 | 450 | CCW (M3) | up to 0,015 mm | Rz = 5 - 15 µm | Lathe or grinding | Oil or emulsion |
| 06,00 - 08,00 | 1000 | 0,60 | 600 | | | | | |
| 09,00 - 14,00 | 1000 | 0,75 | 750 | Rapidly (G0) | up to 0,04 mm | | | |

Product selection

| MXS Tool selection (complete) | | | | | | Spare part selection | | | | | | |
|-------------------------------|-----------|-------------|-----------------|-----------------|---|---|----------|-------------|----------|-------------|----------|------|
| Tool body | Dia. Ø-mm | Version MFB | Rolling length | | Cylindrical shank* | | MXS Cage | | MXS Cone | | Roller | |
| | | | ZA- int.coolant | ZU | ZA(Øixh) | ZU(ØkxSxØm) | Ø-mm | Version MFB | Ø-mm | Version MFB | Code MFB | Qua. |
| MXS1 | 1,00 | 3 | 37 | UNL (Unlimited) | ZA12x40 • ZA16x40 • ZA19,05x40 • ZA20x40 • ZA22x40 • ZA25x40 • ZA25,40x40 | ZU19,05x76x12 • ZU19,05x115x12 • ZU20x76x12 • ZU20x115x12 • ZU22x76x12 • ZU22x115x12 • ZU25x76x15 • ZU25x115x15 • ZU25,40x76x15 • ZU25,40x115x15 | 1,00 | 3 | 1,00 | 3 | 500301 | 3 |
| | 2,00 | | | | | | 2,00 | | | | | |
| | 3,00 | | | | | | 3,00 | | | | | |
| | 4,00 | | | | | | 4,00 | | | | | |
| | 5,00 | | | | | | 5,00 | | | | | |
| | 6,00 | | | | | | 6,00 | | | | | |
| | 7,00 | | | | | | 7,00 | | | | | |
| | 8,00 | | | | | | 8,00 | | | | | |
| | 9,00 | | | | | | 9,00 | | | | | |
| | 10,00 | | | | | | 10,00 | | | | | |
| | 11,00 | | | | | | 11,00 | | | | | |
| | 14,00 | | | | | | 14,00 | | | | | |

UNL at ZU25 or 25,4 shank. Other ZU shanks 37 mm.

How to order | Order samples

| | | | |
|---|-----------------|-----------------|---------------|
| MXS1-2,00-3-37-ZA20x40 Roller burnishing tool | 2,00-3 MXS Cage | 2,00-3 MXS Cone | 500301 Roller |
|---|-----------------|-----------------|---------------|

You can create order codes of the tool and spare parts by looking at the product selection table. For this, please rank the requested product features side by side. All dimensions in mm. **MFB(3):** Machine feeding - plain and stepped shaft