# Octagonal MOFX Mill

Facing | Chamfering

## MOFX45 Face Mill

| Rake Angle (°) | A.R. | +15° |
|---|---|---|
| | R.R. | +5° |

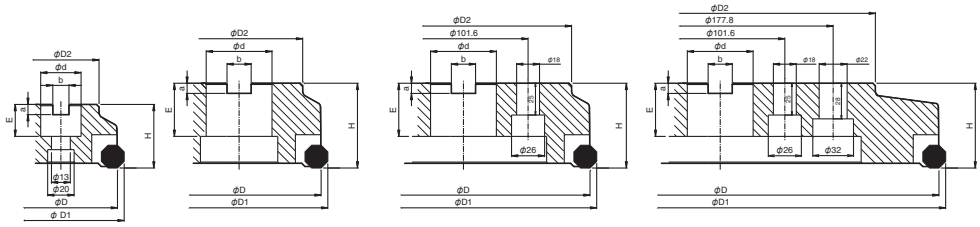
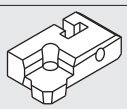
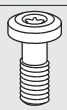
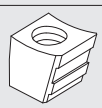


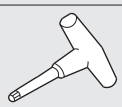
Fig.1 Fig.2 Fig.3 Fig.4

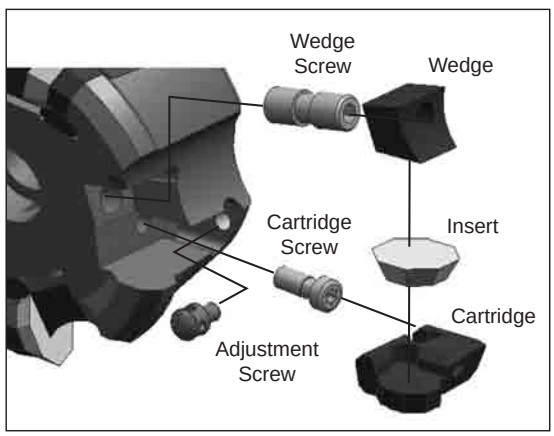
### Toolholder Dimensions

| Description | | Std. | No. of Inserts | Dimension (mm) | | | | | | | | | | Drawing | Weight (kg) | Applicable Inserts ➡ M13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | øD | øD1 | øD2 | ød | ød1 | ød2 | a | b | E | H | | | |
| Metric | MOFX 45080R07-5T-MSF | ● | 5 | 80 | 91 | 70 | 27 | 20 | 14 | 7 | 12.4 | 22 | 50 | Fig.1 | 1.4 | OFMR07 Type |
| | 45100R07-6T-MSF | ● | 6 | 100 | 111 | 80 | 32 | - | - | 8 | 14.4 | 30 | | Fig.2 | 2.1 | |
| | 45125R07-8T-MSF | ● | 8 | 125 | 136 | 100 | 40 | | | 9 | 16.4 | | 63 | | 3.9 | |
| | 45160R07-10T-MSF | ● | 10 | 160 | 171 | 120 | | | | 10 | | | | | 6 | |
| | 45200R07-12T-MSF | ● | 12 | 200 | 211 | 140 | 60 | | | 15 | 25.4 | 38 | | Fig.3 | 7.4 | |
| | 45250R07-16T-MSF | ● | 16 | 250 | 261 | 180 | | | | | | | | | 12.6 | |
| | 45315R07-20T-MSF | □ | 20 | 315 | 326 | 240 | | | | | | | | Fig.4 | 20.7 | |
| Bore Dia. Inch spec | MOFX 45080R-07-5T-SF | □ | 5 | 80 | 91 | 70 | 25.4 | 20 | 14 | 6 | 9.5 | 26 | 50 | Fig.1 | 1.4 | OFMR07 Type |
| | 45100R-07-6T-SF | □ | 6 | 100 | 111 | 80 | 31.75 | - | - | 8 | 12.7 | 32 | | Fig.2 | 2.1 | |
| | 45125R-07-8T-SF | □ | 8 | 125 | 136 | 100 | 38.1 | | | 10 | 15.9 | 38 | 63 | | 3.9 | |
| | 45160R-07-10T-SF | □ | 10 | 160 | 171 | 120 | 50.8 | | | 11 | 19.0 | | | | 5.8 | |
| | 45200R-07-12T-SF | □ | 12 | 200 | 211 | 130 | 47.625 | | | 14 | 25.4 | | | Fig.3 | 7.6 | |
| | 45250R-07-16T-SF | □ | 16 | 250 | 261 | 180 | | | | | | | | | 12.9 | |
| | 45315R-07-20T-SF | □ | 20 | 315 | 326 | 240 | | | | | | | | Fig.4 | 20.7 | |

### Spare Parts

| Cartridge | Cartridge Screw | Wedge | Wedge Screw | Adjustment Screw |
|---|---|---|---|---|
|  |  |  |  |  |
| LOF07R | SH-50150TR | WOF07R | W8×21 | AJ-412 |

| Wrench (for Wedge) | Wrench (for Cartridge) |
|---|---|
|  |  |
| TH-4 | TTC-20 |

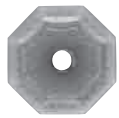



## Features

1) Wedge clamp system
2) Good surface finish (Easy edge height adjustment system)
3) 8-edges insert provides high cost efficiency
4) High axial rake angle and double positive angle on chipbreaker provide low cutting force
5) SH chipbreaker (for general purpose / low cutting force) and GT chipbreaker (Tough edge)

● : Std. Item
□ : Check Availability

● Applicable Inserts

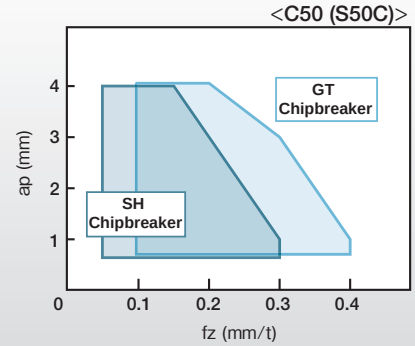
| Description | Applicable Inserts ➔ M13 | |
|---|---|---|
| |  |  |
| **MOFX45...-SF** | OFMR 070405EN-SH | OFMR 070408EN-GT |

For recommended cutting conditions, see page ➔ **M27**

Note 1) OFMR0704○○EN-GT / SH is no hand type. It can be also used for L-hand (L) type cutter (special order item).

Note 2) Inserts for MOFX type cutter cannot be used for MOF type cutters (See **M26**).

## Chipbreaker range



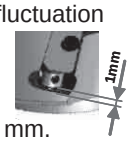

## Max ap and usable edges

| Usable edges | Max. ap (mm) |
|---|---|
| | OFMR07 types |
| 4 edges | 10mm |
| 8 edges | 4mm |

## How to Correct the Edge Fluctuation

### 1.Set the edge fluctuation adjustment screw

- Set the distance between the bottom of edge fluctuation adjustment screw and the cutter body to approximately 1 mm.




### 2. Set the cartridge

- Set the cartridge to the cutter body with the cartridge screw. Recommended torque: 5 Nm

### 3. Set the wedge

- After setting the insert to the cartridge, set the wedge with the wedge screw.

### 4. Loosen the screws (Preparation for edge fluctuation adjustment)

- Loosen the wedge screw by approximately 10°.
- Loosen the cartridge screw by approximately 45°.

### 5. Correct the front edge fluctuation

- Measure the front edge fluctuation. With reference to the most protruding edge, turn the edge fluctuation adjustment screw counterclockwise to correct the front edge fluctuation.

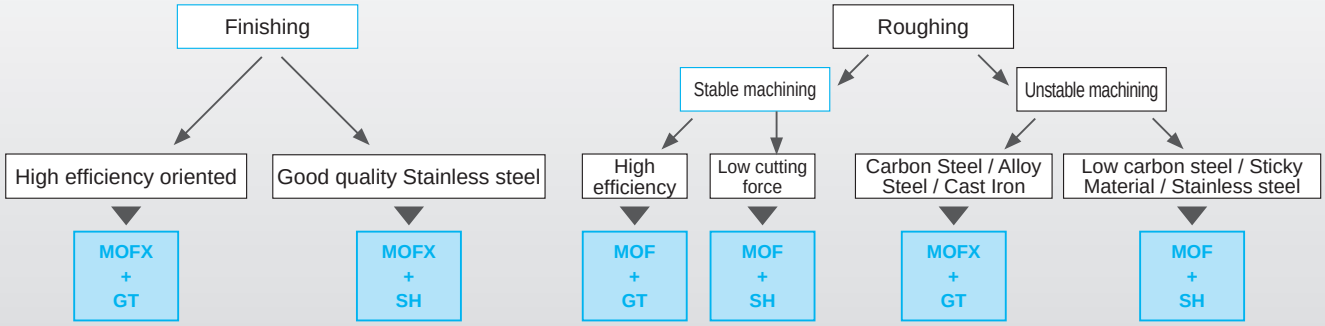
### 6. Make the final adjustment

- Tighten the cartridge screw Recommended torque: 5Nm
- Tighten the wedge screw Recommended torque: 6Nm
- Measure the front edge fluctuation again.

## Outlines of MOFX / MOF Mill

【MOFX】
High durability of cutter body due to the cartridge design.
Best for finishing due to easy edge height adjustment.

【MOF】 (See **M26**)
Excellent chip evacuation when roughing sticky materials such as low carbon steel and stainless steel.




MOFX is suitable for more precious machining and unstable machining.