



Maschinenspezifische Spannlösungen  
*Machine specific workholding solutions*

# TRIAG INTERNATIONAL

**MU-4000V (5AX)**  
**MB-4000H (HMC)**  
**MA-400HA (HMC)**

## OKUMA

Spannlösungen für mehr  
**Effizienz** und **Produktivität!**

*Workholding solutions for  
more **efficiency** and  
**productivity!***

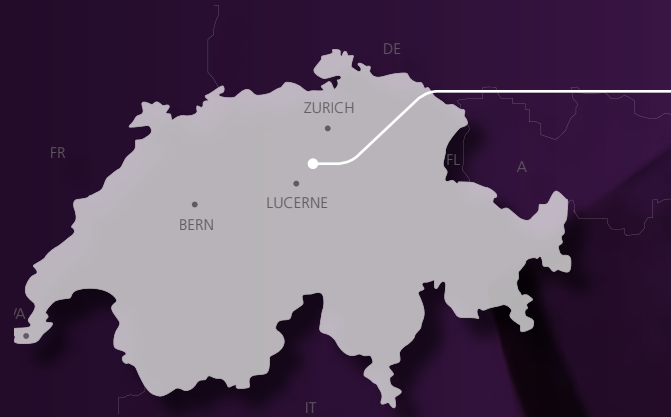


Mass- und Konstruktionsänderungen  
bleiben uns vorbehalten. We reserve  
the right to modify dimensions and  
structural design.

**triag-int.ch**  
Official Website



**06  
19**



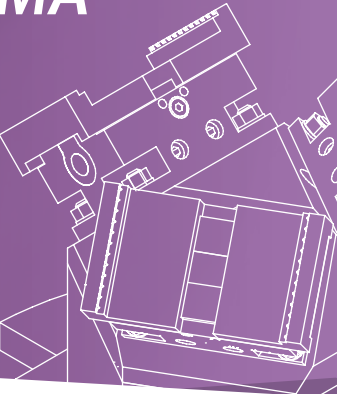
Eigenes Engineering  
Eigene Produktion  
Weltweiter Vertrieb

*In-house Engineering  
In-house Manufacturing  
Worldwide distribution*

## Modulare Spannlösungen für OKUMA *Modular workholding solutions for OKUMA*

Modularität ist ein zentrales Stichwort bei Triag International. Unsere Produkte sind sehr flexibel einsetzbar und einfach zu bedienen.

*Modularity is a central keyword at Triag International. Our products are very flexible and easy to use.*

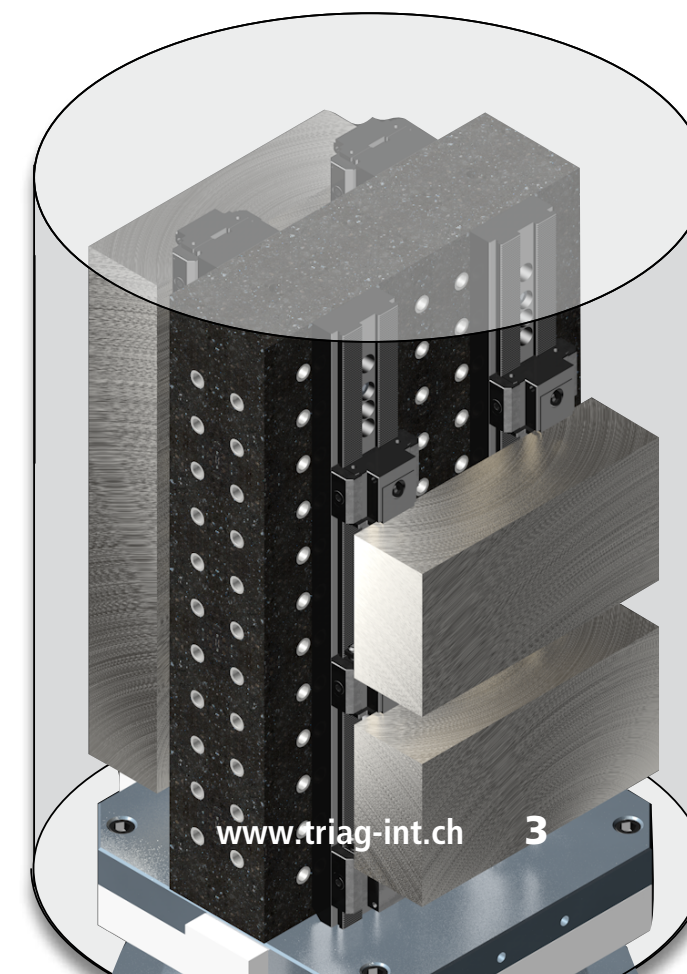


*Time to say goodbye  
to the dinosaur vises!*

## Optimale Maschinenraum-Nutzung *Optimum use of the working envelope*

Erreichen Sie maximale Produktivität und Effizienz dank optimaler Maschinenraum-Nutzung. Mit dem Einsatz von massgeschneiderten Spannlösungen erwecken auch Sie das schlummernde Potential Ihrer Werkzeugmaschine!

*Achieve maximum productivity and efficiency with optimal machine room utilization. With the use of tailor-made workholding solutions, you will also awaken the dormant potential of your machine tool!*



[www.triag-int.ch](http://www.triag-int.ch)

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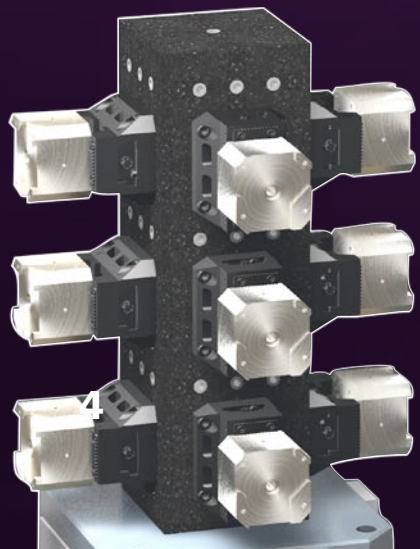
2

## Eigenschaften

- ✓ Sehr hohe Vibrationsdämpfung
- ✓ Spez. Gewicht < Aluminium
- ✓ Hohe Formstabilität
- ✓ Gute chemische Beständigkeit
- ✓ Nachhaltiges Produkt
- ✓ Krafterhaltung durch Nachfederung
- ✓ Einstellbares Mittellager
- ✓ Modulare Bauweise
- ✓ 3mm Direkt-Prägebacken

## Features

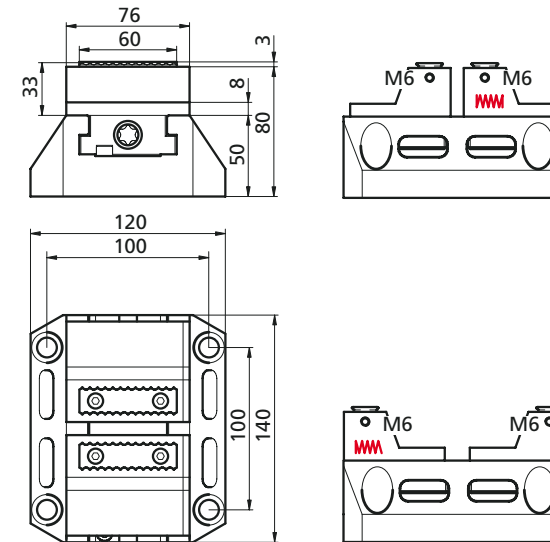
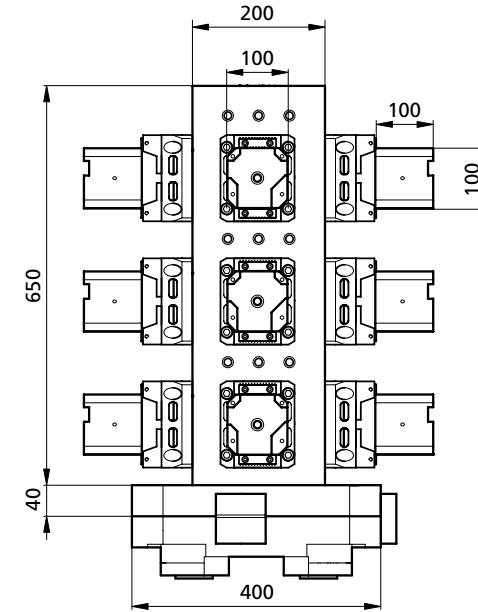
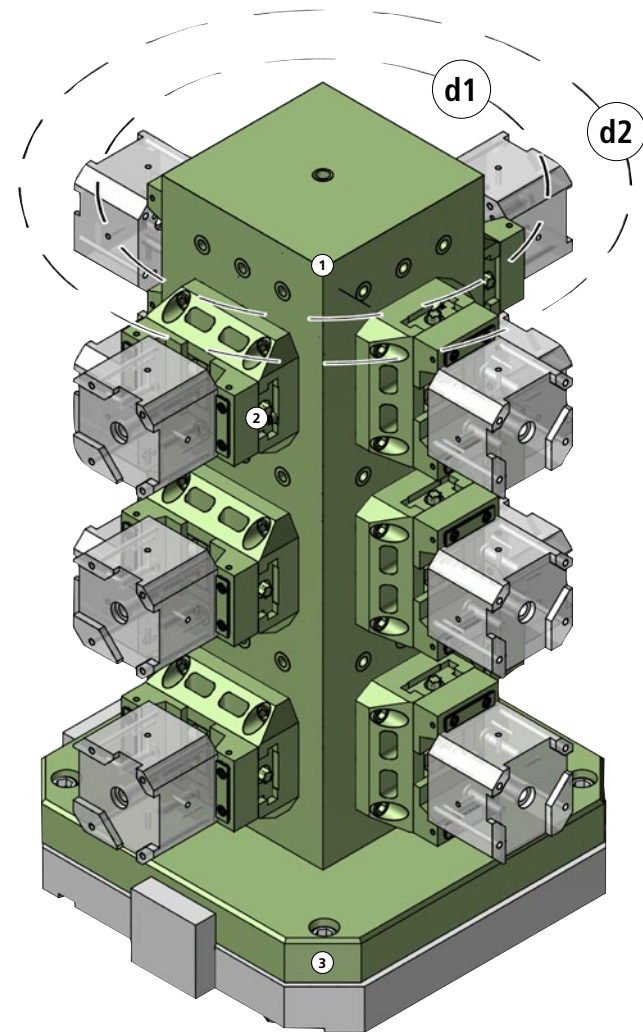
- ✓ Very high vibration damping
- ✓ Spec. weight < aluminium
- ✓ High form stability
- ✓ Good chemical resistance
- ✓ Sustainable product
- ✓ Spring loaded mechanism
- ✓ Adjustable centre bearing
- ✓ Modular design
- ✓ 3mm Direct-stamping jaws



Mineralgussturm  
*Epoxy-Mineral tombstone*



12x Zentrischspanner ZSX  
*12x self centering vises ZSX*



| Artikel Nr. + Inhalt<br>Article Nr. + content | Bezeichnung<br>Description                | Spannkraft (F)<br>Clamping force (F) | Spannbereich<br>Clamping range | d1    | d2    | kg      |
|-----------------------------------------------|-------------------------------------------|--------------------------------------|--------------------------------|-------|-------|---------|
| OAQ 202065 R50                                |                                           |                                      |                                | ~ 370 | ~ 570 | ~ 196,5 |
| ① 1x MQ202065R50                              | Mineralgussturm / Epoxy mineral tombstone |                                      | -                              | -     | -     | ~ 76    |
| ② 12x ZSX140L50UPRG                           | Zentrischspanner / Self centering vises   | → max. 2100 daN (70Nm)               | 10-118                         | -     | -     | ~ 70,8  |
| ③ 1x GPL400x40                                | Grundplatte / Base-plate                  |                                      | -                              | -     | -     | ~ 47    |

Bestellschlüssel + Inhalt  
Order code + content

Spannkraft Zentrischspanner  
Workholding force Self centering vise

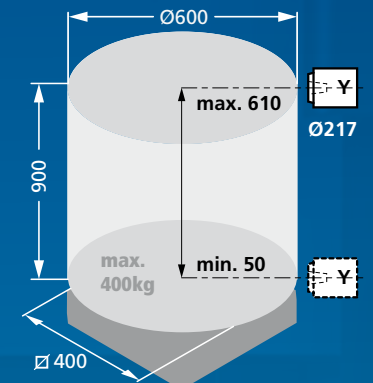
Lineare Spannkraft (Nr.1)  
Linear workholding force (Nr.1)

Niederzug Spannkraft (Nr.2)  
Pull down workholding force (Nr.2)

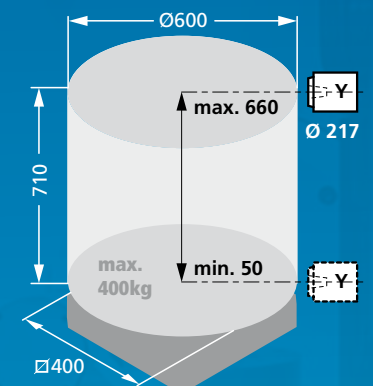
OKUMA

HMC

MB-4000H



MA-400HA



## Eigenschaften

- ✓ Sehr hohe Vibrationsdämpfung
- ✓ Spez. Gewicht < Aluminium
- ✓ Hohe Formstabilität
- ✓ Gute chemische Beständigkeit
- ✓ Nachhaltiges Produkt
- ✓ Hochflexibel und modular
- ✓ Module in 2mm Schritte verstellbar
- ✓ Kraftvoll und präzise
- ✓ Einfaches Handling

## Features

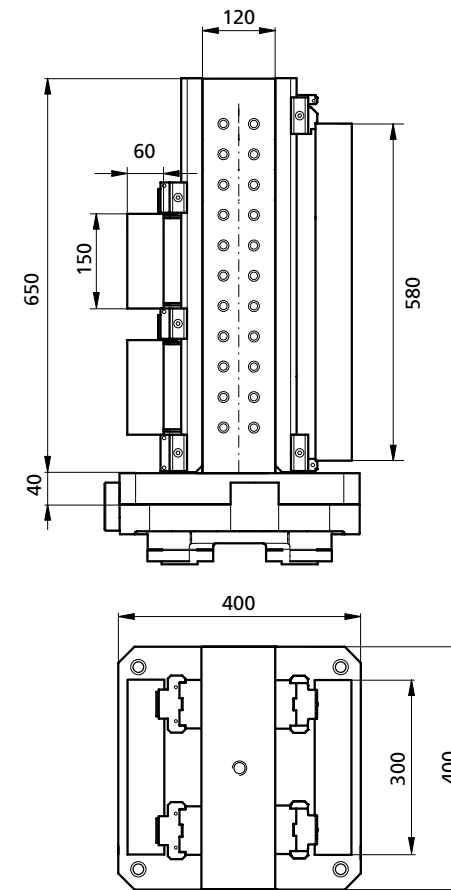
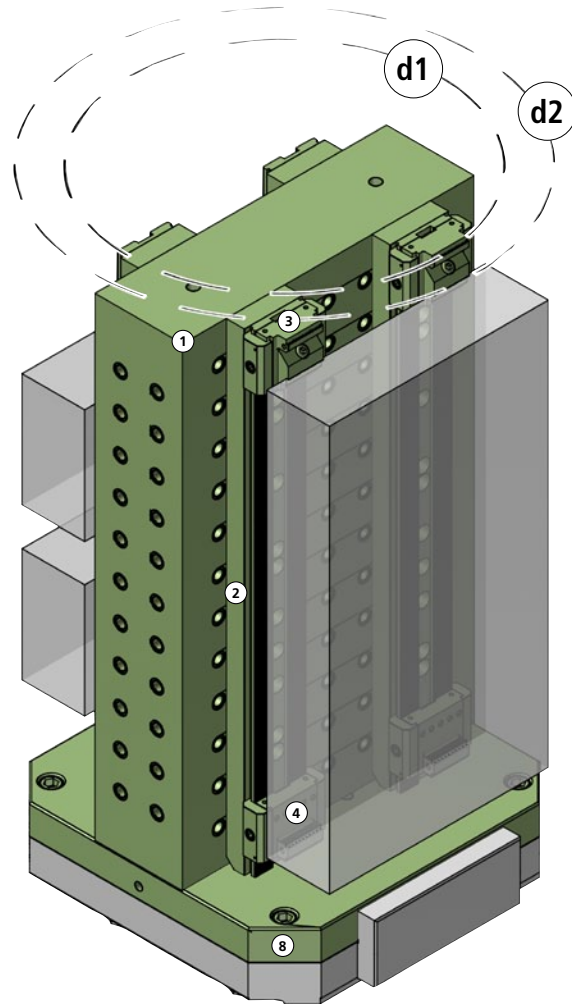
- ✓ Very high vibration damping
- ✓ Spec. weight < aluminium
- ✓ High form stability
- ✓ Good chemical resistance
- ✓ Sustainable product
- ✓ High-flexible and modular
- ✓ Modules adjustable in 2mm steps
- ✓ Powerful and precise
- ✓ Easy handling



Mineralgussturm  
*Epoxy-Mineral tombstone*



powerCLAMP Spannsystem  
*powerCLAMP workholding system*



| ① | Artikel Nr. + Inhalt<br>Article Nr. + content | Bezeichnung<br>Description                |                      | Spannkraft (F)<br>Clamping force (F) | d1    | d2    | kg     |
|---|-----------------------------------------------|-------------------------------------------|----------------------|--------------------------------------|-------|-------|--------|
|   | <b>OAR 401265 R50</b>                         | <b>Maschinen-Set / Machine-Set</b>        |                      |                                      | ~ 380 | ~ 470 | ~ 210  |
| ① | 1x MR401265R50                                | Mineralgussturm / Epoxy mineral tombstone |                      |                                      | -     | -     | ~ 93   |
| ② | 4x PCB4050650                                 | Basisschienen / Base-rails                |                      |                                      | -     | -     | ~ 51,2 |
| ③ | 6x PS1P48L34B115                              | Spannmodule / Clamping modules            | max. 1600 daN (40Nm) | -                                    | -     | -     | ~ 8,8  |
| ④ | 2x PAND4834PRGA1                              | Anschlagmodule / End-modules              |                      | -                                    | -     | -     | ~ 2,2  |
| ⑤ | 4x PS1F48N34B80                               | Spannmodule / Clamping-modules            | max. 2800 daN (40Nm) | -                                    | -     | -     | ~ 4,8  |
| ⑥ | 8x PCU29047                                   | Unterlagsscheiben / Parallels             |                      | -                                    | -     | -     | ~ 0,4  |
| ⑦ | 2x PAND4834                                   | Anschlagmodule / End-module               |                      | -                                    | -     | -     | ~ 2,6  |
| ⑧ | 1x GPL400x40                                  | Grundplatte / Base-plate                  |                      |                                      | -     | -     | ~ 47   |

Bestellschlüssel + Inhalt  
Order code + content

Spannkraft Zentrischspanner  
Workholding force Self centering vise

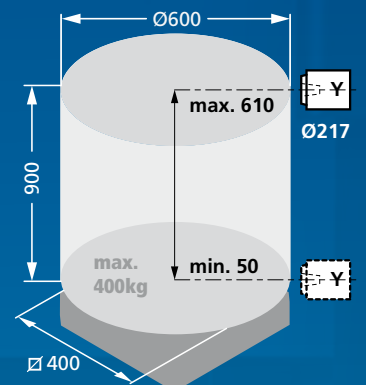
Lineare Spannkraft (Nr.1)  
Linear workholding force (Nr.1)

Niederzug Spannkraft (Nr.2)  
Pull down workholding force (Nr.2)

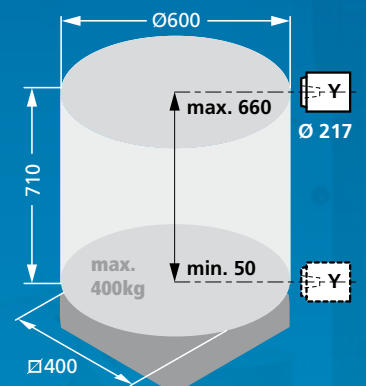
OKUMA

HMC

MB-4000H



MA-400HA





## Eigenschaften

- ✓ Modulare Mehrfachspannung
- ✓ Backen-Schnellwechselsystem
- ✓ 3mm Direkt-Prägebacken
- ✓ Beste Zugänglichkeit
- ✓ Modular erweiterbar
- ✓ Hohe Wiederholgenauigkeit
- ✓ Einfache Montage/Demontage

## Features

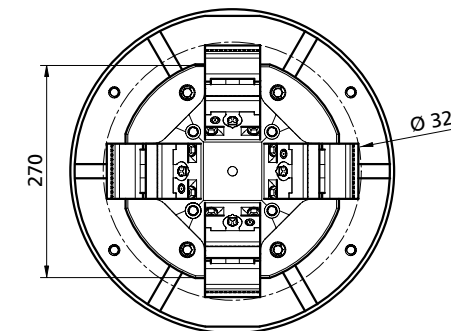
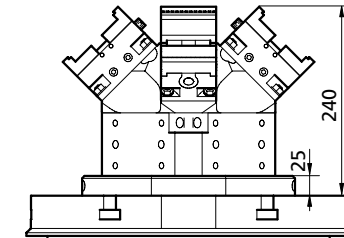
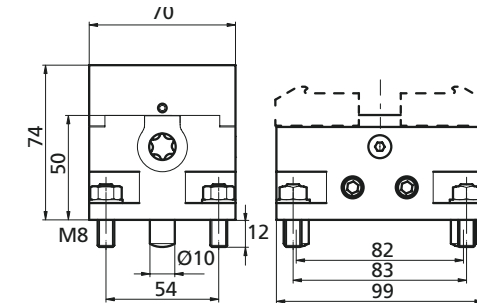
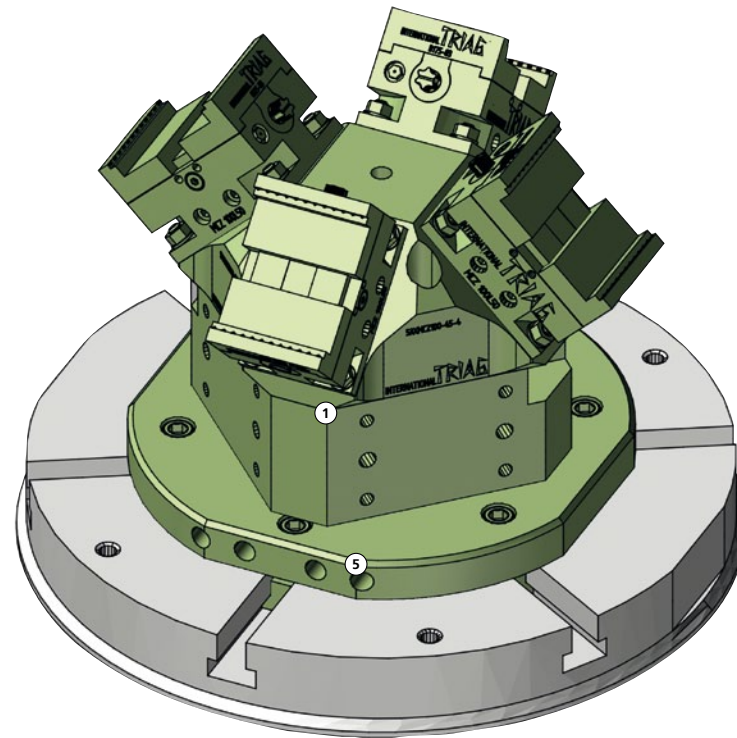
- ✓ Modular multiple workholding
- ✓ Jaw quick-change system
- ✓ 3mm Direct-stamping jaws
- ✓ Best accessibility
- ✓ Modular expandable
- ✓ High repeat reliability
- ✓ Easy installation/removal



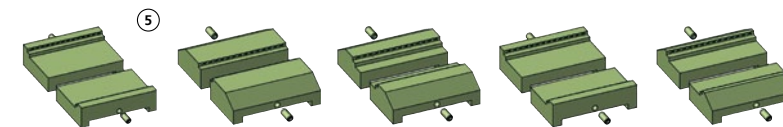
5-Achs Zentrischspannblock Sputnik II  
5-axis self centering vise block Sputnik II



Nullpunkt-System  
Zero point system



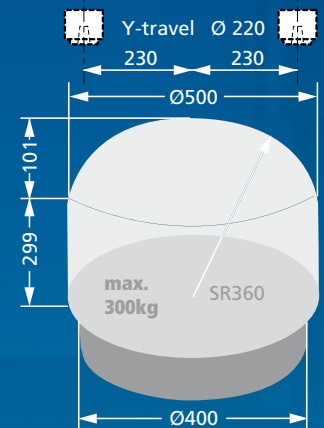
Inkl. / incl.  
**40 Backen**  
**40 jaws**



OKUMA

5AX

MU4000-V



| ① | Artikel Nr. + Inhalt<br>Article Nr. + content | Bezeichnung<br>Description                      | Spannkraft<br>Clamping force            | Spannbereich<br>Clamping range         | kg     |
|---|-----------------------------------------------|-------------------------------------------------|-----------------------------------------|----------------------------------------|--------|
|   | <b>MU4000VZF181439</b>                        |                                                 |                                         |                                        | ~ 29,3 |
| ① | 1x 5AXMCZ100-45-4H                            | Zentrischspannblock / Self centering vise block | → max. 1600 daN (50Nm)                  | 6-102                                  | ~ 14,4 |
| ② | 4x OPMB18M12                                  | 0-Punkt Zentrierbolzen / 0-point pull studs     | -                                       | -                                      | -      |
| ③ | 4x M12 x 45 DIN912                            | Zylinderschrauben / Cap screws                  | -                                       | -                                      | -      |
| ④ | 4x B175 SET                                   | Backenset / Jaw-set                             | -                                       | -                                      | -      |
| ⑤ | 1x TF181444                                   | Adapterplatte / Adapter plate                   |                                         |                                        | -      |
| ⑥ | 1x TF181238                                   | Adapterbolzen / Adapter bolt                    |                                         |                                        | -      |
| ⑦ | 1x M6 x 18 DIN912                             | Zylinderschraube / Cap screw                    |                                         |                                        | -      |
| ⑧ | 6x M12 x 18 DIN508                            | T-Nutensteine / T-slot nut                      |                                         |                                        | -      |
| ⑨ | 6x M12 x 40 DIN912                            | Zylinderschrauben / Cap screws                  |                                         |                                        | -      |
| ⑩ | 4x M12 x 16 DIN912                            | Gewindestifte / Grub screws                     |                                         |                                        | -      |
| ⑪ | 1x TF181450                                   | Zentrierzapfen / Centering plug                 |                                         |                                        | -      |
| ⑫ | 1x M8 x 22 DIN7991                            | Senkschraube / Flat head screw                  |                                         |                                        | -      |
|   |                                               |                                                 | <b>Inhalt Pos. ④<br/>Content pos. ④</b> | <b>Spannbereich<br/>Clamping range</b> |        |
|   |                                               |                                                 | 8x B175-26                              | 6-26                                   | -      |
|   |                                               |                                                 | 8x B175-45                              | 25-45                                  | -      |
|   |                                               |                                                 | 8x B175-64                              | 44-64                                  | -      |
|   |                                               |                                                 | 8x B175-83                              | 63-83                                  | -      |
|   |                                               |                                                 | 8x B175-102                             | 82-102                                 | -      |

Bestellschlüssel + Inhalt  
Order code + content

Spannkraft Zentrischspanner  
Workholding force Self centering vise

Lineare Spannkraft (Nr.1)  
Linear workholding force (Nr.1)

F1

Niederzug Spannkraft (Nr.2)  
Pull down workholding force (Nr.2)

F2

## Eigenschaften

- ✓ Krafterhaltung durch Nachfederung
- ✓ Einstellbares Mittellager
- ✓ Modulare Bauweise
- ✓ 3mm Direkt-Prägebacken
- ✓ Sehr hohe Vibrationsdämpfung
- ✓ Spez. Gewicht < Aluminium
- ✓ Hohe Formstabilität
- ✓ Gute chemische Beständigkeit
- ✓ Nachhaltiges Produkt

## Features

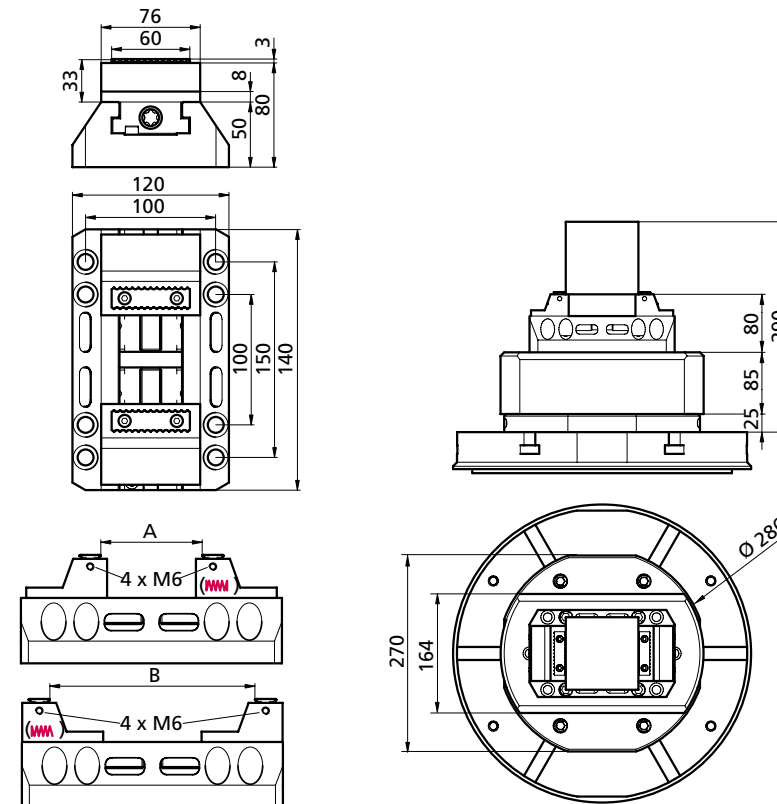
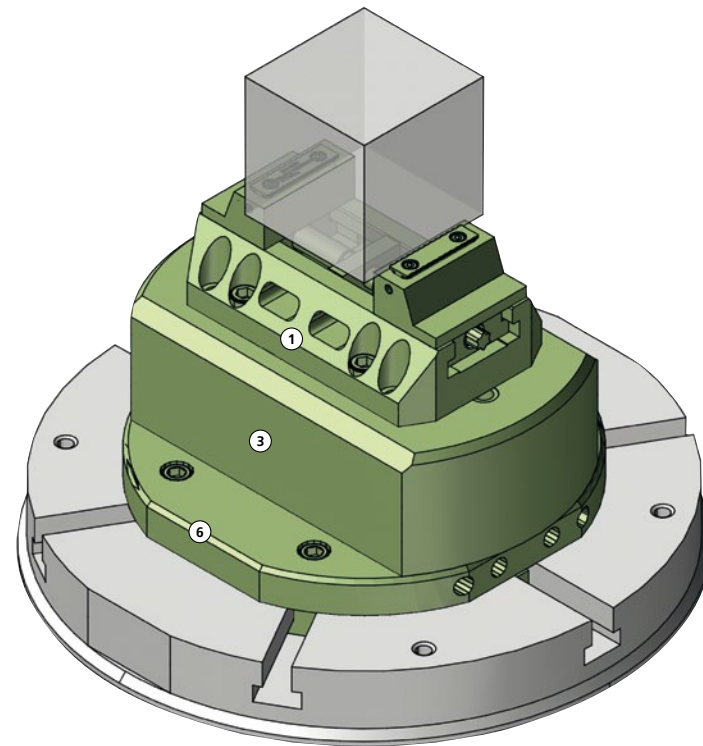
- ✓ Spring loaded mechanism
- ✓ Adjustable centre bearing
- ✓ Modular design
- ✓ 3mm Direct-stamping jaws
- ✓ Very high vibration damping
- ✓ Spec. weight < aluminium
- ✓ High form stability
- ✓ Good chemical resistance
- ✓ Sustainable product



**ZSX Zentrischspanner**  
**ZSX Self centering vise**



**Mineralguss-Erhöhung**  
**Epoxy-Mineral riser block**



| ① | Artikel Nr. + Inhalt<br>Article Nr. + content | Bezeichnung<br>Description                       | Spannkraft (F)<br>Clamping force (F) | Spannbereich<br>Clamping range | Kg     |
|---|-----------------------------------------------|--------------------------------------------------|--------------------------------------|--------------------------------|--------|
|   | <b>MU4000VZF181440</b>                        | <b>Maschinen-Set / Machine-Set</b>               |                                      |                                | ~ 29,3 |
| ① | 1x ZSX200L50-UPRG                             | Zentrischspanner / Self centering vises          | → max. 2100 daN (70Nm)               | 10-178                         | ~ 8,8  |
| ② | 4x TWPAS1227                                  | Passschrauben / Dowel screws                     |                                      | -                              | -      |
| ③ | 1x MUB2817-H85                                | Mineralguss Erhöhung / Epoxy mineral riser block |                                      | -                              | ~ 10   |
| ④ | 4x OPMB18M12                                  | Nullpunkt Zentrierbolzen / Zero point pull studs |                                      | -                              | -      |
| ⑤ | 4x M12 x 25 DIN913                            | Gewindestifte / Grub screws                      |                                      | -                              | -      |
| ⑥ | 1x TF181444                                   | Adapterplatte / Adapter plate                    |                                      | -                              | ~ 10,5 |
| ⑦ | 1x TF181238                                   | Adapterbolzen / Adapter bolt                     |                                      | -                              | -      |
| ⑧ | 1x M6 x 18 DIN912                             | Zylinderschraube / Cap screw                     |                                      | -                              | -      |
| ⑨ | 6x M12 x 18 DIN508                            | T-Nutensteine / T-slot nut                       |                                      | -                              | -      |
| ⑩ | 6x M12 x 40 DIN912                            | Zylinderschrauben / Cap screws                   |                                      | -                              | -      |
| ⑪ | 4x M12 x 16 DIN912                            | Gewindestifte / Grub screws                      |                                      | -                              | -      |
| ⑫ | 1x TF181450                                   | Zentrierzapfen / Centering plug                  |                                      | -                              | -      |
| ⑬ | 1x M8 x 22 DIN7991                            | Senkschraube / Flat head screw                   |                                      | -                              | -      |

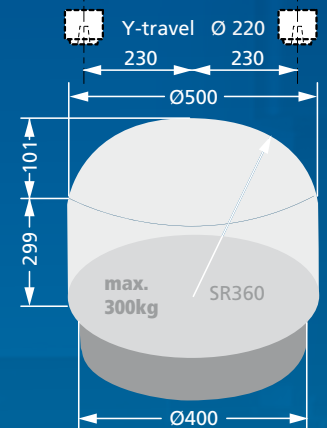
Bestellschlüssel + Inhalt  
Order code + content

→ Spannkraft Zentrischspanner  
Workholding force Self centering vise

Lineare Spannkraft (Nr.1)  
Linear workholding force (Nr.1) → F1

Niederzug Spannkraft (Nr.2)  
Pull down workholding force (Nr.2) → F2

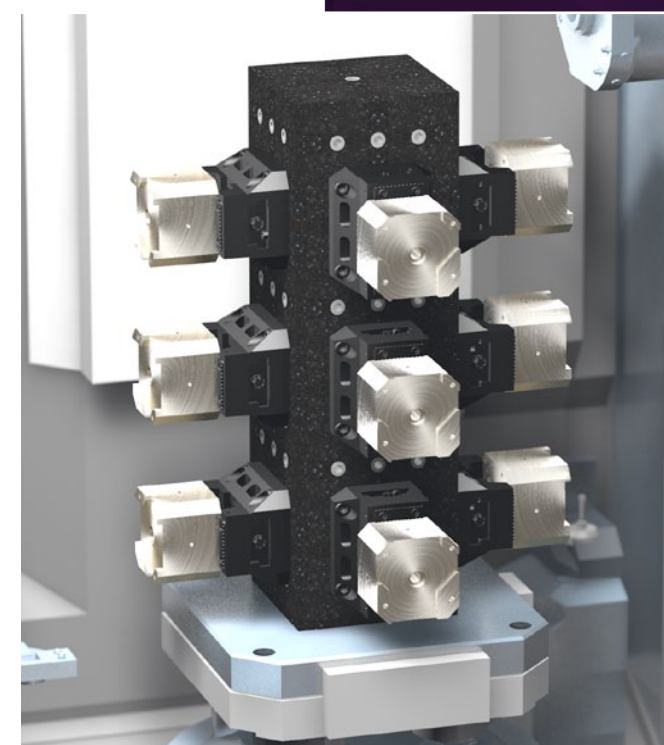
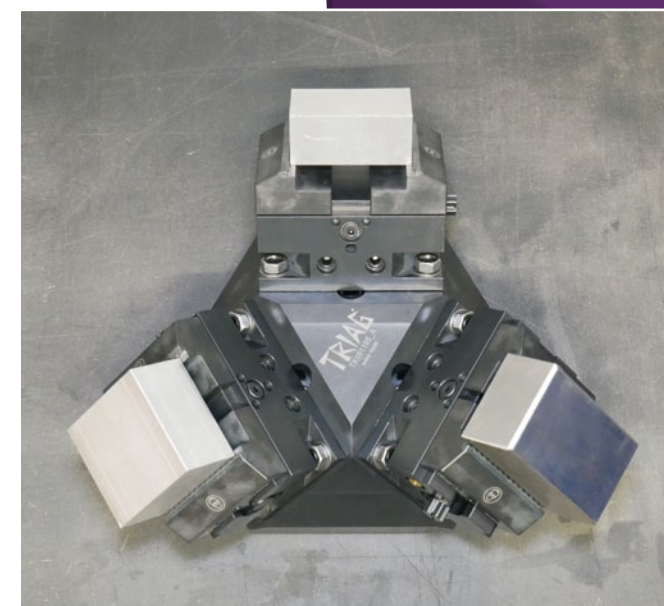
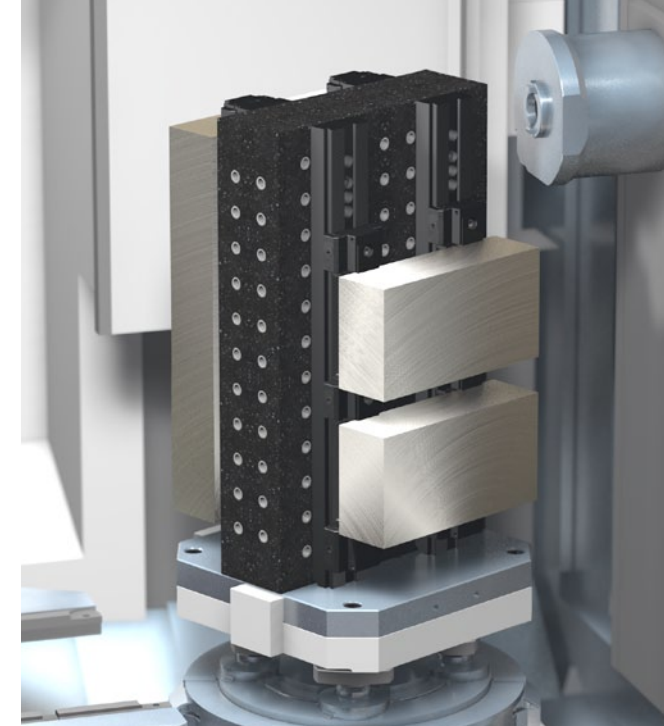
## MU4000-V



## 3mm Direkt-Prägebacken *3mm Direct-stamping jaws*

Bei allen Prägebacken von Triag International  
*On all stamping jaws of Triag International*

**triag-int.ch**  
Official Website



# Gesamtkatalog *General catalogue*



Mehr Spanntechnik, mehr Infos und  
viele Anwendungsbeispiele!

*More workholding, more info and  
a lot of application examples!*



Triag International



@triagint\_workholding



Triag International

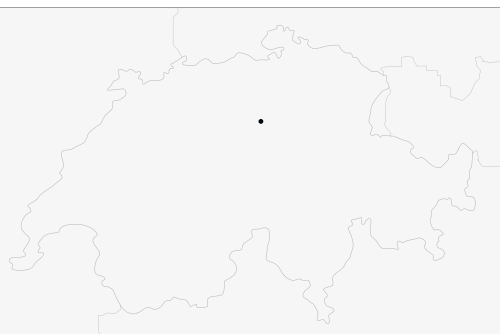
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✉ [clamping@triag-int.ch](mailto:clamping@triag-int.ch)



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