

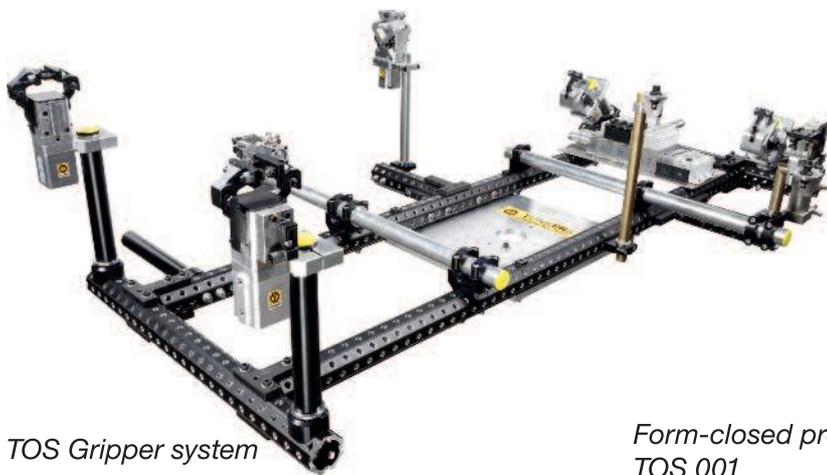


TÜNKERS One Screw System (TOS)

The TÜNKERS® One Screw System combines the advantages of form-closed situation in the main frame (Level 1) with that of force-closed in the gripper arms (Level 2). Due to the ability to attach the joints in the main frame with one screw on the octagonal main frame profile, in certain applications this results in an extremely rapid assembly time. In order to guarantee a predefined clamping situation, each threaded connection should incorporate a clearance sleeve. The joints are optimally positioned by means of alternating hole templates at a distance of 30 mm from each surface and 15 mm offset from the adjacent surface.

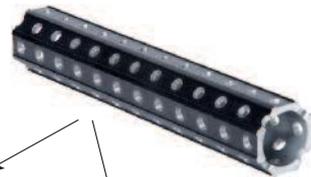
- Octagonal-section aluminum profile in Level 1 and round tube in Level 2
- One of the fastest systems in automation in terms of MTTR
- Variable threaded connection concept
- Slim design in Level 1
- Small number of components
- No special tools required for assembly, no blind rivet nuts

GRIPPING



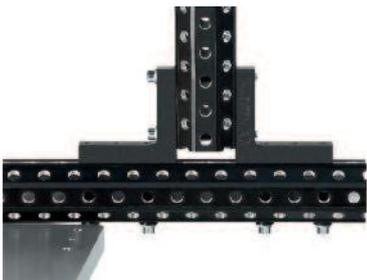
TOS Gripper system

Form-closed profile
TOS 001
for main frame

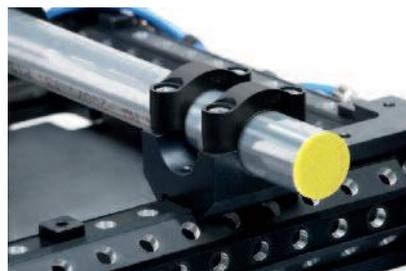


Force-closed
aluminum tubes GR 25/40 for
gripper arms

Optional: CFK tubes
GRC 25/40



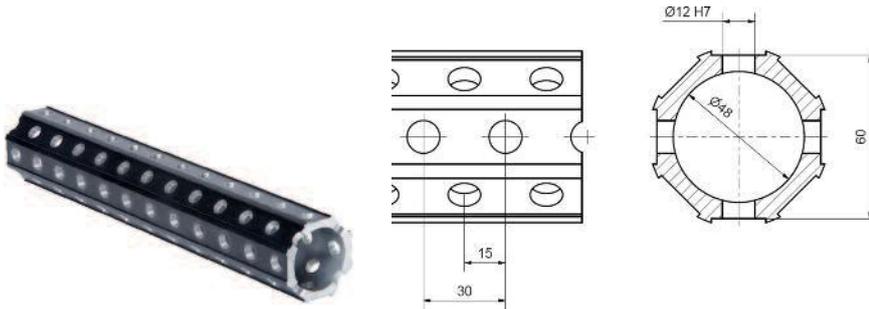
Detail view – Base frame
connector
TOS 023 / TOS 024



Detail view – Cross joint
TOS 040



Detail view – clamp connection



| Type | Material | Weight | Geometrical moment of inertia I _x | Section modulus W _x |
|-----------------------------|----------------|----------|--|--------------------------------|
| TOS 001 - Octagonal profile | EN AW 6063 T66 | 2,8 kg/m | 359886 mm ⁴ | 11990 mm ³ |

Ordering information: TOS001-...

Profile lengths in set 30 mm increments (maximum length 4078 mm)



| Type | Material | Weight | Geometrical moment of inertia I _x | Section modulus W _x |
|-------------------------------|------------|-----------|--|--------------------------------|
| GR 40 - Circular-section tube | EN AW 2007 | 1,83 kg/m | 95492 mm ⁴ | 4775 mm ³ |

Ordering information: GR40-...

Profile lengths in 10 mm increments (maximum length 6000 mm)



| Type | Material | Weight | Geometrical moment of inertia I _x | Section modulus W _x |
|-------------------|------------|----------|--|--------------------------------|
| GR 25 - Round bar | EN AW 2007 | 1,4 kg/m | 19175 mm ⁴ | 1534 mm ³ |

Ordering information: GR25-...

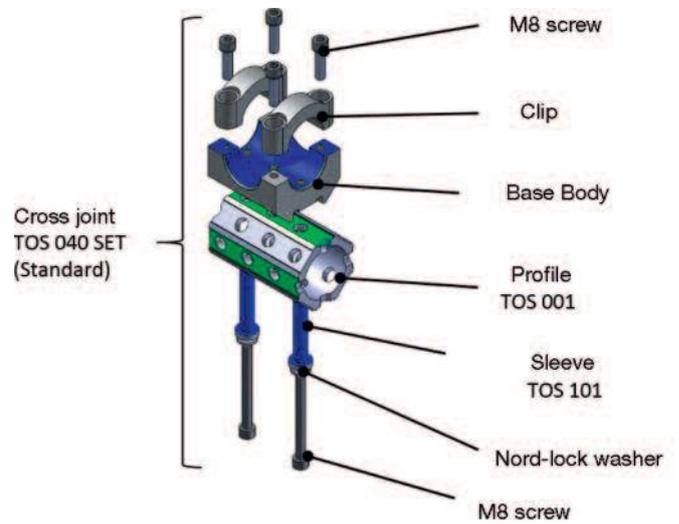
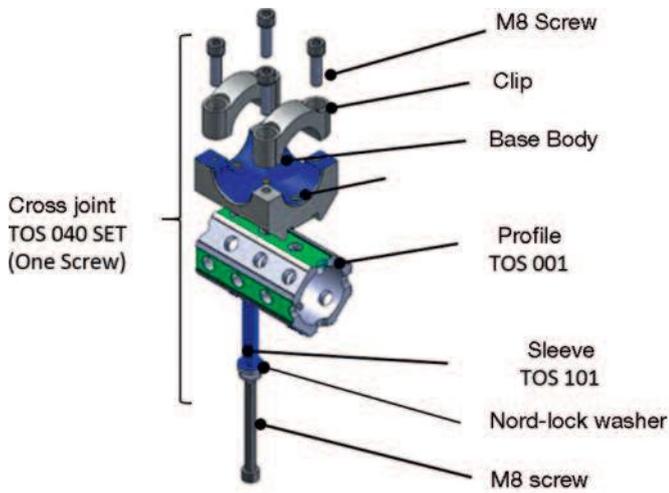
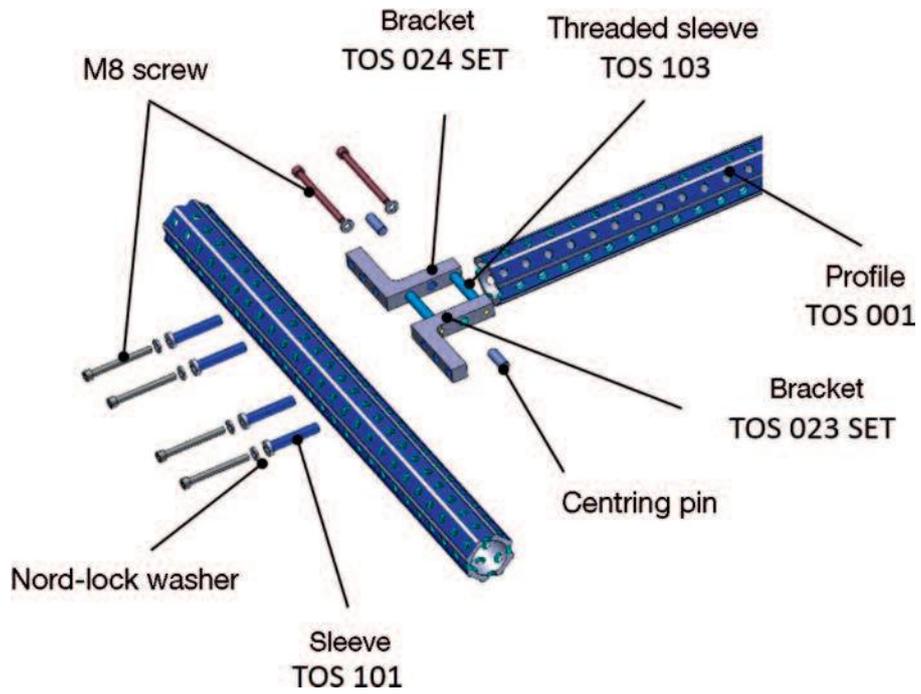
Profile lengths in 10 mm increments (maximum length 3000 mm)

Please Note:

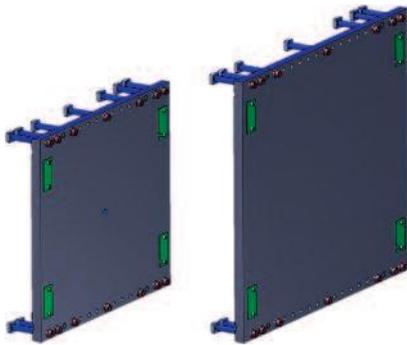
All technical data relating to the profiles have been determined using Autodesk Inventor Professional 2014. Tünkers does not guarantee that the actual product exactly corresponds to the technical data provided. Tünkers accepts no liability for damage which may occur as the result of individual use of the product.

System configuration – base frame and cross joints

GRIPPING



Components of the base frame (Level 1):



Base plate
TOS 010



Base plate
TOS 011



Flange
connection SW60
TOS 015 SET



Basic profile
TOS 001



TOS 023 SET
TOS 024 SET



T-connector
TOS 021 SET



Cross joint 40
TOS 040 SET



Joint 40 LW
TOS 041 SET



Cross joint 25
TOS 044 SET



Joint 25 LW
TOS 045 SET



Extension arm 40
TOS 043 SET

GRIPPING

Joints for gripper arms (Level 2):



GSKN Cross joint



GSKN Series

Typical adapter / clamping unit connections



GNAK A10



GNAK A00



GNXK



GNAK 40-A-1