**12752**



chain anchor

clamp

## Material
Clamp - as part no. 10678.
Chain - steel, 25,4 pitch. 3m long.
Chain anchor - steel.

## Technical Notes
Heavy clamping forces of up to 50kN.

Provides strong and even clamping of large diameter workpieces.
Clamp or unclamp with a simple turn of hexagon socket. Chain can be easily removed clear from the workpiece.
Please use socket head cap screw of strength class 12,9 for mounting. Please order T-nuts to suit your application separately, if required see part 24000.

| Order No. | Description | | | $d_1$ | $h_1$ | $h_2$ | $l_1$ | $l_2$ |
|---|---|---|---|---|---|---|---|---|
| **12752.W0001** | Set: Clamp, Chain (3m), Chain Anchor | | | 17 | 111 | 35 | 108 | 12 |

| Order No. | $l_3$ | $l_4$ | $l_5$ | $w_1$ | $w_2$ | $w_3$ | A/F | Clamp reach $s_1$ | Clamping force kN max. |
|---|---|---|---|---|---|---|---|---|---|
| **12752.W0001** | 57 | 28 | 25.4 | 50 | 25.4 | 50 | 13 | 30 | 50 |



at optimal distribution, clamping force = 5000Kg
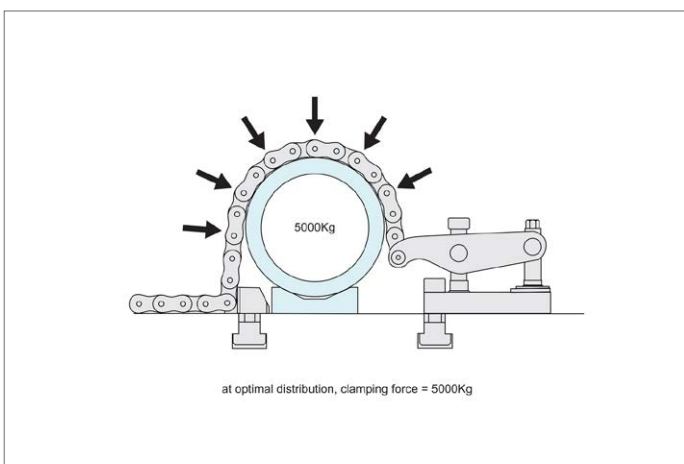
Our comprehensive range of clamping elements includes a compact and powerful workpiece clamping element, the chain clamping set no. 12700. This set was specifically designed for clamping large workpieces with round or arched surfaces.

Due to an increase in the bearing surface of the chain, the clamping force is distributed across the workpiece thereby reducing deformation.

CHAIN CLAMPING

## Setting Up
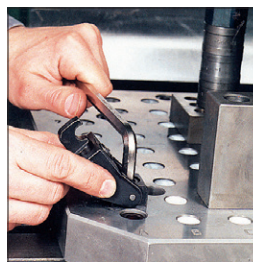


1. **Attach the hook unit and the take-up unit as close to the workpiece as possible.**



2. **Turn the knurled nut on the take-up unit until the pull rod is fully extended. Select the number of chain segments required for the workpiece and attach to the pull rod.**



3. **Fine adjustment of the chain lengths is made by tightening the knurled nut until the chain slightly touches the workpiece.**



4. **To clamp the work piece connect the free end of the chain onto the hook unit. Using a hex key tighten the eccentric shaft, and ensure the lever is rotated to its fully locked position (180°). The workpiece is now clamped.**



chain force    clamping force    chain force
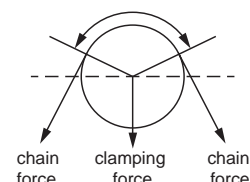
## Important Factors in Selection of Chain Clamp
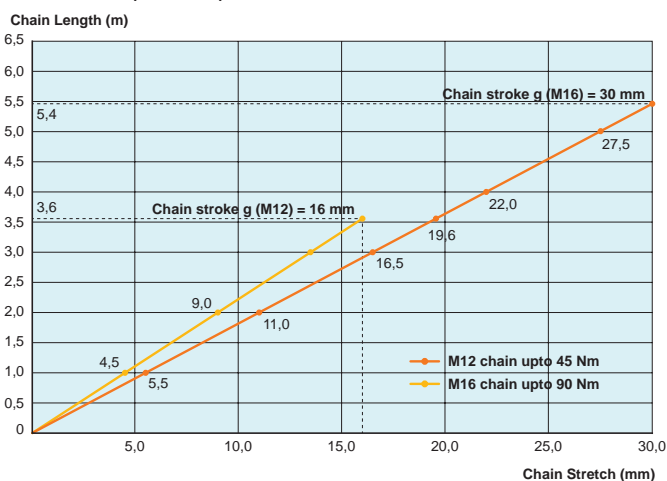
### Chain Length and Stretch

Torque value of 50 Nm is used for M12 set.

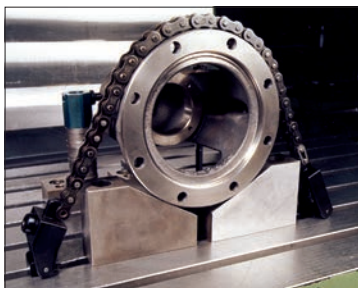Torque value of 90 Nm is used for M16 set.

The clamping force achievable through the Wixroyd chain clamp set is dependent upon three factors:

- Workpiece diameter (see graph).
- Chain length and stretch (see graph).
- Contact angle of chain and workpiece (see table below right).

**Chain Stretch at Specified Torques**

**Chain Length (m)**



Chain stroke g (M16) = 30 mm

Chain stroke g (M12) = 16 mm

5,4
3,6
4,5
5,5
9,0
11,0
16,5
19,6
22,0
27,5

M12 chain upto 45 Nm
M16 chain upto 90 Nm

**Chain Stretch (mm)**

### Table of Clamping Force to Contact Angle α



**Clamping with the chain clamp set.**

|  | Torque | α = 105° | α = 120° | α = 135° | α = 150° | α = 180° |
|---|---|---|---|---|---|---|
| M12 | 50Nm | 80% | 87% | 92% | 97% | 100% |
| M16 | 90Nm | 80% | 87% | 92% | 97% | 100% |

**Important Note: Achievable clamping force decreases as the contact angle of chain and workpiece (α) reduces. Please use the table above as a guide.**

**Wixroyd**
AN ESSENTRA COMPANY

ov-W12700-A-T-chain-clamping-set-Inh - Updated -24-10-2022