





# **F-SERIES**

Flanging Machines

F-200 F-400

# F-SERIES MULTIPURPOSE FLANGING TECHNOLOGY

**T-DRILL** F-series pipe flanging machines offer new potential in heavy-duty pipe end forming and flanging. Lips/Stub ends, for the use of loose flanges, are formed directly on the end of the pipe – a solution that saves you up to 40% in time and costs compared to traditional weld neck flange connections.

Flanging by using the **T-DRILL** method takes minimum roughly a minute, while a similar process made by welding in stainless steel pipe takes up to one hour, including the preparations. Because of no welding, there's no need for inspection of the welding seam.

## T-DRILL FLANGING TECHNOLOGY

The T-DRILL flanging method is approved by

- Pressure Equipment Directive (PED)
- Det Norske Veritas
- · Germanischer Lloyd
- · Lloyd's Register of Shipping
- Bureau Veritas
- ASME Standard
- ASTM F2015-00















## **FLANGING TECHNOLOGY**

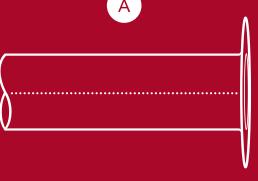
A. Flanging

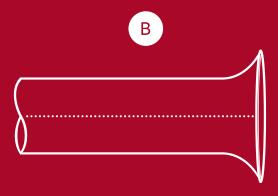
B. Flaring

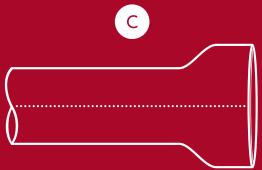
C. Expansion

D. Bevelling











## **Perfect for**



Pulp and paper industry



Food and brewery processing pipes



Water and wastewater installations



Shipbuilding



Chemical industry



Mechanical services for multi-story buildings



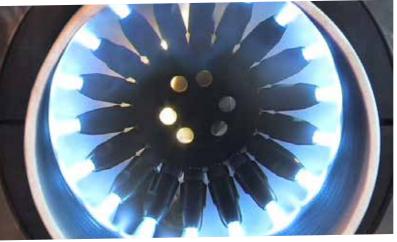
Ventilation systems



District heating and cooling piping

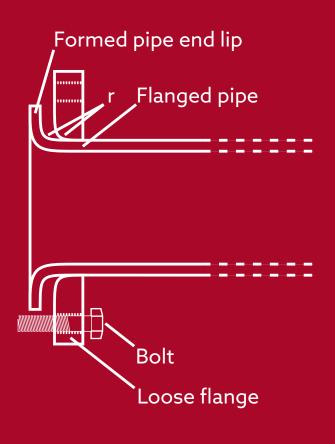








## **LOOSE FLANGE JOINT**



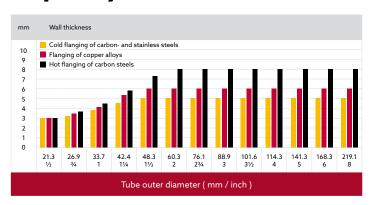




### F-200 Flanging machine

The T-DRILL F-200 is capable of both hot and cold forming of most malleable materials within an O.D. range of 21,3–219,1 mm.

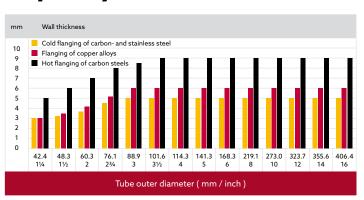
### Capacity of F-200



## F-400 Flanging machine

The T-DRILL F-400 meets the most demanding requirements of pipe manufacturing on larger O.D. ranges. It is capable of both hot and cold forming within an O.D. range of 42,4–419 mm.

## Capacity of F-400





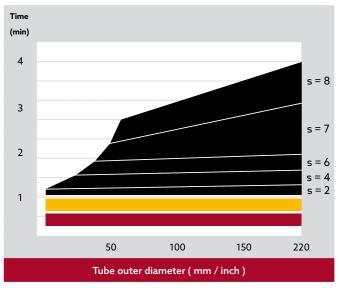


#### Technical data

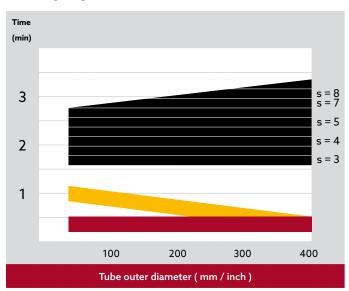
|                            | F-200   | F-400                         |
|----------------------------|---|-------------------------------|
| Pipe to be flanged         | Ø21,3-219,1 mm                                    | Ø42,4-419 mm                  |
| Materials to be formed     | Copper, Carbon steels, Stainless steel, Aluminium |                               |
| Rated power                | 10 kW   | 15,5 kW                       |
| Air supply                 | 6 bar/90 psi                                      | 6 bar/90 psi                  |
| Motor of hydraulics        | 4 kW  | 4 kW                          |
| Hydraulic pump output      | 023 l/min   | 025 l/min                     |
| Gas connections for burner | Oxygen 6 bars, propane 2 bars                     | Oxygen 6 bars, propane 2 bars |

The information included in this brochure is subject to revision without notice.

#### Flanging times for F-200



### Flanging times for F-400



Sometimes thinner than 2 mm wall pipes needs multi-stage flanging. In case of better flanging time estimation needed, please contact T-DRILL sales.

- Multi-stage flanging
- Flanging in one stage
- Hot flanging on different wall thicknesses

- Multi-stage flanging
  - Flanging in one stage
  - Hot flanging on different wall thicknesses

The charts above are meant to be suggestive only. Total times depend on the material specifications.

## DO IT WITH T-DRILL

Cut costs - Improve quality - Increase profit

- + Cut workshop costs by eliminating the need for welding and X-raying.
- Precise and stable results, no risk of weld or braze fracture
- + No costly flange inventories or complex equipment needed
- + Fast installation with loose flanges, no bolthole positioning
- Very easy to operate and practically maintenancefree with programmability
- + Hot & cold forming for long and bent pipes, smooth/grooved flanged surfaces.

#### MANUFACTURER:



#### T-DRILL OY

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