

# FTW 24-120 PRO TUBESHEET WELDER

/ MIG-MAG

/ Tube inside diameter 24 - 120 mm

(0.9 - 4.7 in)



/ The FTW PRO's range of use contains mainly areas where factors like less time effort, best quality and highest reproducibility are requested. For tube-to-tubesheet joints in heat exchangers or cooling elements these criteria are for utmost importance.

Innovations like the pneumatic clamping system or the hanging device simplify the operators work considerably and additionally decrease the time effort. Precise torch positioning is provided by the 3-point support – even at different tube protrusion.

/ **COMPACT AND ERGONOMIC DESIGN**

/ **HIGHEST QUALITY**

/ **INCREASED PRODUCTIVITY**

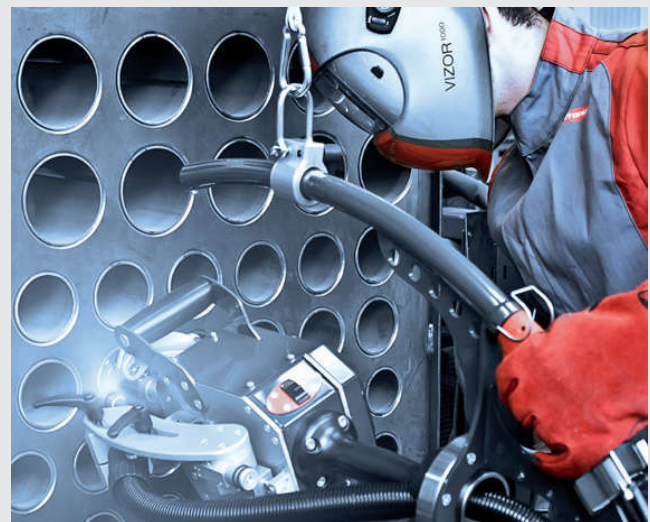
/ **HIGHER REPRODUCIBILITY**

/ **TIME SAVINGS DUE TO FAST AND EASY POSITIONING**

/ **EASY OPERATION**



/ Vertical welding position



/ Horizontal welding position

## WELDING HEAD FTW 24-120 PRO



### FEATURES

- / Pneumatic clamping system
- / Different mandrels and clamping jaws for different tube inside diameters
- / Adjusting units for precise torch adjustments
- / Special torch with multilock and water cooling
- / Hanging device (optional)
- / Comfortable handle for quick-starting of welding programs
- / 3-point support (optional)

### HANGING DEVICE (OPTIONAL)

/ For vertical and horizontal welding position. Weightless positioning by using a balancer.

### MULTILOCK TORCH

/ Special water-cooled torch with multilock for rapid changing/adjusting of torch elbow (angle available in 20°/30°).



### CLAMPING SYSTEM

/ Different mandrels/clamping jaws/support rings with comfortable carrying case. Clamping via pneumatic.



### 3-POINT SUPPORT (OPTIONAL)

/ Precise torch positioning via pneumatic 3-point support – even with different tube protrusion.



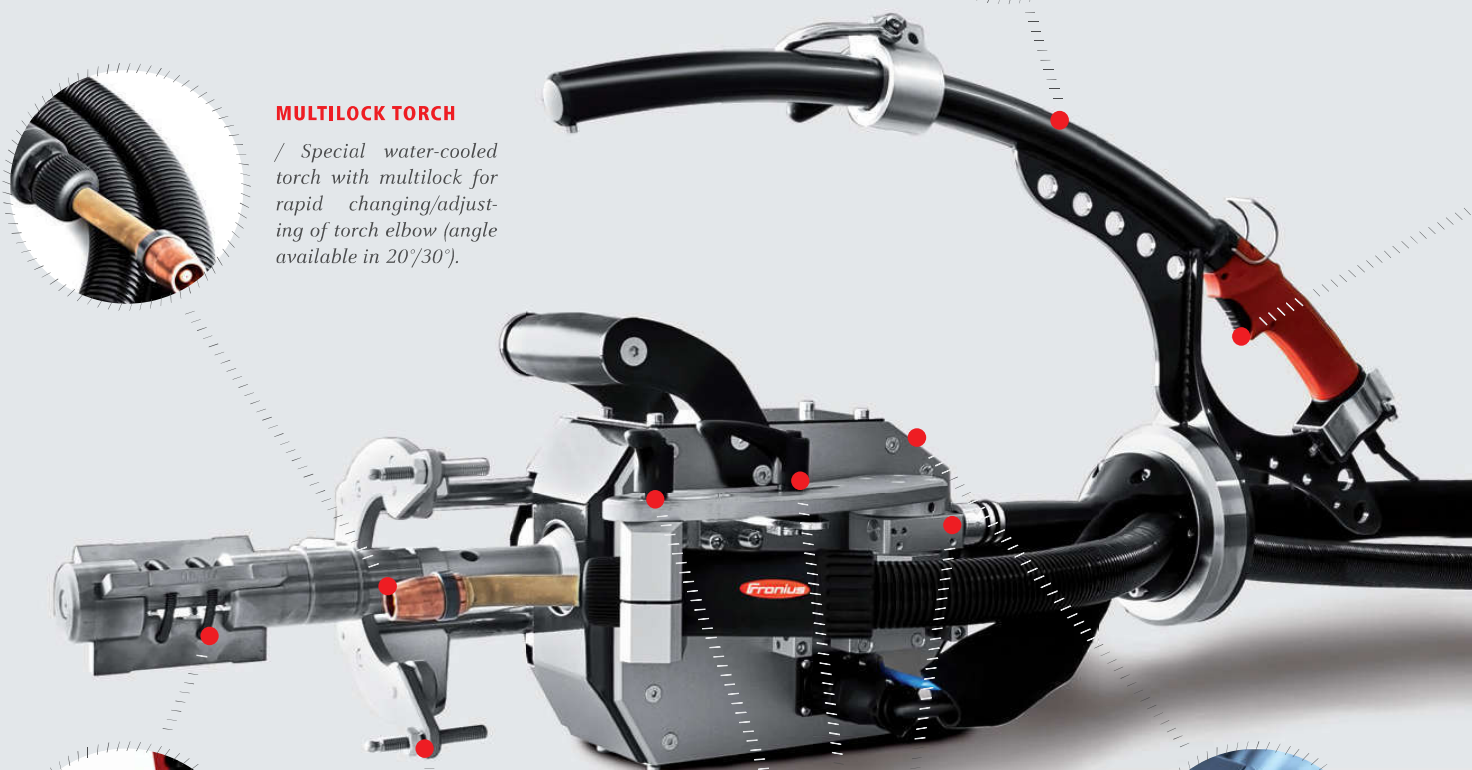
### ADJUSTING UNITS WITH FIXTURE

/ Two adjusting knobs and two fixing lever allow perfect torch adjusting.



### CLAMPING/ADJUSTING

/ The pneumatic clamping process is simply activated by a slide switch.





# CONTROL UNIT FCU/FTW WITH REMOTE CONTROL FRC-40/FTW



## FEATURES

- / Robust housing
- / Graphical user interface
- / Touch-display
- / Multifunctional wheel
- / Changeable protective sheets
- / Parameter program- and storable
- / Different languages
- / Job-switching (optional)



### HANDLE

/ Ergonomic handle for quick-starting of welding programs. Removable for using without hanging device.



### TOUCH-DISPLAY

/ Comfortable operation via touch-display.

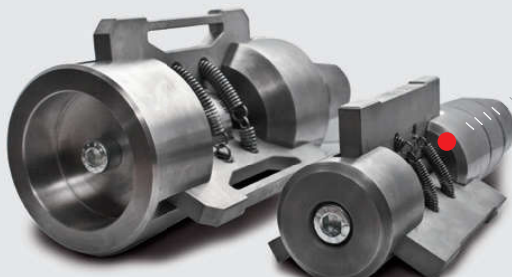


### MULTIFUNCTIONAL WHEEL

/ Multifunction wheel for selecting and altering parameters – even while the welding procedure is running.

## MANDRELS

/ Three mandrels cover tube inside diameters from 30 to 120 mm (1.2 - 4.7 in) - other tube diameters on request.



Ø 70 - 120 mm  
(2.8 - 4.7 in)

Ø 40 - 80 mm  
(1.6 - 3.1 in)

Ø 30 - 54 mm  
(1.2 - 2.1 in)



### CLAMPING JAWS

/ Each mandrel supports different clamping jaws for different tube inside diameters.



### SUPPORT RINGS

/ Support rings for different tube diameters.

## TECHNICAL DATA

### FTW 24-120 PRO (WELDING HEAD)

Tube inside diameter	24 - 120 mm (0.9 - 4.7 in)
Tube protrusion	8 - 35 mm (0.31 - 1.4 in)
Welding process	MIG/MAG
Rotary speed	0 - 10 rpm
Welding position	PA/PB/PG/PF
Weight (without mandrel/torch/hanging device)	9 kg (19.8 lb)

### DIMENSIONS

A	927 mm (36.5 in)
B	798 mm (31.4 in)
C	563 mm (22.2 in)
D	258 mm (10.2 in)
E	205 mm (8.1 in)
F	468 mm (18.4 in)
G	248 mm (9.8 in)

### MULTILOCK TORCH/FTW

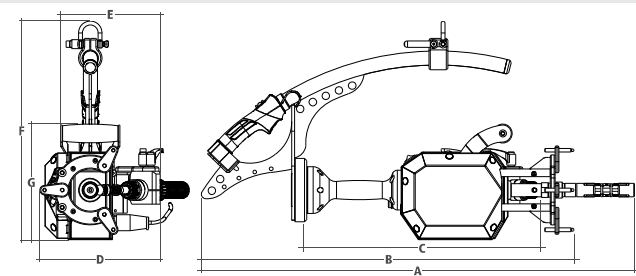
Welding current DC 60%/100%	250 A/200 A
Wire diameter	0.8 - 1.2 mm (0.031 - 0.047 in)
Elbow (customer specific angle on request)	20°/30°
Hose package length	2,5/3,5/4,5 m (98.4/137.8/177.2 in)

### FCU/FTW (CONTROL UNIT)

Mains voltage, 50 - 60 Hz	230 V
Power consumption	300 VA
Control voltage	36 V DC
Mains cable with plug	5 m (197 in)
Control line for FTW	3 m (118 in)
Control line for power source	3 m (118 in)
Weight	9,7 kg (21.4 lb)

### FRC-40/FTW (REMOTE CONTROL)

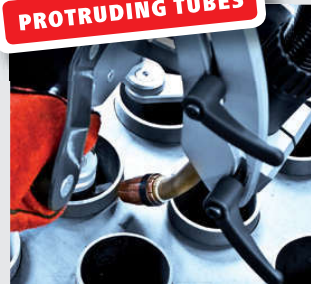
Dimension	275 x 195 x 85 mm (10.8 x 7.7 x 3.3 in)
Weight	2,45 kg (5.4 lb)



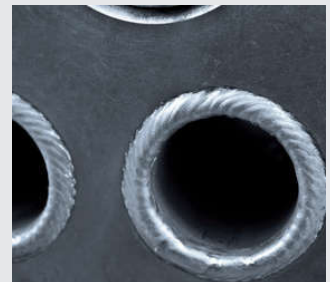
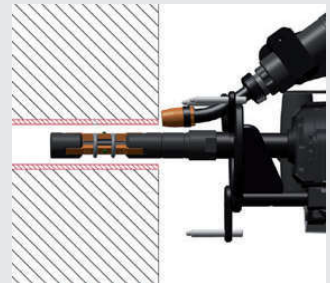
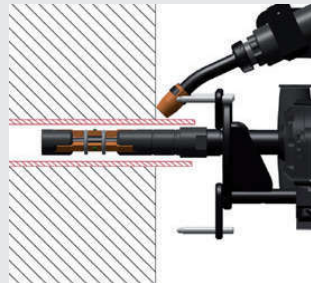
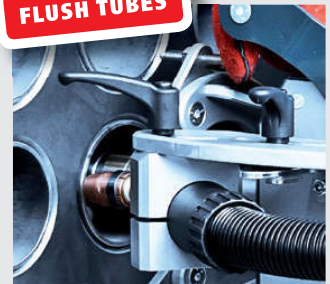
## APPLICATION

/ Protruding tubes-to-tubesheets are welded via fillet weld in PB-position. The special torch with multilock allows a quick 180° rotation of the elbow for welding flush tubes in PA-position (recessed tube welding on request).

### PROTRUDING TUBES



### FLUSH TUBES



/ Battery Charging Systems / Welding Technology / Solar Electronics

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