

# CARRIAGE FDV 22 MF

/ Battery powered welding carriage with magnetic base and optional torch oscillation



/ The FDV 22 MF welding carriage is versatile useable for mechanized longitudinal (MIG/MAG) welding operations. A strong permanent magnet on the base of the carriage gives highest traction and allows travelling on vertical and oblique surfaces without using a track system.

## STANDARD EQUIPMENT

- / Compact and lightweight design
- / Battery powered – no mains cable necessary
- / Strong permanent magnet for highest traction and vertical travelling without a track
- / Onboard control unit
- / Guide wheels automatically track the torch in the filled joint
- / Universal torch holder for manual- and machine torches
- / Integrated path-measuring system
- / Limit switch function in both directions
- / Battery charger (230 V) and battery (14.4 V/3 Ah)
- / Connection cable to power source (Tuchel) 10 m

## ACCESSORIES

- / Torch oscillation FOU 30/ML6
- / Battery charger FDV MF
- / Rechargeable battery 14.4 V/3 Ah
- / Brushes
- / Additional magnet
- / Stainless steel wheels

## FUNCTIONS

### Carriage

- / Main switch: on/off
- / Start left/stop/start right
- / Travel speed knob
- / Digital indication of travel speed
- / Welding on/off
- / Start/stop power source (2-step mode)
- / Programming buttons for travel path, segment welding and endcrater fill

### TORCH OSCILLATION (OPTION)

- / Oscillation on/off/auto
- / Dwell time left/right
- / Oscillation speed
- / Oscillation width (amplitude)

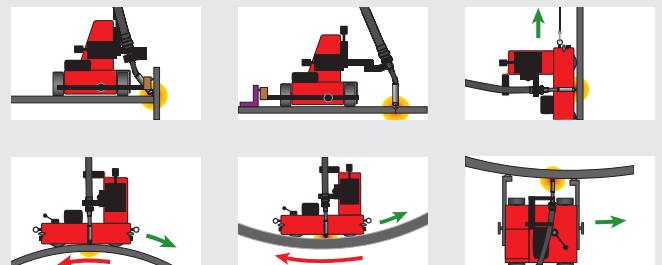
## APPLICATION EXAMPLES

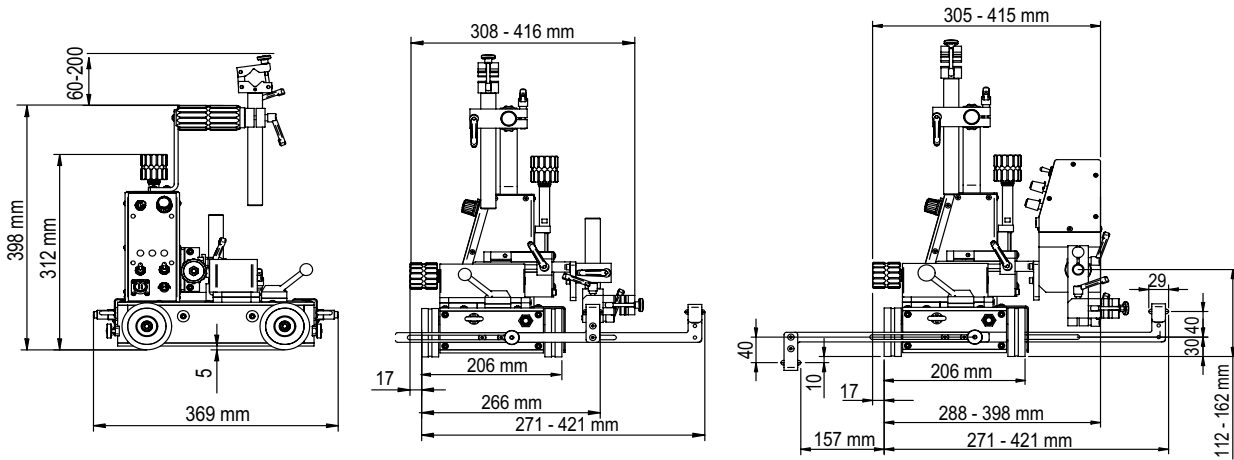


/ Onboard control unit



/ Torch oscillation (option)





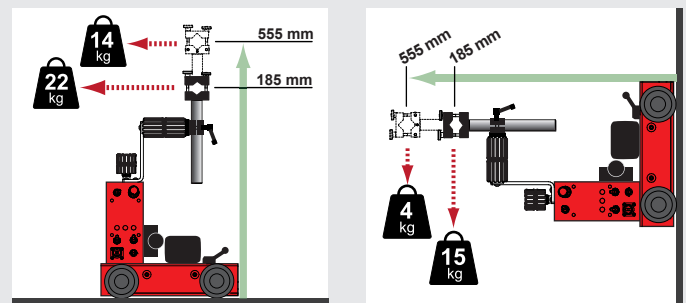
## TECHNICAL DATA

FDV 22 MF*	
Max. load	22 kg (48.5 lb)
Pulling force horizontal/vertical (on hosepack holder)	220 N/150 N (49.5 lbf/33.7 lbf)
Welding position	PA, PB, PC, PF, PG
Minimum material thickness	5 mm (0.2 in)
Horizontal travel speed (load = 85 N/19.1 lbf)	0-140 cm/min (+/- 2 %) (0-55.1 in/min)
Vertical travel speed (load = 85 N/19.1 lbf)	0-125 cm/min (+/- 4 %) (0-49.2 in/min)
Adjustable torch regulation (horizontal/vertical)	28 mm/28 mm (1.1/1.1 in)
Torch body diameter	16-22 mm (0.6-0.9 in)
Power supply battery charger	230 V/50-60 Hz
Power supply carriage (battery)	14.4 V DC
Battery charging time	45 min
Min. battery capacity without OSC	2 h
Min. battery capacity with OSC	1 h
Weight (incl. Battery)	14,5 kg (32 lb)

\* Not suitable for using on pre-heated work pieces!

FOU 30	
Max. load	6 kg (13.2 lb)
Oscillation path (R=150 mm/5.9 in)	1-30 mm (0.04-1.2 in)
Speed/frequency (R=150 mm/5.9 in, path=10 mm/0.4 in)	12-110 Hübe/min
Dwell time	0-3 sec.

## MAX. TENSION LOAD ON HOSEPACK HOLDER



/ Battery Charging Systems / Welding Technology / Solar Electronics

## WE HAVE THREE DIVISIONS AND ONE PASSION: SHIFTING THE LIMITS.

/ Whether Battery Charging Systems, Welding Technology or Solar Electronics - our goal is clearly defined: to be the technology and quality leader. With around 3,000 employees worldwide, we shift the limits of what's possible - our more than 850 active patents are testimony to this. While others progress step by step, we innovate in leaps and bounds. Further information about all Fronius products and our global sales partners and representatives can be found at [www.fronius.com](http://www.fronius.com)

Fronius Canada Ltd.  
2875 Argentia Road, Units 4,5 & 6  
Mississauga, ON L5N 8G6  
Canada  
Telephone +1 905 288-2100  
Fax +1 905 288-2101  
[sales.canada@fronius.com](mailto:sales.canada@fronius.com)  
[www.fronius.ca](http://www.fronius.ca)

Fronius USA LLC  
6797 Fronius Drive  
Portage, IN 46368  
USA  
Telephone +1 877 FRONIUS  
[sales.usa@fronius.com](mailto:sales.usa@fronius.com)  
[www.fronius-usa.com](http://www.fronius-usa.com)

Fronius UK Limited  
Maidstone Road, Kingston  
Milton Keynes, MK10 0BD  
United Kingdom  
Telephone +44 1908 512 300  
Fax +44 1908 512 329  
[sales.uk@fronius.com](mailto:sales.uk@fronius.com)  
[www.fronius.co.uk](http://www.fronius.co.uk)

Fronius International GmbH  
Froniusplatz 1  
4600 Wels  
Austria  
Telephone +43 7242 241-0  
Fax +43 7242 241-953940  
[sales@fronius.com](mailto:sales@fronius.com)  
[www.fronius.com](http://www.fronius.com)

v02 2012 EN