

/ Perfect Welding / Solar Energy / Perfect Charging



## **FLEXTRACK 45** **WELDING CARRIAGE**

/ MIG-MAG / CMT

# FLEXTRACK 45 - SYSTEM OVERVIEW

## SEAM TRACKER (OPTION)

/ Mechanical seam  
tracking horizontal /  
vertical



## TORCH HOLDER

/ Easy and precise  
torch positioning.

## HANDLES

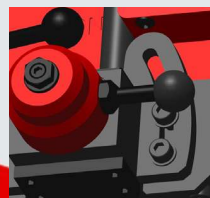
/ Two handles for com-  
fortable carrying and  
mounting.

## CLUTCH ON/OFF

/ Quick (re-)positioning  
of the carriage

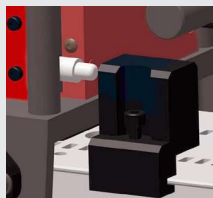
## GUIDING WHEELS

/ Quick adjustable for  
fast & easy mounting on  
different rail configura-  
tions



## LIMIT SWITCHES

/ For both directions the  
carriage has integrated  
limit switches for automat-  
ic return / stop.



## OSCILLATION (OPTION)

/ linear  
/ radial

## TORCHES

/ 5 types of torches  
are compatible:

- Multilock
- Robacta
- Robacta Drive
- CMT Drive
- Manual torches

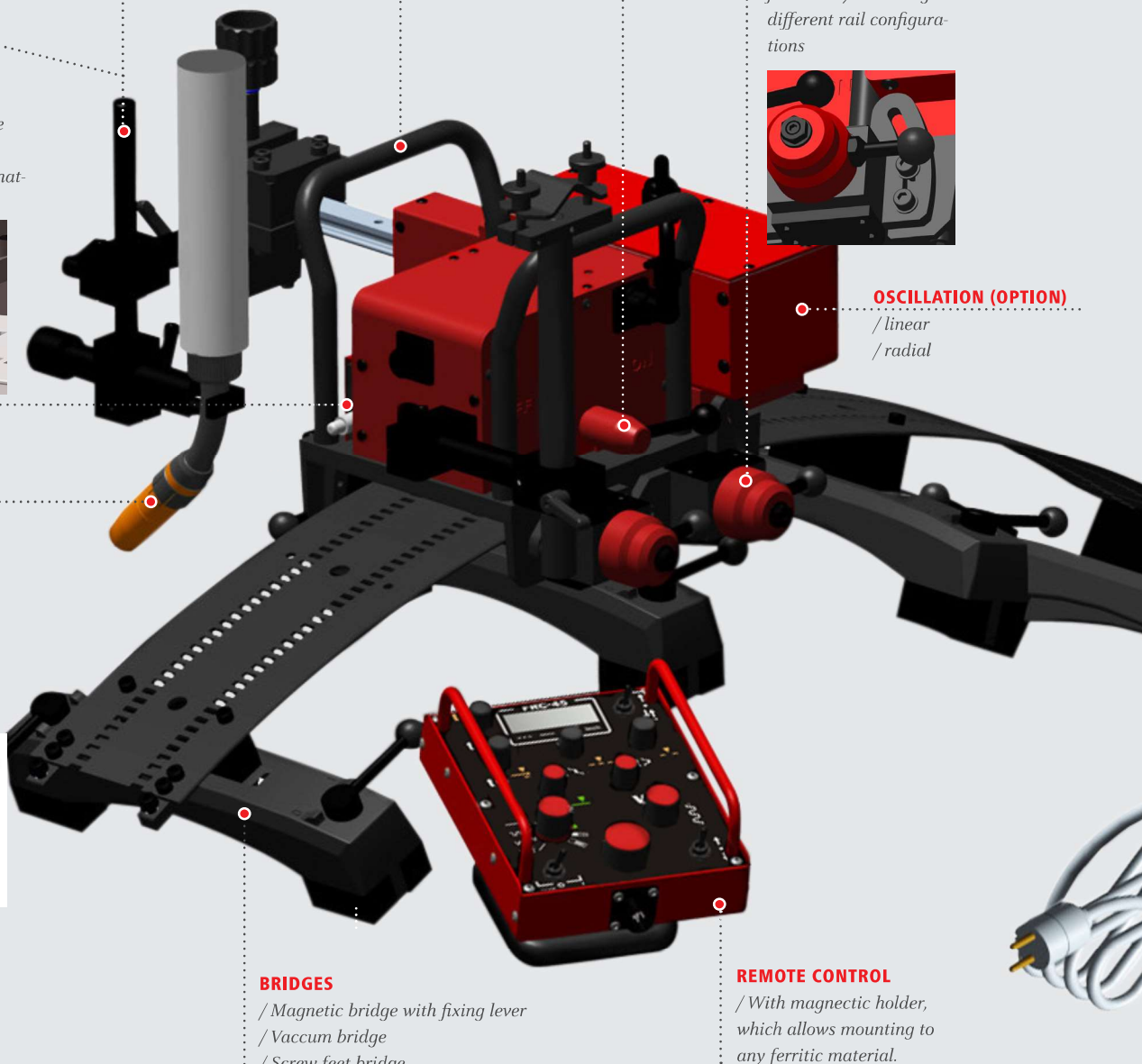


## BRIDGES

/ Magnetic bridge with fixing lever  
/ Vacuum bridge  
/ Screw feet bridge

## REMOTE CONTROL

/ With magnetic holder,  
which allows mounting to  
any ferritic material.



## REMOTE CONTROL FRC-45

### FUNCTIONS:

- / Welding mode (with/without arc)
- / Travel speed
- / Travel direction
- / Offset
- / Oscillation mode
- / Oscillation speed
- / Oscillation amplitude
- / Dwell time
- / Endcrater filling
- / ACC Current Control
- / Segment welding
- / Segment welding Orbital



### RAILS

- / 3 different rail types:
  - Flexible
  - Straight
  - Ring



### CONTROL BOX

- / For connecting the carriage and the remote control



### MAINS CABLE

- / 230 V, 50 - 60 Hz
- / 115 V, 50 - 60 Hz

/ In addition to its compact design, the FlexTrack 45 offers the best possible flexibility. Depending on the application, you can choose between 3 different rail types.

Especially in industries where surface geometries can vary widely, for example in shipbuilding or container construction, the FlexTrack 45 is perfect for universal use.

Operation is performed by the FRC-45 remote control, which provides a variety of functions and setting options. Thanks to its integrated magnetic holder, the remote control can be quickly attached to the chassis and other ferritic surfaces.

## FEATURES

- / Compact design
- / Robust aluminium housing
- / Various rail configurations for a variety of applications
- / Expandable with Oscillation or ACC module
- / Quick and easy assembly of rails and carriage
- / Designed for use in rough environments
- / Constant welding speed
- / TPSi ready



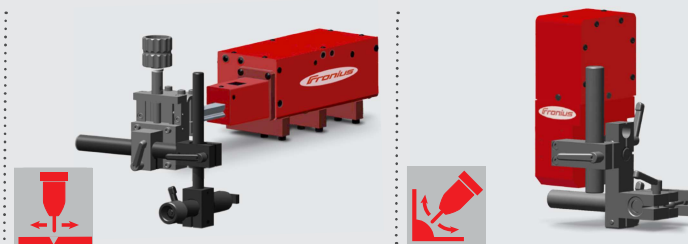


# EXTENSIONS / ACCESSORIES / OPTIONS



## OSCILLATION (OSC)

/ There are 2 different oscillation modules, which can be operated in 4 different modes. Both the linear and the radial oscillation can be used according to the application, as right or left variant. The modular design of the FlexTrack 45 makes it possible to add or change the desired oscillation module in a few working steps.



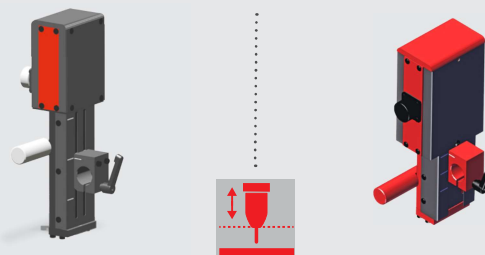
	LINEAR OSCILLATION FOU 30 / ML10 / LINEAR	RADIAL OSCILLATION FOU 30 / ML6 / RADIAL
Oscillation speed	5 - 400 cm/min (1.97 - 157.48 in/min)	20 - 120 cm/min (7.87 - 47.24 in/min) (radius: 150 mm / 5.91 in)
Amplitude	2 - 30 mm (0.079 - 1.18 in)	1 - 30 mm (0.039 - 1.18 in)
Offset	0 - 50 mm (0 - 1.97 in)	0 - 50 mm (0 - 1.97 in)
Dwell time	0 - 3 sec.	0 - 3 sec.
Net weight (without torch holder)	2 kg (4.4 lb)	3,6 kg (7.94 lb)
IEC Ingress Protection rating	IP 23	IP 23
Oscillation modes		

## ARC CURRENT CONTROL (ACC)

/ The ACC module is used for the automatic distance control of the torch to the work piece\*. The main advantage is, that on possibly uneven surfaces or at not exactly centrally mounted guide rails, best welding results can be realised.

*\* ACC function works only with steel components, not with aluminium materials!*

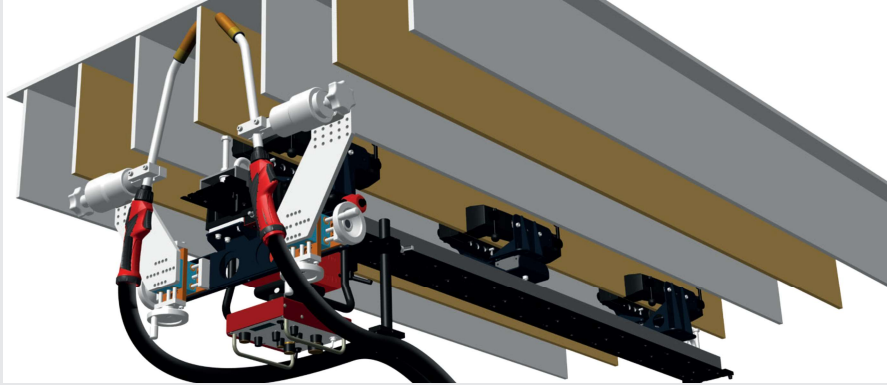
*When using the TPSi power source with PMC und LSC, the functions penetration- and arc stabilizer must be deactivated.*



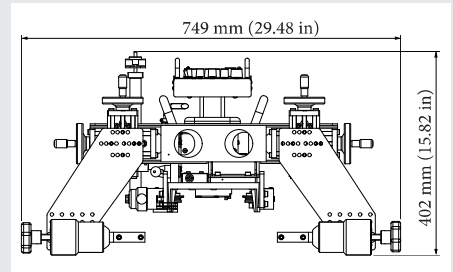
	ACC MODULE FMS 100 / ML15 / SE / ACC	ACC MODULE FMS 50 / ML15 / SE / ACC
Travel speed (automatic mode)	30 cm/min (11.81 in)	30 cm/min (11.81 in)
Travel speed (manual mode)	100 cm/min (39.37 in)	100 cm/min (39.37 in)
Working distance	5 - 100 mm (0.2 - 3.94 in)	max. 50 mm (1.96 in)
Dwell time	1 - 60 sec.	1 - 60 sec.
Sensibility steps	1 - 9	1 - 9
Length / width / height	124 / 111 / 308 mm (4.88 / 4.37 / 12.13 in)	124 / 116 / 258 mm (4.88 / 4.56 / 10.15 in)
Max. load capacity	15 kg (33.07 lb)	15 kg (33.07 lb)
Net weight	2,45 kg (5.40 lb)	2 kg (4.40 lb)
IEC Ingress Protection rating	IP 23	IP 23



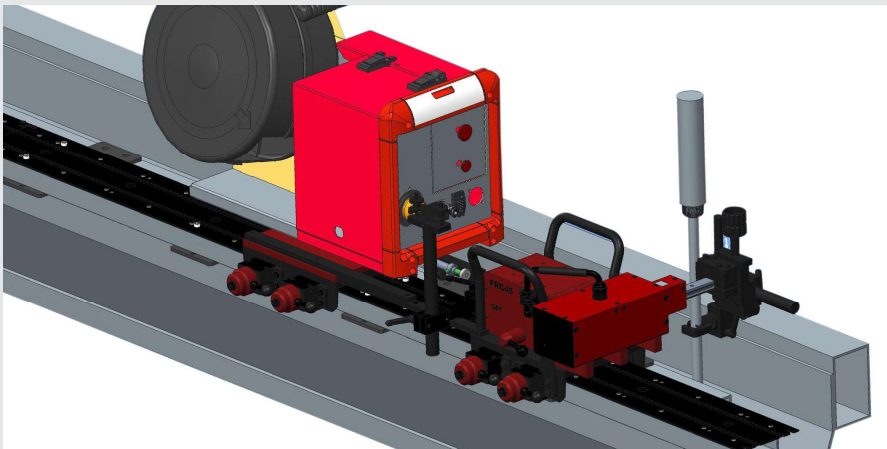
## TWO-TORCHES EXTENSION



- / Extension for 2<sup>nd</sup> torch
- / Manual torch positioning in horizontal and vertical direction



## TRAILER FOR WIRE FEEDER



- / Useable on rigid rails
- / Compatible to VR 4000, VR 5000 or WF25i wire feeder

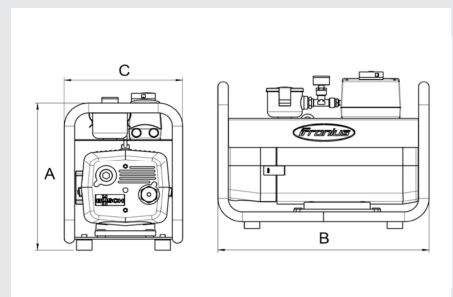


## VACUUM PUMP FOR VACUUM BRIDGES



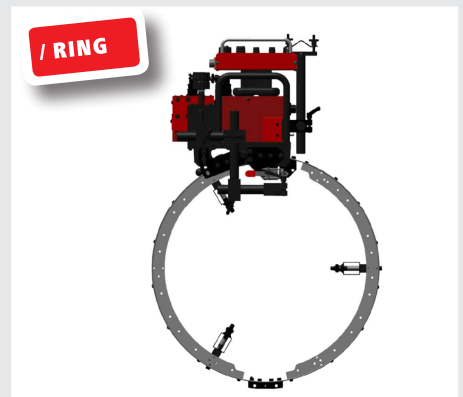
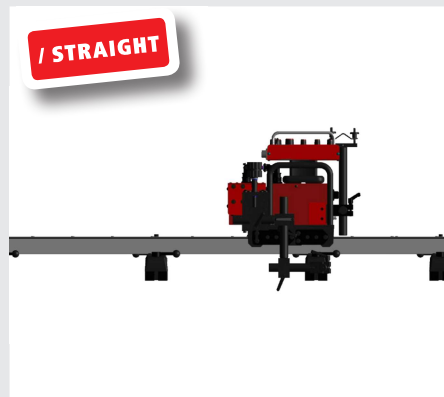
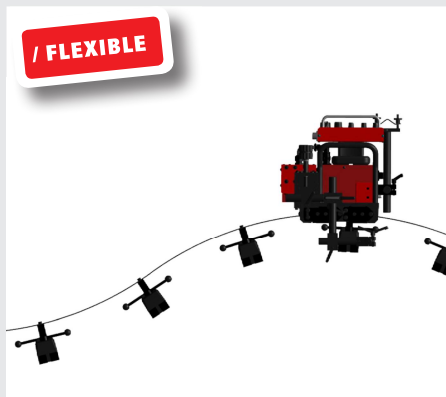
- / Oil-free rotary vane vacuum pump
- / Suction power for up to 13 vacuum bridges
- / Non-reversing starter
- / Inlet filter and pressure manometer
- / Mains cable 5 m (196.85 inch)

VACUUM PUMP	
Max. suction power	25 m³/h
Max. pressure	120 mbar
Mains voltage 50 - 60 Hz	3x200-240 / 346-420V
Power consumption	900 W
Mains cable with plug	5 m (196.85 in)
A (Height)	406 mm (15.98 in)
B (Length)	547 mm (21.53 in)
C (Width)	307 mm (12.08 in)
Net weight	31 kg (68.34 lb)
IEC Ingress Protection rating	IP 23



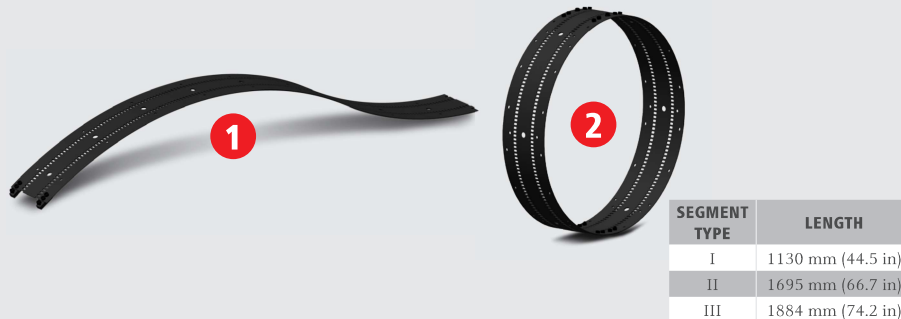
# RAIL SYSTEMS

/ Depending on the application, three different rail configurations are available: flexible, straight and ring (orbital). The carriage can be fixed quick and easy on any configuration - only the guide rollers must be adjusted accordingly.



## FLEXIBLE RAILS / RINGS

- 1 Can be mounted on curved or flat surfaces – min. inside radius 1500 mm (59.1 inch) / min. outside radius 1100 mm (43.3 inch).
- 2 Can be also mounted on tubes as ring rails for inside and outside welding. Different segment lengths (1130/1695/1884 mm [44.5/66.7/74.2 inch]) provide a wide diameter range.



DIAMETER	SEGMENTS	BRIDGES
1560 - 1740 mm (61.4 - 68.5 in)	3x Type I 1x Type II	18
1740 - 1920 mm (68.5 - 75.6 in)	3x Type III 1x Type I	18
1920 - 2100 mm (75.6 - 82.7 in)	3x Type III 1x Type II	20
2100 - 2280 mm (82.7 - 89.8 in)	3x Type III 2x Type I	21
2280 - 2460 mm (89.8 - 95.9 in)	5x Type II	25
2460 - 2640 mm (95.9 - 103.9 in)	3x Type III 2x Type II	25
2640 - 2820 mm (103.9 - 111 in)	5x Type II 1x Type I	25
2820 - 3000 mm (111 - 118.1 in)	6x Type II	28
3000 - 3180 mm (118.1 - 125.2 in)	3x Type III 3x Type II	30
3180 - 3360 mm (125.2 - 132.3 in)	6x Type III	30
3360 - 6060 mm (132.3 - 238.6 in)	on request	

## RIGID RAILS / RINGS

- 1 Straight rigid rails with aluminium profile for vertical and horizontal applications.
- 2 Ring rails with rigid aluminium profiles. The rails are connected with hinge and catch for fast and easy setup.

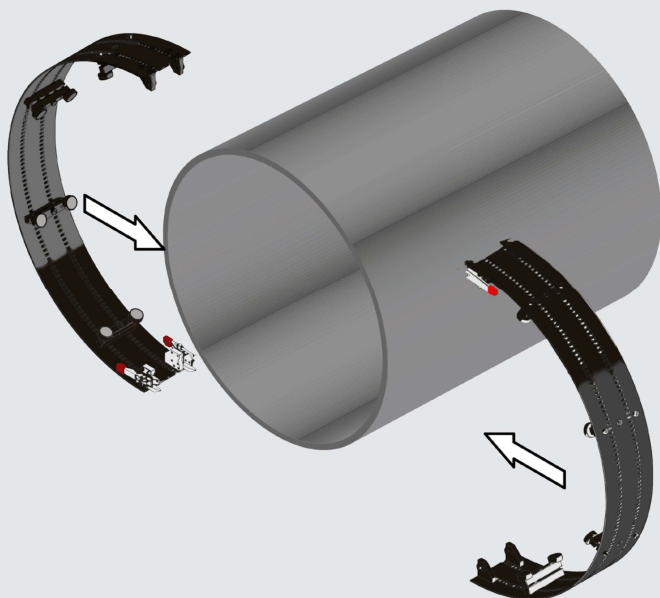


DIAMETER	SEGMENTS	BRIDGES
200 - 300 mm (7.9 - 11.8 in)	2	3
300 - 480 mm (11.8 - 18.9 in)	2	4
480 - 660 mm (18.9 - 26 in)	2	6
660 - 840 mm (26 - 33.1 in)	2	8
840 - 1020 mm (33.1 - 40.2 in)	3	9
1020 - 1200 mm (40.2 - 47.2 in)	3	12
1200 - 1380 mm (47.2 - 54.3 in)	3	15
1380 - 1560 mm (54.3 - 61.4 in)	4	16



## RING SEGMENTS WITH FIXED RADIUS

For orbital welding applications with a pipe outer diameter range of 254 - 1778 mm (10 - 70 inch). Magnetic bridge elements and quick-release fasteners allow particularly simple and rapid assembly of the rail elements. Simple and quick fixation on the workpiece by pre-bent rail segments with pre-assembled bridge elements and quick-release system.



DIAMETER	SEGMENTS	MAGNET BRIDGES	SPRING SUPPORT
254 mm (10 in)	1	4	8
304 - 457 mm (12 - 18 in)	1	6	12
508 - 609 mm (20 - 24 in)	1	8	16
660 mm (26 in)	2	8	16
711 - 863 mm (28 - 34 in)	2	10	20
914 mm (36 in)	2	12	24
965 - 1016 mm (38 - 40 in)	3	12	24
1066 - 1320 mm (42 - 52 in)	3	15	30
1371 - 1422 mm (54 - 56 in)	4	16	32
1473 - 1778 mm (58 - 70 in)	4	20	40

## BRIDGE ELEMENTS

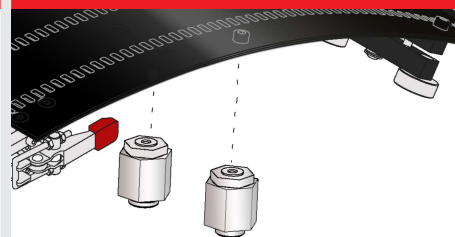
RING SEGMENTS  
(FIXED RADIUS)

### MAGNETIC BRIDGES



/ For flexible ring segments with fixed radius for mounting on ferritic parts. Height correction: 10 mm (0.39 inch)

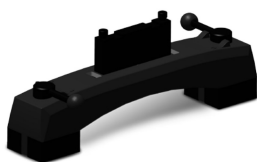
### SPRING SUPPORT



/ For flexible ring segments with fixed radius. Mountable also on non-ferritic parts.

FLEXIBLE & RIGID  
RAILS

### MAGNETIC BRIDGES



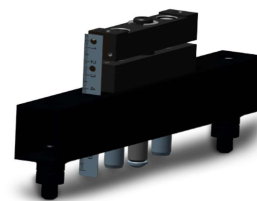
/ For flexible or rigid rails to mount on ferritic parts.  
Heat resistant up to 180 °C (356 °F).  
Adjustable magnetic force.

### VACUUM BRIDGES



/ For flexible or rigid rails to mount on parts with smooth surfaces like aluminum or stainless steel. Working temperature from 0 to 120°C (32 to 248 °F).  
Optionally -30 to 250 °C (-22 to 482 °F)

### SCREW FEET BRIDGE



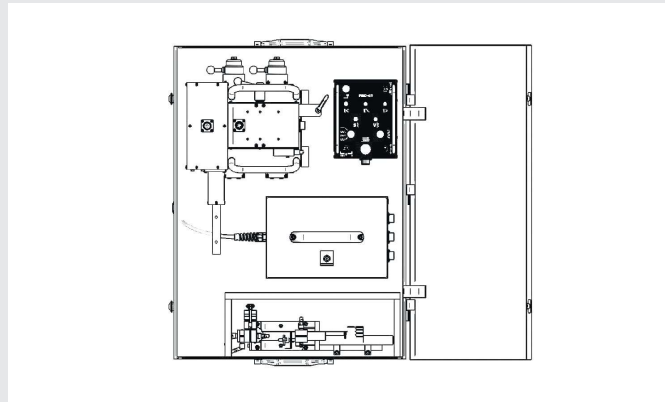
/ For rigid rails up to 840 mm (33 inch) diameter.

## TECHNICAL DATA

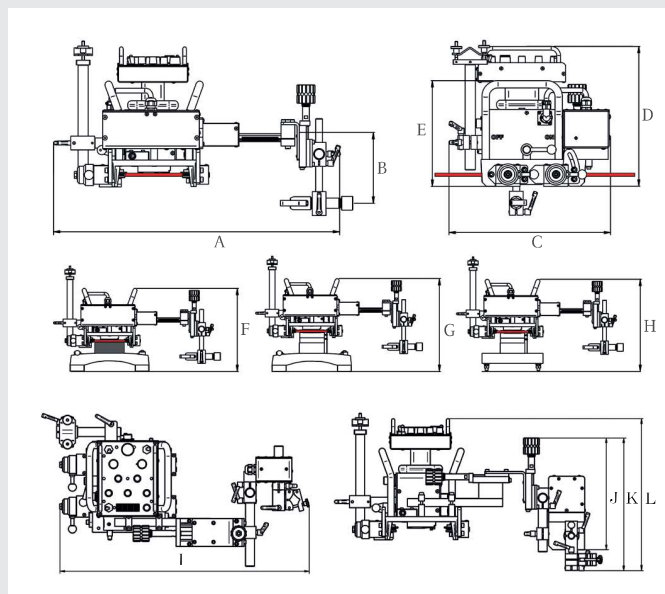
FLEXTRACK 45	
<b>CARRIAGE</b>	
Welding position	PA, PB, PC, PF, PG
Material thickness	min. 4 mm (0.16 in)
Horizontal travel speed	5 - 300 cm/min (1.97 - 118.11 in/min)
Vertical travel speed	5 - 250 cm/min (1.97 - 98.43 in/min)
Endcrater fill time	0 - 5 seconds
Max. load capacity horizontally/vertically	45/30 kg (99.2/66.1 lb)
Weight (without torch holder)	12,5 kg (27.6 lb)
IEC Ingress Protection rating	IP 23
<b>E-CABINET</b>	
Mains voltage 50 - 60 Hz	115/230 V
Power supply	24 V DC
Weight (without cables)	5,3 kg (11.7 lb)
IEC Ingress Protection rating	IP 23
<b>REMOTE CONTROL</b>	
Cable length	10 m (393.7 in)
Weight (without cable)	1,5 kg (3.3 lb)
IEC Ingress Protection rating	IP 23
<b>DIMENSIONS</b>	
A (with linear OSC)	543 - 623 mm (21.4 - 24.5 in)
(without linear OSC)	480 - 560 mm (18.9 - 22 in)
B (with linear OSC)	97 - 201 mm (3.8 - 7.9 in)
(without linear OSC)	119 - 223 mm (4.7 - 8.8 in)
C (with linear OSC)	352 mm (13.9 in)
(without linear OSC)	334 mm (13.1 in)
D	304 mm (12 in)
E	230 mm (9.1 in)
F (overall height rigid straight rail setup)	318 mm (12.5 in)
G (overall height with magnetic bridge)	317 - 415 mm (12.4 - 16.3 in)
H (overall height with screw feet bridge)	317 - 415 mm (12.4 - 16.3 in)
I (with radial OSC)	507 - 628 mm (20 - 24.7 in)
(without radial OSC)	480 - 560 mm (18.9 - 22 in)
J (with radial OSC)	204 - 280 mm (8 - 11 in)
(without radial OSC)	119 - 223 mm (4.7 - 8.8 in)
K	333 mm (13.1 in)
L (height)	382 mm (15 in)



/ Watch the video on  
our YouTube channel.



/ Custom fitting metal transport box including a toolkit for the entire system (rails separately).



/ Perfect Welding / Solar Energy / Perfect Charging

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

/ Whether welding technology, photovoltaics or battery charging technology – our goal is clearly defined: to be the innovation leader. With around 3,700 employees worldwide, we shift the limits of what's possible - our record of over 800 granted patents is testimony to this. While others progress step by step, we innovate in leaps and bounds. Just as we've always done. The responsible use of our resources forms the basis of our corporate policy.

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v06 Apr 2016 EN



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