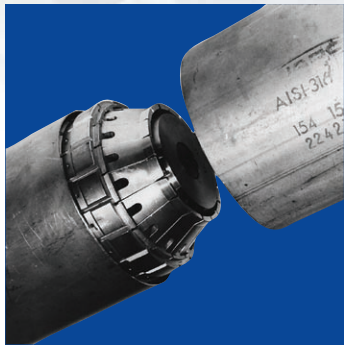
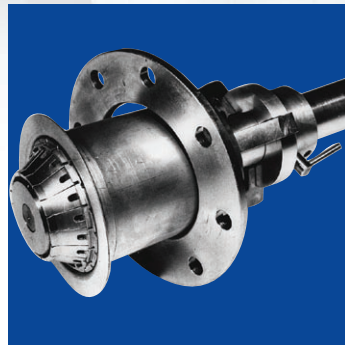


With the same clamping device you can fix without any tool changes:



tube/tube



tube/flange



tube/elbow



tube/pulled-T

ORBILINE

The centering system from ORBIMATIC truncates, aligns and purges.

Operation

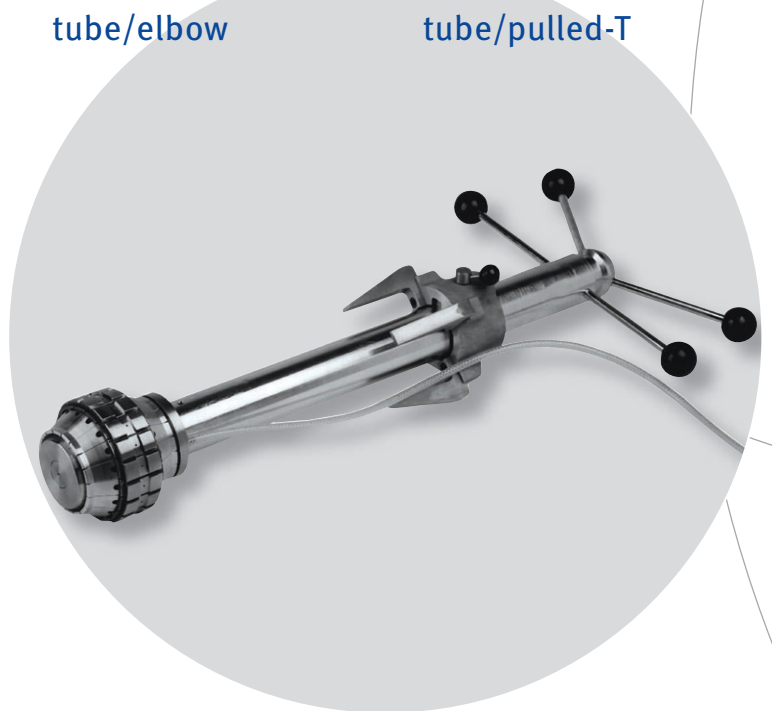
By turning the central actuating handle, two sets of conical fingers are drawn together forcing the backing ring segments radially into the bores of the tubes to be aligned. Strong clamping forces hold the tubes firmly in close abutment permitting welding to take place without the need for tacking. Tubes with wall thickness up to 5% of the tube diameter are rounded and tubes up to 12 metres in length can be welded by adding standard extensions.

Gas Purging

Argon or Helium purging gas is fed into the purge gas manifold and distributed through gas tubes to each individual segment.

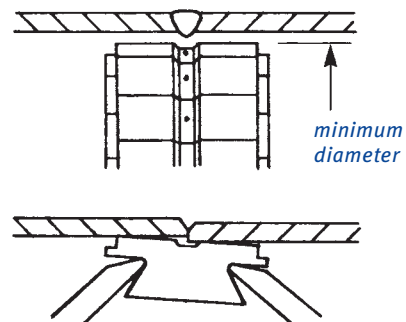
Purge gas is concentrated at the underside of the weld, purging is rapid and welding can start immediately.

Low gas flow rate and pressure avoids blow back and 1 - 2 l/min is sufficient to provide shielding.



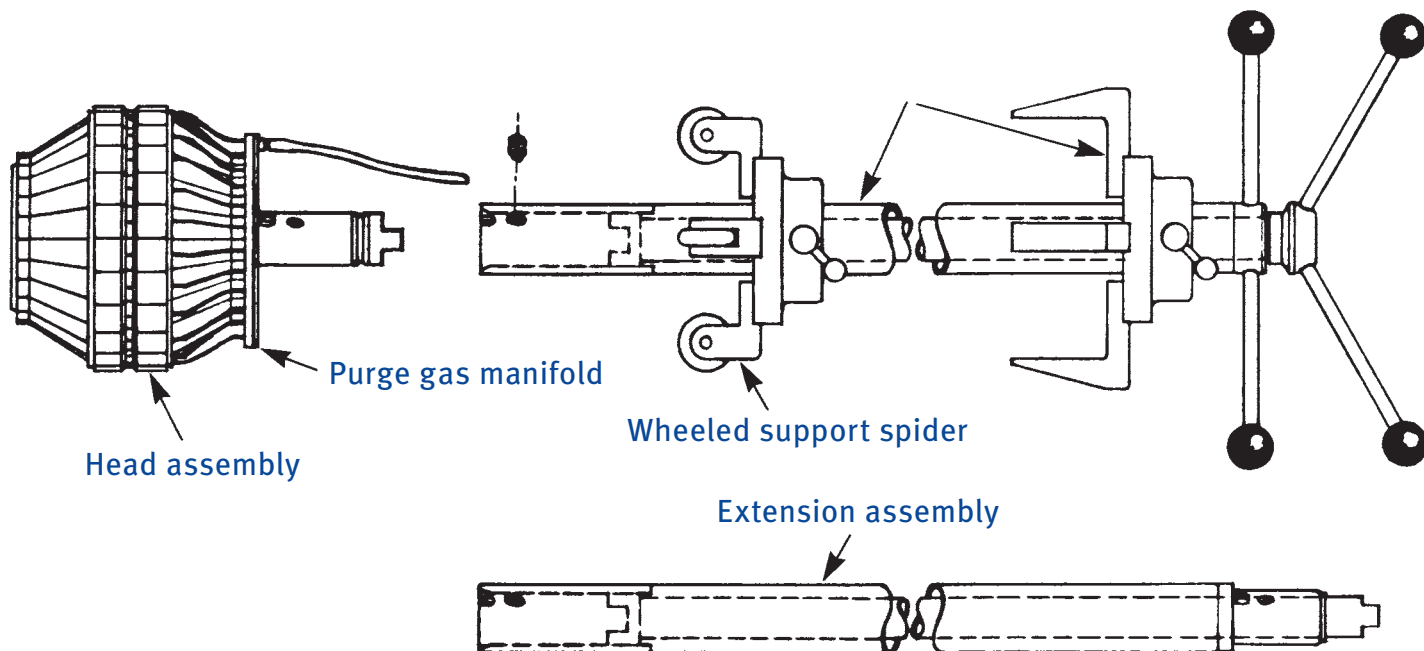
Tubes within the 10% operating range are welded. Additional collapse to minimum diameter is provided to enable head unit to be with drawn past penetration.

Conical fingers act independently ensuring tubes with different bores are accurately aligned.



ORBILINE Centering System

Complete actuator assembly



The ORBILINE clamping devices are available in the following standard sizes:

Size/ Article	Operating range		Minimum-Ø	
	[mm]	[inch]	[mm]	[inch]
OL 34	34.0 - 37.0	1.339 - 1.457	32.0	1.260
OL 37	37.0 - 40.0	1.457 - 1.575	35.0	1.378
OL 40	40.0 - 44.0	1.575 - 1.732	38.0	1.496
OL 44	44.0 - 48.0	1.732 - 1.890	42.0	1.654
OL 48	48.0 - 53.0	1.890 - 2.087	45.0	1.772
OL 53	53.0 - 58.0	2.087 - 2.283	50.0	1.969
OL 58	58.0 - 64.0	2.283 - 2.520	55.0	2.165
OL 64	64.0 - 70.0	2.520 - 2.756	61.0	2.402
OL 70	70.0 - 77.0	2.756 - 3.031	67.0	2.638
OL 77	77.0 - 85.0	3.031 - 3.346	74.0	2.913
OL 85	85.0 - 93.0	3.346 - 3.661	81.0	3.189
OL 93	93.0 - 102.0	3.661 - 4.016	89.0	3.504
OL 102	102.0 - 112.0	4.016 - 4.409	98.0	3.858
OL 112	112.0 - 123.0	4.409 - 4.843	108.0	4.252
OL 123	123.0 - 135.0	4.843 - 5.315	119.0	4.685
OL 135	135.0 - 148.0	5.315 - 5.827	130.0	5.118
OL 148	148.0 - 162.0	5.827 - 6.378	143.0	5.630
OL 162	162.0 - 178.0	6.378 - 7.008	157.0	6.181

Size/ Article	Operating range		Minimum-Ø	
	[mm]	[inch]	[mm]	[inch]
OL 178	178.0 - 195.0	7.008 - 7.677	172.0	6.772
OL 195	195.0 - 214.0	7.677 - 8.425	190.0	7.480
OL 214	214.0 - 235.0	8.425 - 9.252	208.0	8.189
OL 235	235.0 - 258.0	9.252 - 10.157	229.0	9.016
OL 258	258.0 - 283.0	10.157 - 11.142	251.0	9.882
OL 283	283.0 - 311.0	11.142 - 12.244	276.0	10.866
OL 311	311.0 - 342.0	12.244 - 13.465	304.0	11.969
OL 342	342.0 - 376.0	13.465 - 14.803	335.0	13.189

Stamp of distributor:

The technical data are not binding. They are not warranted characteristics and are subject to change. Please consult our general conditions of supply.

© Orbitalum Tools GmbH (09.2009)

Orbitalum Tools GmbH

Sales and Consulting:

Tel. +49 (0) 77 31 792-786 up to -789
 Fax +49 (0) 77 31 792-524
 tools@orbitalum.com
 www.orbimatic.com

Plant:

Division Orbimatic
 Floesser Weg 17
 35418 Buseck
 Germany

