

Catalogue

Weld Overlay Solutions

2017 Polysoude - Updated on September 2020

Original edition: Polysoude S.A.S. Nantes France.

The photos, diagrams and drawings are given to promote understanding and are therefore not contractual.

All copyrights reserved. This product catalogue shall not be copied, either in part or whole, in any form or by any means whatsoever, whether electronic or mechanical, including photocopying, recording or the use of computer medium, without the publisher's written permission.

Printed in France.
Published by Polysoude, Nantes, France.
www.polysoude.com - info@polysoude.com.



CONTENTS

Processes	5
GTAW/TIG & TIG ^{er}	5
Workpieces and application examples	6
Vertical weld overlay solutions	7
PolyClad Easy	7
PolyClad 3C	11
PolyClad C&B	15
PolyClad SPX	19
Horizontal pipe weld overlay solutions	23
PolyClad TWIN-TIG ^{er} C	23
PolyClad TWIN-TIG ^{er} L	27
Elbow weld overlay solutions	31
PolyClad Elbow L	31
Appendix	35
Workpiece geometries	35
Torches and lances	37
Video monitoring	42
Administrative, packing and logistics costs	45
Sales conditions	46



Icons & Legends



TIG Hot Wire technology

Πσ^{er} technology

CNC Computer Numerical Controller (CNC)

POWin Conventional Controller

Programmable motion (motorised)

Non-programmable motion (manual or motorised)

Processes



GTAW/TIG & TIGer

The main advantages of TIG CW/HW compared to other processes: all position use, excellent surface quality, clean without spatter... Zero defects.

The TIG^{er} technology is a Polysoude innovation based on the TIG (GTAW) process. It is designed to guarantee quality, to increase significantly the deposition rate and to reduce dilution.



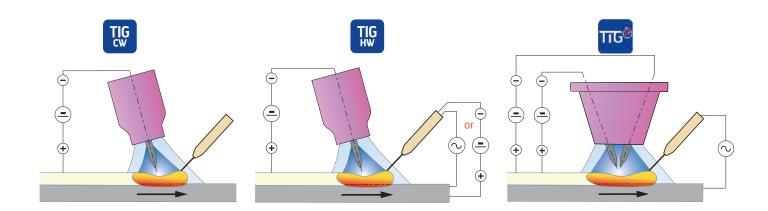




Electrode	1	1	2
Wire	CW	HW - DC or AC	HW - AC
Arc type	Single arc	Single arc	Two arcs in one
Deposition rate			
Single torch (*)	up to 1 kg/h	up to 2.5 kg/h	up to 6kg/h
Twin torch (#)	-	up to 4kg/h	up to 9 kg/h
Minimum I.D. before weld overlay considering 2 layers	28 mm	34 mm	100 mm

^(*) Maximum deposition rate given for reference, produced under optimal conditions (welding position, application type, base material, surface and filler wire)

^(#) The deposition rate in "Twin" configuration is a balance between the optimal characteristics for the first layer (the lowest possible thickness and therefore dilution) and the weld overlay speed for the simultaneous execution of the first and second layer.



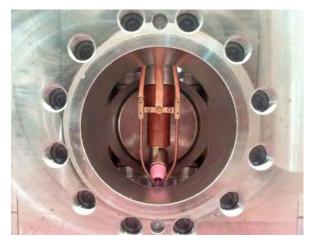


Workpieces and application examples



















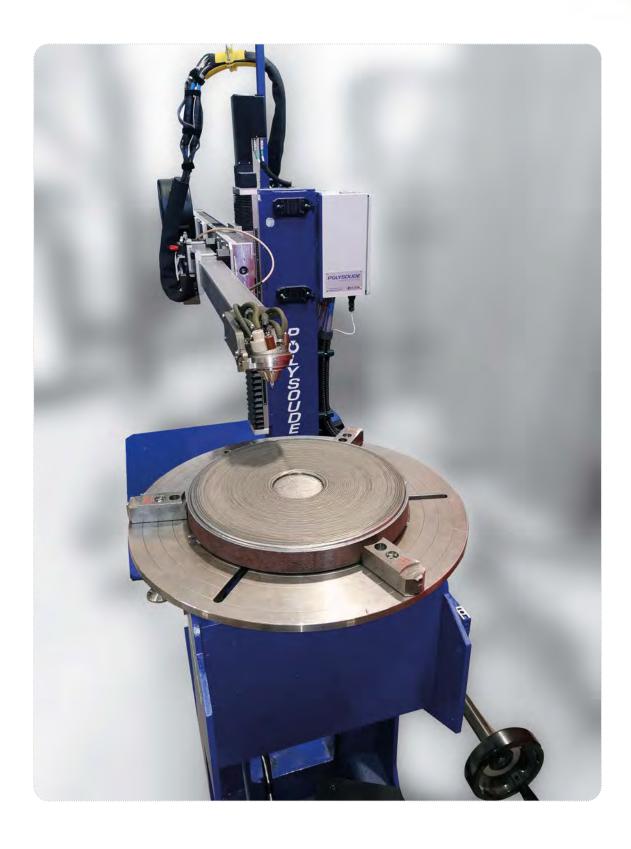


Courtesy of CFHI, Newtesol, NVO, AMPO, Paipu, RocMaster and Subsea Services

Vertical weld overlay solutions



PolyClad Easy





Advantages

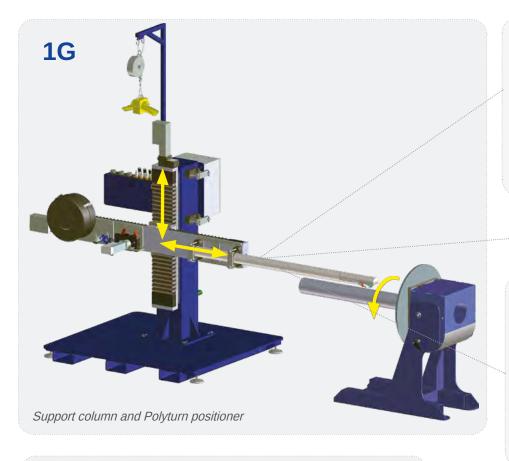
- Ease of setup
- Extra compact
- Versatility: vertical and horizontal overlay positions

- Delivered with a library of typical weld overlay programmes
- Flexibility: wide range of lances and torches
- Multiprocesses: TIG











TIGer torch



Tiltable TIGer torch



TIG CW/HW lance with tiltable torch



TIG WP27 CW/HW torch



Variant of use according to the cladding position of the workpiece



▶ Programming software

Solution with conventional controller:









Main items

- Support column
- Cross slides (AVC/Step-over)
- Wire feeder
- Lance/torch
- Titable positioner Polyturn
- Smart welding station







► Variants/options-accessories

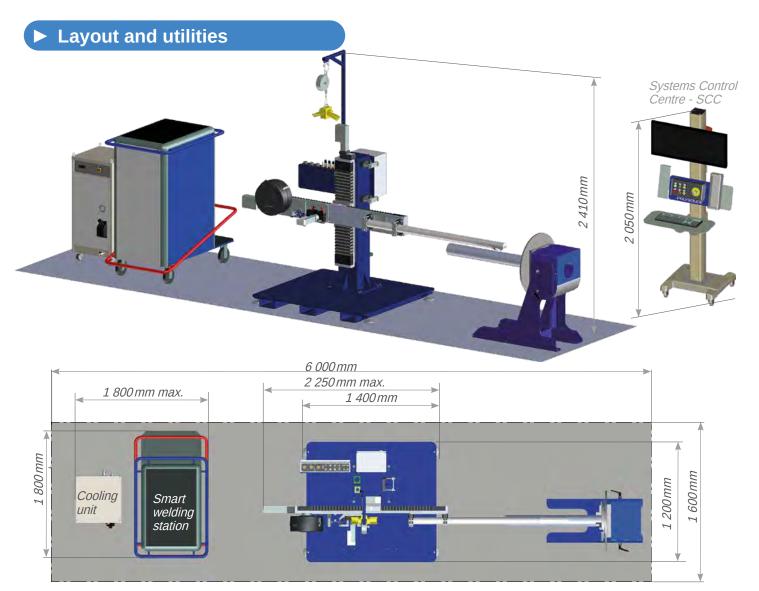
- High resolution video monitoring
- TIG HW or TIGer
- DAQbox tool for productivity management and data acquisition
- Systems Control Centre (*)

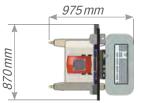


▶ Technical data

Cross slides stroke	1.0 m x 0.6 m
Wire feeder	0.5 to 14m/min
Compatible with wire spool	Ø300 mm - 15 kg
Capacity of the positioner	
Maximum load	300 kg (welding position 2G) 200 kg (welding position 1G) with roller support
Workpiece diameter	Ø50 to Ø300 mm
Maximum length of weld overlay lance	Up to 1.5 m







Utilities		
Smart welding station - TIG HW	400 V - three-phase - 33 kVA	
Video container or SCC	230 V - single phase - 6 kVA	
Cooling unit	230 V - single phase - 4 kVA	

► Product items numbers	TIG POWin	TTG© POWin
PolyClad Easy - weld overlay installation (including support column, cross slides, wire feeder, smart welding stations and cooling unit)	0038300005	0038300006
Tiltable positioner (max load 300 kg):		
Polyturn positioner with chuck O.D. 600 mm (hollow shaft Ø 170 mm)	003800	01517
P0 285 motor drive (ratio 1:285)	0038850301	
Chuck O.D. 200 mm, hollow shaft Ø170 mm - 20 \leq OD tube \leq 210 mm	0038004020	
Chuck O.D. 400 mm, hollow shaft Ø170 mm - 120 \leq OD tube \leq 380 mm	0038004019	
Digital display for torch position and step-over	0033842401	
DAQbox - Data acquisition system	0033249101	
Systems Control Centre (optional)	On request	
Torches and lances	See Torches and lances on page 39	
Video system (optional)	On request	

Vertical weld overlay solutions

PolyClad 3CCompact Cladding Center





Advantages

- Ready to use
- Wide range of use for both simple and complex workpieces
- Compact and transportable

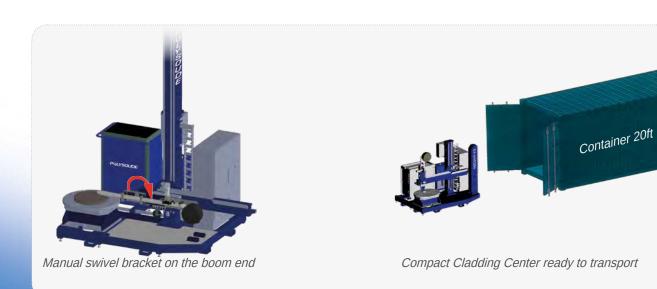
- Prewired on platform
- Flexibility
- Multiprocesses: TIG TIG











▶ Programming software

Two solutions depending on the workpieces complexity to be cladded:

















Flatbed turntable

Main items

- Lance/torch
- Smart welding station

► Variants/options-accessories

- High resolution video monitoring
- TIG HW or TIG^{er}
- Systems Control Centre (*)
- DAQbox tool for productivity management and data acquisition





Conventional

controller

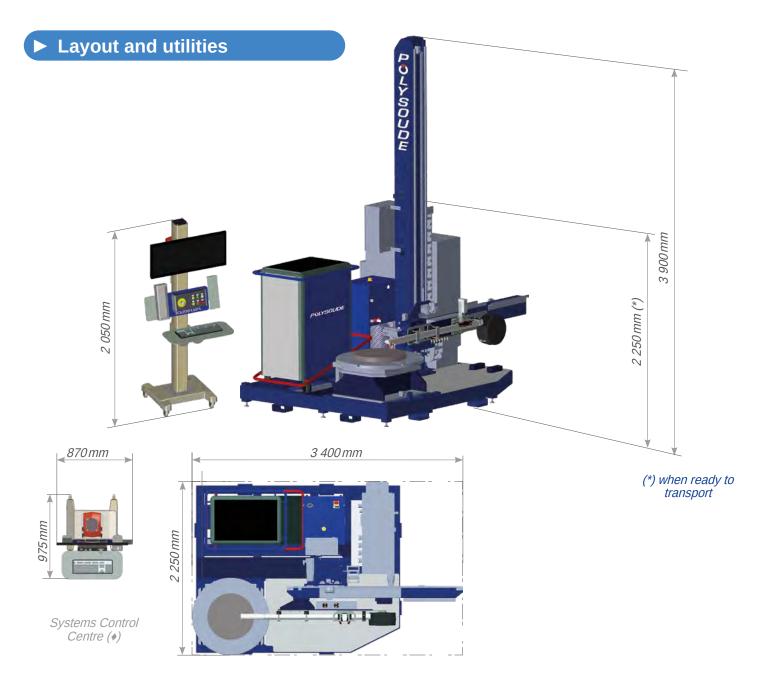


Technical data

Column & boom	
Maximum height under boom	3 m
Vertical stroke (max.)	2.5 m
Horizontal stroke (max.)	1.5 m
Maximum load on boom end	70 kg
Wire feeder	0.5 to 14 m/min
Compatible with wire spool	Ø 300 mm - 15 kg
Capacity of the flatbed turntable	4.5t - Ø1m
Maximum length of weld overlay lance	1m
Workpiece length	Up to 1.5 m

Other sizes of C&B and flatbed turntable are available on request.





Utilities		
Column & Boom	400 V - three-phase - 3 kVA	
Smart welding stations - TIG CW/HW	400 V - three-phase - 33 kVA	
Video container (optional) or SCC	230 V - single phase - 6 kVA	
Cooling unit	230 V - single phase - 4 kVA	
Flat turntable	400 V - three-phase - 3 kVA	

▶ Product item numbers

	TIG POWin	TTG [®] POWin	TIG CNC	TTG® CNC
PolyClad 3C - Compact Cladding Center (including C&B, HD cross slides, welding head, smart welding station, flatbed turntable and cooling unit)	On request	On request	0034870001	0034870002
DAQbox - Data acquisition system (Accessory)	003324	49101	Inclu	ded
Systems Control Centre (optional)	On re	quest	Inclu	ded
Torches and lances	See Torches and lances on page 39		39	
Video system (optional)	On request			

Vertical weld overlay solutions

PolyClad C&B Column & boom and flatbed turntable





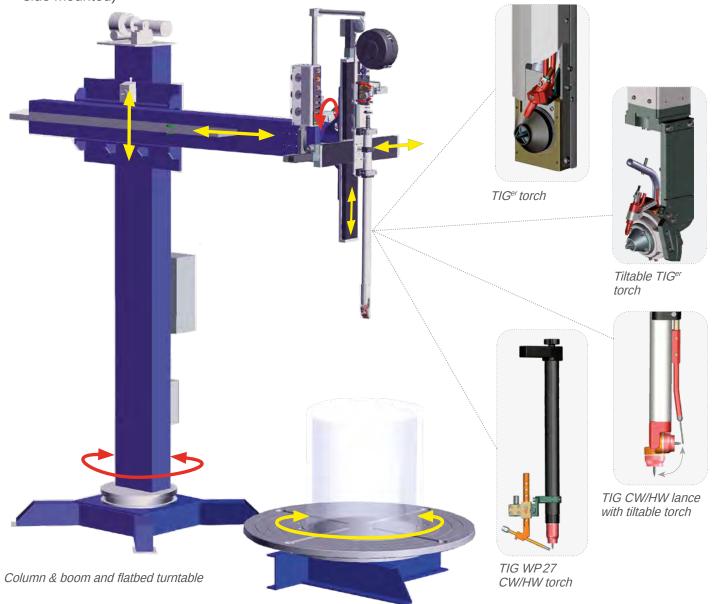
Advantages

- Ease of setup
- Compact, modular standard design
- Versatility: vertical and all other weld overlay positions
- Two possibilities of cross slide mounting (front or side mounted)
- Delivered with a library of typical weld overlay programmes
- Flexibility: wide range of lances and torches
- Multiprocesses: TIG











▶ Programming software

Two solutions depending on the workpieces complexity to be cladded:

Conventional controller



















Main items

- Column and boom
- Cross slides
- · Wire feeder
- Lance/torch
- Flatbed turntable
- Smart welding station

➤ Variants/options-accessories

- High resolution video monitoring
- Tiltable positioner
- TIG HW or TIG^{er}
- Manual swivel bracket ±90° (cross slide tilting)
- High temperature bellows
- Systems Control Centre (*)
- DAQbox tool for productivity management and data acquisition









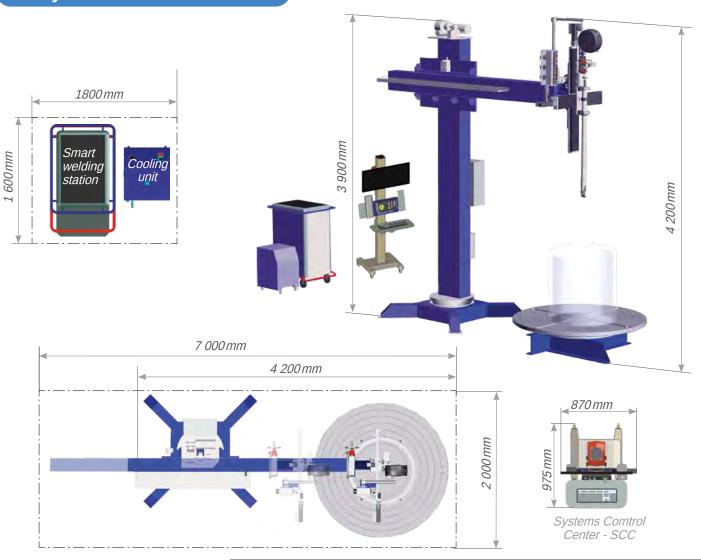
Technical data

Column & boom	3 m x 2 m
Maximum height under boom	3 m
Vertical stroke (max.)	2 m
Horizontal stroke (max.)	2 m
Maximum load on boom end	150 kg
Cross slides stroke	1 m x 0.6 m
Wire feeder	0.5 to 14m/min
Compatible with wire spool	Ø300 mm - 15 kg
Capacity of the flatbed turntable	3t - Ø1.5 m
Capacity of the positioner	2t-Ø1m
Maximum length of weld overlay lance	1m

Other sizes of C&B, flatbed turntable and positioner are available on request



► Layout and utilities



Utilities		
C&B with flatbed turntable/positioner	400 V - three-phase - 24 kVA	
Smart welding stations - TIG CW/HW	400 V - three-phase - 33 kVA	
Video container or SCC	230 V - single phase - 6 kVA	
Cooling unit	230 V - single phase - 4 kVA	

► Product item numbers	TIG POWin	TTG [®] POWin	TIG CNC	TTG® CNC
PolyClad C&B - Standard vertical weld overlay installation (including C&B, cross slides, wire feeder, smart welding station and cooling unit)	0033260002	0033260003	On request	On request
Flatbed turntable 3t	003800	02002		
Tiltable positioner 2t	00380	01506		
Manual swivel bracket ±90° for cross slides	0033260101			
Digital display set for torch position and step-over (including digital display, torch slide encoder, position counter and cable)	003384	42401		
Systems Control Centre	On red	quest		
DAQbox - Data acquisition system	0033249101			
High temperature bellows for cross slides	0033380580			
Torches and lances	See Torches and lances on page 39		39	
Video system (optional)	On request			

Vertical weld overlay solutions



PolyClad SPX SPX endless rotation head





Advantages

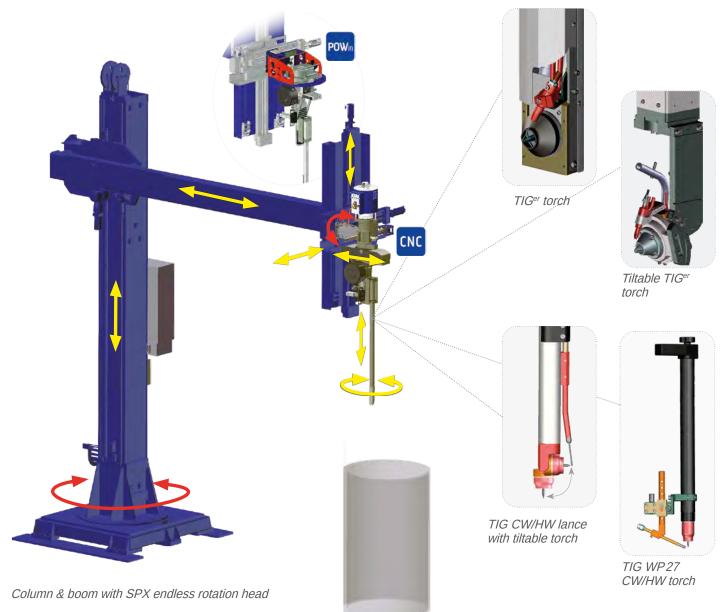
- Ease of setup
- Wide range of use for both simple and complex workpieces
- Increased productivity due to endless rotating head
- Flexibility
- Multiprocesses: TIG TIG TIG







Autocentring programme for the lance







Tiltable cross slides with SPX head (manual swivel bracket ±90°)



Column & Boom with platform



▶ Programming software

Two solutions depending on the workpieces complexity to be cladded:

















Main items

- Column & boom
- Heavy Duty cross slides
- SPX endless rotation head equipped with wire feeder and AVC cross slides
- Lance/torch
- Smart welding station

Variants/options-accessories

- High resolution video monitoring
- Flatbed turntable
- C&B platform (smart welding station, control cabinet...)
- Manual swivel bracket ±90° (SPX head tilting)
- Extension bracket for large workpiece diametres
- Systems Control Centre (*)
- DAQbox tool for productivity management and data acquisition

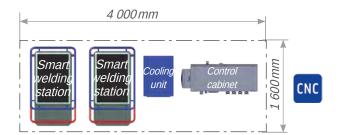
Technical data

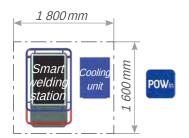
Column & boom	4m x 4m - Heavy Duty
Maximum height under boom	4 m
Vertical stroke (max.)	3 m
Horizontal stroke (max.)	4 m
Maximum load on boom end	400 kg
SPX head - workpiece diameter (max.)	600 mm 1200 mm with optional extension bracket
SPX head - AVC slide stroke	300 mm
HD cross slide strokes	2 m x 1 m
Wire feeder	0.5 to 14 m/min
Compatible with wire spool	Ø 300 mm - 15 kg
Capacity of the flatbed turntable (option)	15t - Ø 2.4m
Maximum length of weld overlay lance	1.5m

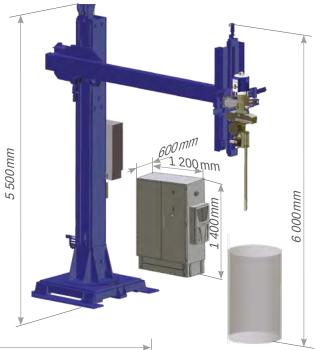
Other sizes of C&B and flatbed turntable are available on request.

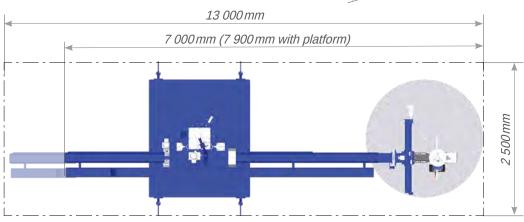


Layout and utilities











Systems Control Centre - SCC

Utilities		
Column & Boom	400 V - three-phase - 16 kVA	
Smart welding stations - TIG CW/HW	400 V - three-phase - 33 kVA	
Smart welding stations - TIG ^{er} 🚾	400 V - three-phase - 1x33 kVA + 1x28 kVA	
Video container	230 V - single phase - 6 kVA	
Cooling unit	230 V - single phase - 4 kVA	
Systems Control Centre (option)	230 V - single phase - 4 kVA	
Flat turntable (optional)	400 V - three-phase - 6 kVA	

► Product item numbers	TIG POWin	TTG© POWin	TIG CNC	TTG CNC
PolyClad SPX-2 - Standard vertical weld overlay SPX installation (including C&B, HD cross slides, SPX head, smart welding	0033690001	0033690005	On request	0033690004
station(s), cooling unit)	000000001	000000000	Onrequest	000000007
Flatbed turntable 15t - Ø2.4 m	0038002003		0038002003	
C&B platform	0038001007		0038001007	
Manual swivel bracket ±90° for SPX cross slides	0038001006		003800	01006
Extension bracket for SPX large diameter	0032800201		00328	00201
DAQbox - Data acquisition system	0033249101		On request	
Systems Control Centre	On request	On request	Included	
High temperature bellows for SPX cross slides	0033380581		003338	80581
Torches and lances	See Torches and lances on page 39			39
Video system	On request		Included	

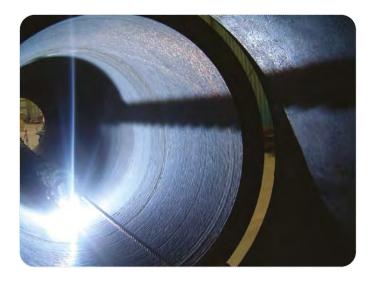
Horizontal pipe weld overlay solutions



PolyClad TWIN-TIGer C

TWIN-TIG^{er}-12m: 360° full length I.D. weld overlay



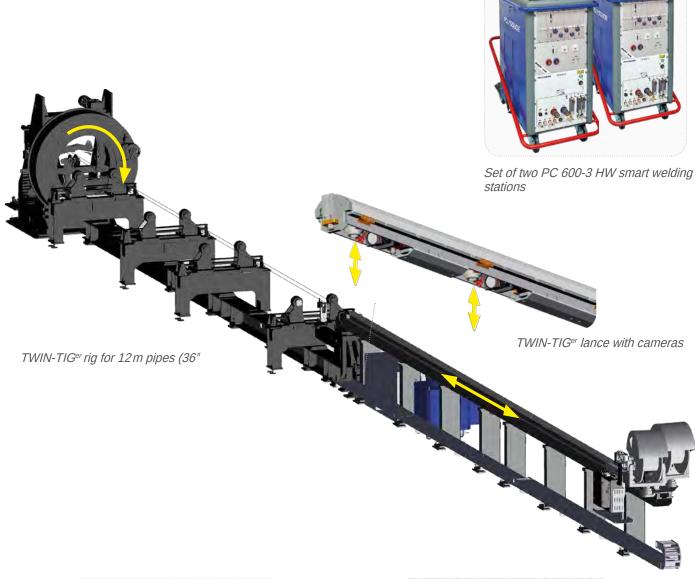






▶ Advantages

- Ease of setup
- Two simultaneous layers
- AVC control (independent for each torch)
- Video for continuous monitoring and relocation
- High deposition rate & high productivity





Carriage with 2x250 kg or 2x15 kg wire spools



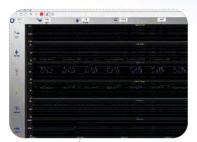
Rotator with special clamping chuck

Systems Control Centre

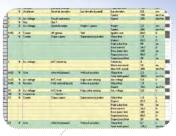
Delivered with the machine

Main items

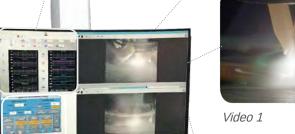
- Horizontal guiding beam travel carriage wire feeder units
- Weld overlay lance with two TIGer-2 torches "TWIN-TIGer"
- Head stock rotator
- Special clamping chuck
- Pipe supports
- Rope tensioning system
- Set of PC 600-3 smart welding stations



DAQbox (optional)



Weld overlay programming software (weld overlay parameters)





Video 2

Variants/options-accessories

- Extra travel carriage for preheating/cooling devices
- DAQbox tool for productivity management and data acquisition
- Interpass temperature measurement



Operator programming interface

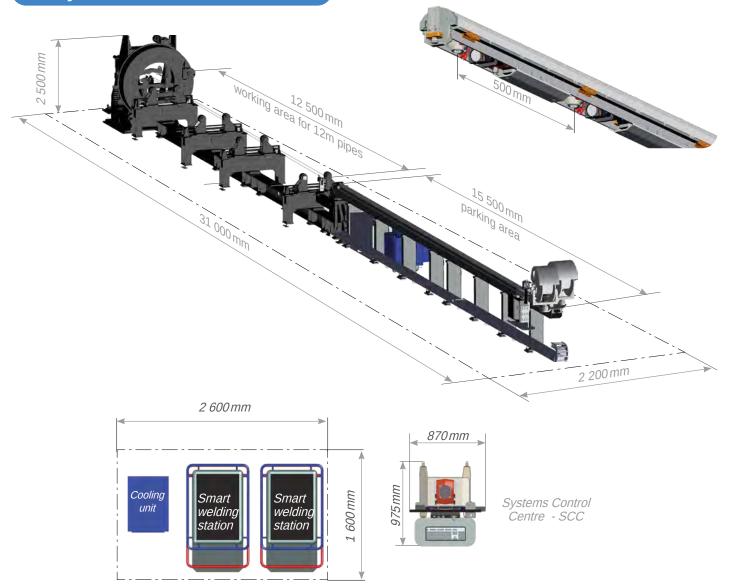
Technical data

Pipe	
I.D. min. (pipe length 12 m)*	150 mm (5 29/32")
Clamping chuck	36" - 6" \leq O.D. $_{\text{tube}} \leq$ 36" or 72" - 16" \leq O.D. $_{\text{tube}} \leq$ 72"
Distance between torches 1 & 2	500 mm
AVC stroke (independant for each torch)	40 mm
Wire feeder (x2)	0.5 to 14 m/min
Compatible with wire spool	Ø760 mm - 250 kg or Ø300 mm - 15 kg
Video	1 camera per torch

^{*} Before weld overlay considering 2 layers



► Layout and utilities



Utilities	
Smart welding stations	400 V - three-phase - 33 kVA
Electrical cabinet	400 V - three-phase - 13 kVA

► Product item numbers	6" ≤ O.D ≤ 36" 16" ≤ O.D. ≤ 72"
PolyClad TWIN-TIG ^{er} C-2 - Standard horizontal weld overlay installation (including horizontal guiding beam, head stock rotator, weld overlay lance with one motorised camera prorch, smart welding stations, cooling units, Systems Control Centre)	per 0039170001 0039170002
Extra travel carriage for preheating/cooling devices	0038009005
DAQbox - Data acquisition system, electrical cabinet model	0039179200
Interpass temperature measurement (optional)	0039178100
Gas and power consumption measurements (optional)	0039179201
Wire level control kit (optional)	0039178101

Horizontal weld overlay pipe solutions



PolyClad TWIN-TIGer L

TIGer rig: Longitudinal internal weld overlay





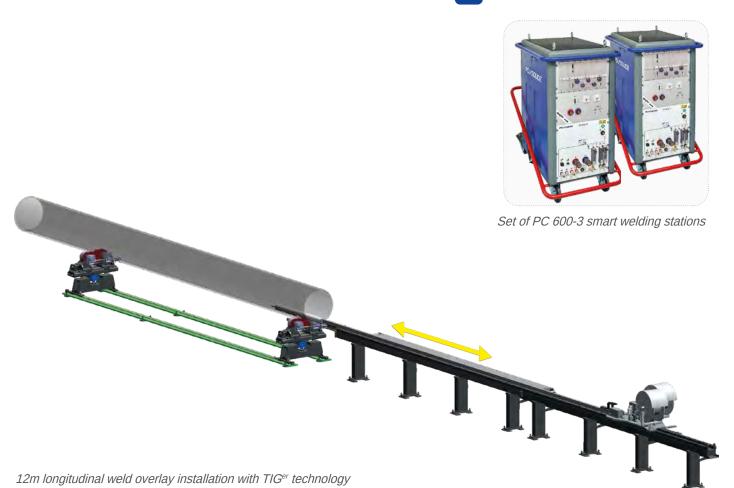




Advantages

- A unique solution for the longitudinal seam weld overlay of metallurgically bonded pipes from the inside (after welding from outside and remachined root ⁽¹⁾)
- Perfectly smooth quality of the cladded surface
- Integrated compensation management of the welded joint twist
- Reduced deformation
- Full-length weld overlay
- TIG^{er} high deposition rate & high productivity
- Very low dilution rate
- Process: πσ⁶







Travel carriage, wire feeding assembly and connection plate





AVC/OSC slides for each torch



▶ Systems Control Centre

Delivered with the installation

► Equipment includes

- Installation main frame
- 12m TWIN-TIG^{er} lance
- Travel carriage
- Pipe orientation roller assembly
- Set of two PC 600-3 smart welding stations
- Systems Control Centre SCC



Weld overlay programming software (weld overlay parameters)





Video system: Wide dynamic video for real time monitoring



CNC operator programming interface

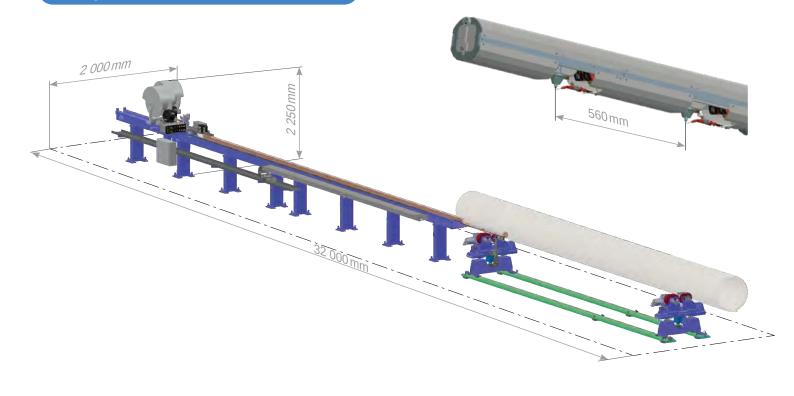
▶ Technical data

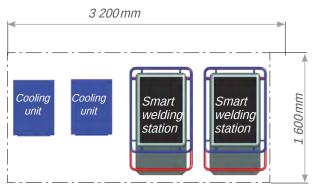
Tube	
O.D. max.	580 mm (24")
I.D. min.*	180 mm (6 1/2")
Length	12 m
Width of the seam to be cladded	10 to 25 mm
Distance between torches 1 & 2	560 mm
AVC stroke (independant for each torch)	15 mm
OSC stroke (independant for each torch)	40 mm (± 20 mm)
Wire feeder	0.4 to 14 m/min
Compatible with wire spool	Ø760 mm - 250 kg or Ø300 mm - 15 kg
Video	1 camera per torch

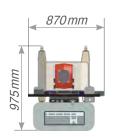
^{*} Before weld overlay considering 2 layers



► Layout and utilities







Systems Control Centre - SCC

Utilities		
Smart welding stations - TIGer	400 V - three-phase - 2 x 33 kVA	
Pipe support and lance carriage	400 V - three-phase - 16 kVA	
Control panel	230 V - single phase - 6 kVA	
Cooling unit	230 V - single phase - 7 kVA	

Product item numbers

12 m

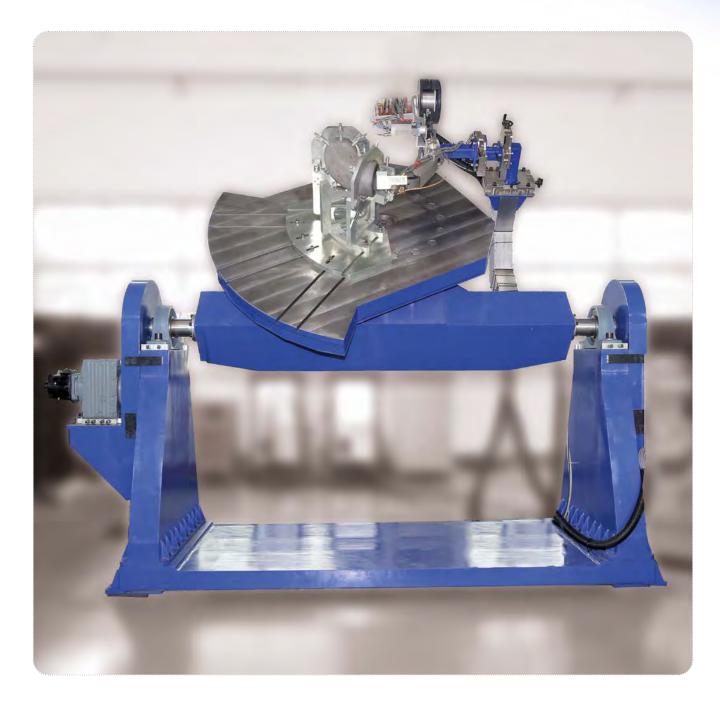
PolyClad TWIN-TIG^{er} L-2 - Longitudinal TIG^{er} weld overlay installation (including TIG^{er}-2 weld overlay lance, pipe orientation roller assembly, sets of smart welding stations, cooling unit, SCC)

0033950001

Elbow weld overlay solutions



PolyClad Elbow L TIG^{er} 8" to 30" (1.5D)









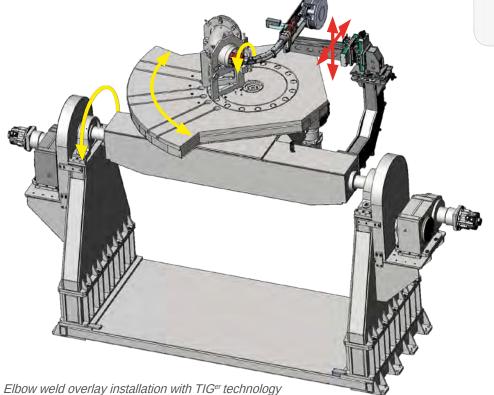
Advantages

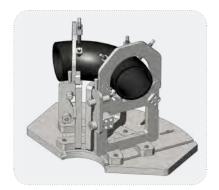
- Quick installation of the elbow elbow
- Consistent smooth surface after weld overlay in longitudinal direction
- Reduced deformation
- No start-stop points inside the elbow

- TIGer high deposition rate/high productivity
- Automated cladding sequence
- Process: TTG®





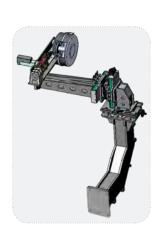




Clamping unit



Weld overlay lances with wire feeder



Weld overlay head interface



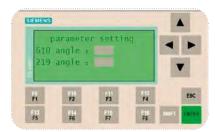
▶ Control cabinet

Main items

- Tilting positioner for longitudinal weld overlay - 8" to 30"
- Welding head interface with cross slides & wire feeder
- Set of PC 600-3 smart welding stations (1 master & 1 slave)
- CN control cabinet

| Might a be | Mig

Weld overlay programming software (weld overlay parameters)



Operator touchscreen

► Variants/options-accessories

- TIG^{er} weld overlay lance with torch rotation and fixtures according to the elbow size
- Elbow clamping unit
- DAQbox tool for productivity management and data acquisition



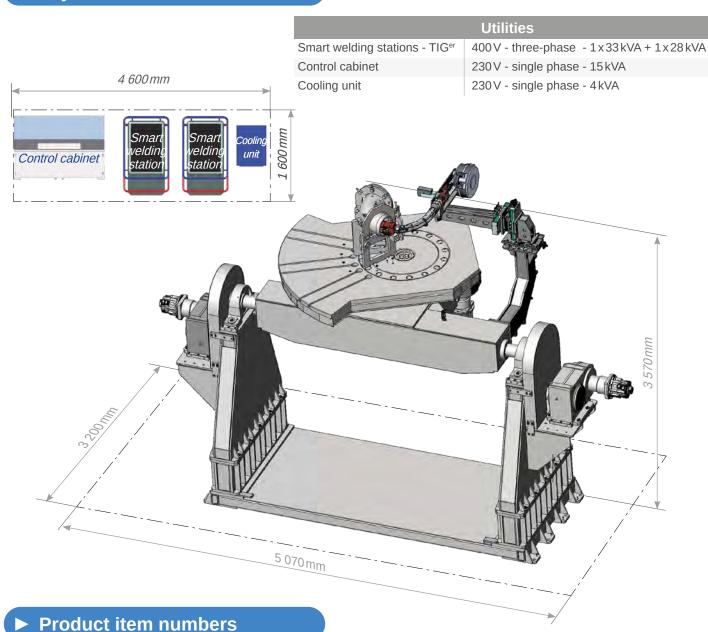
▶ Technical data

Elbow	
O.D. max.	762 mm (30")
I.D. min.*	189 mm (7 7/16")
Elbow radius	1.5 D
AVC stroke	25 mm
Wire feeder	0.5 to 14 m/min
Compatible with wire spool	Ø300 - 15 kg

^{*} Before weld overlay considering 2 layers



▶ Layout and utilities



	8" ≤ I.D. ≤ 30"
PolyClad Elbow L - Standard elbow weld overlay installation (including positioner, cladding lance interface, set of smart welding stations, cooling unit, control cabinet)	0033960001
DAQbox - Data acquisition system	0033249101
TIG ^{er} lance for elbow 90° diameter 8"	0033960101
Fixture for elbow 90° diameter 8"	0033960201
TIG ^{er} lance for elbow 90° diameter 16"	0033960301
Fixture for elbow 90° diameter 16"	0033960401
TIGer lance for elbow 90° diameter 20"	0033960501
Fixture for elbow 90° diameter 20"	0033960601
TIG ^{er} lance for elbow 90° diameter 24"	0033960701
Fixture for elbow 90° diameter 24"	0033960801
TIG ^{er} lance for elbow 90° diameter 30"	0033960901
Fixture for elbow 90° diameter 30"	0033961001

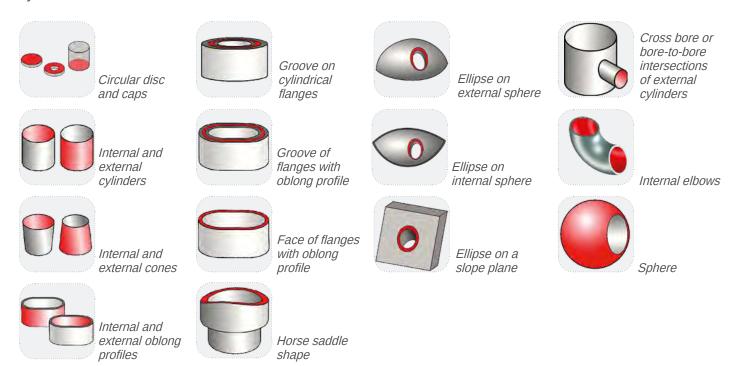
Appendix



Workpiece geometries

Weld overlay machines with conventional or CN Controller?

The choice of equipment and software depends on the shape complexity of the workpieces. Therefore, each surface to be cladded must be identified as cylinder, flat base, cap, truncated cones or an intersection of cylinders.





- Dedicated to less complex surfaces such as cylinders, bases and caps (circular trajectories of the torch)
- Sequential programme
- Each programming step controls the movement along one of the axes (X, Y or Z, no interpolation)
- Programming, archiving and transfer of on-line and off-line programmes



CN Controller

- Dedicated to circular and non-circular or interrupted surfaces such as sealing surfaces, intersection of cylinders and spheres (complex trajectories of the torch)
- Programmed to manage the movement of the torch along several axes, with interpolation
- A simulator allows the previewing of predefined trajectories and the evaluation of associated cycle times and deposition rates
- Unique user-friendly GUI (graphical user interface)
- Programming, archiving and transfer of on-line and off-line programs
- Data monitoring system with alarm functions



Torches and lances

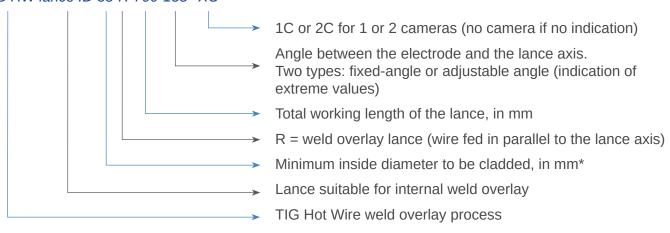


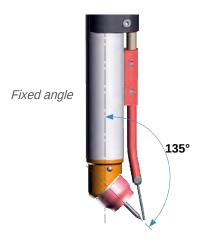
Torches and lances

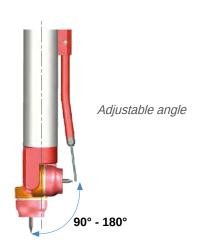
Lance designations

TIG HW Lance designations

TIG HW lance ID 35-R-700-135°-XC

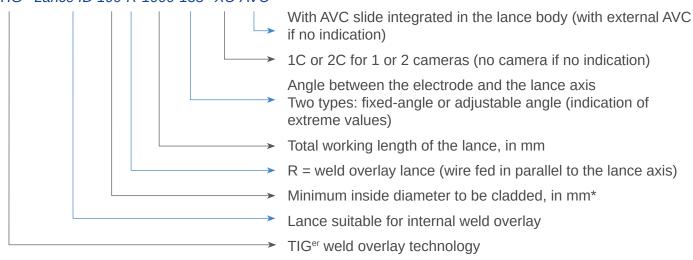






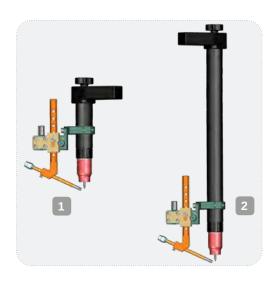
TIG^{er} lance designations

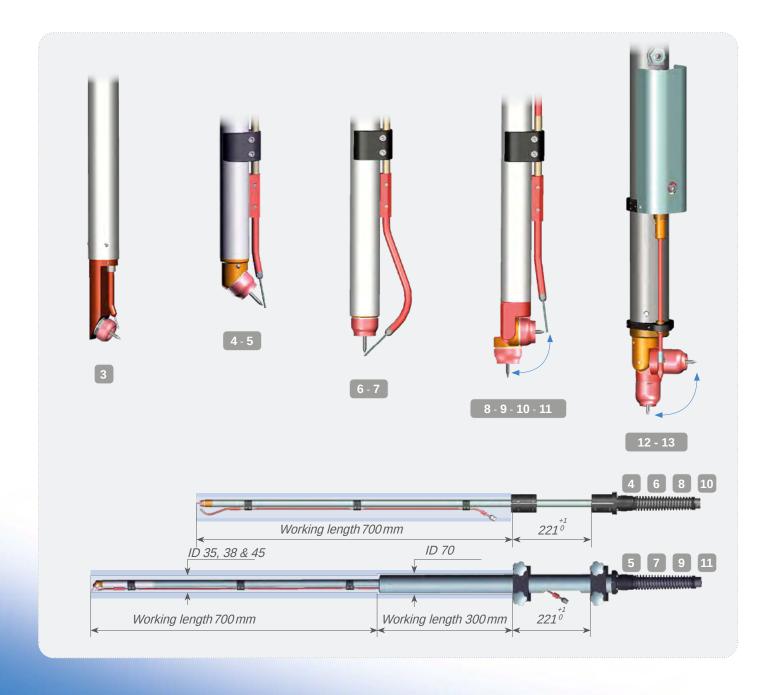
TIGer Lance ID 100-R-1000-135°-XC-AVC



^{*} Before weld overlay considering 2 layers







► Torches and lances

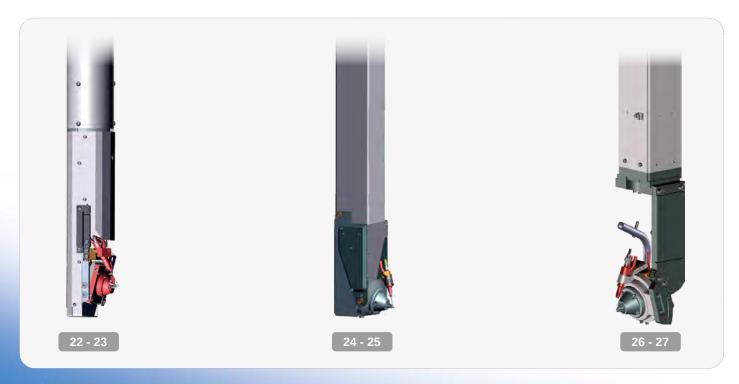
	TIG Torches		Duty cycle		Compatibility PolyClad			
N°			Average current - 100%	Max peak current - 60%	Easy	3C	C&B	SPX
1	WP 27 A	0033263310	500A	500A	\checkmark	\checkmark	\checkmark	\checkmark
2	WP 27 B	0033263410	500A	500A	\checkmark	\checkmark	\checkmark	\checkmark

	TIG HW Lances		Duty cycle		Compatibility PolyClad			
N°			Average current - 100%	Max peak current - 60%	Easy	3C	С&В	SPX
3	ID 34-R-1000-120°	0030740013	300A	350A	\checkmark	\checkmark	\checkmark	\checkmark
4	ID 35-R-700-135°	0030740007	170A	200A	\checkmark	\checkmark	\checkmark	\checkmark
5	ID 35-R-1000-135°	0030740006	170A	200A	\checkmark	\checkmark	\checkmark	\checkmark
6	ID 35-R-700-180°	0030740009	170A	200A	\checkmark	\checkmark	\checkmark	\checkmark
7	ID 35-R-1000-180°	0030740008	170A	200A	\checkmark	\checkmark	\checkmark	\checkmark
8	ID 38-R-700-90/180°	0030740005	170A	200A	\checkmark	\checkmark	\checkmark	\checkmark
9	ID 38-R-1000-90/180°	0030740004	170A	200A	\checkmark	\checkmark	\checkmark	\checkmark
10	ID 45-R-700-90/180°	0030740003	200A	250A	\checkmark	\checkmark	\checkmark	\checkmark
11	ID 45-R-1000-90/180°	0030740001	200A	250A	\checkmark	\checkmark	✓	\checkmark
12	ID 100-R-1000-90/180°	0030740020	300A	350A	\checkmark	\checkmark	\checkmark	\checkmark
13	ID 100-R-1500-90/180°	0030740021	300A	350A	_	-	_	√

Video option on request for all torches and TIG HW lances







► Torches and lances

	TIG ^{er} -2 lances		Duty	Compatibility PolyClad				
N°			Average current - 100%	Max peak current - 60%	Easy	3C	C&B	SPX POWin
14	ID 100-R-1000-90°	0039230001	420A	500 A	\checkmark	\checkmark	\checkmark	\checkmark
15	ID 100-R-1500-90	0039230003	420A	500A	\checkmark	\checkmark	\checkmark	\checkmark
16	ID 120-R-1000-90°-1C/HD	0039230002	420A	500A	\checkmark	\checkmark	\checkmark	\checkmark
17	ID 120-R-1500-90°-1C/HD	0039230004	420A	500 A	\checkmark	\checkmark	\checkmark	\checkmark
18	ID 150-R-1000-105°	0034540011	420A	500 A	\checkmark	\checkmark	\checkmark	\checkmark
19	ID 150-R-1500-105°	0034540012	420A	500 A	\checkmark	\checkmark	\checkmark	\checkmark
20	ID 150-R-1000-90/180°	0039010005	420A	500 A	\checkmark	\checkmark	\checkmark	\checkmark
21	ID 150-R-1500-90/180°	0039010006	420A	500A	\checkmark	\checkmark	\checkmark	\checkmark
19	Accessory box for TIGer-2 lance ID 100	0039230999	-	-	-	-	-	-
15	Accessory box for TIG ^{er} -2 lance ID 120-1C/HD	0039230998	-	-	-	-	-	-
19	Accessory box for ID 150 TIG ^{er} -2 lance ID 150-90/180°	0039010999	-	-	-	-	-	-

P1: Areas 1 & 4 P2: All areas P3: Areas 3 & 6









N°	TIG ^{er} Lance	20	Duty	Compatibility PolyClad	
N	TIG Lance	5 5	Average current - 100%	Max peak current - 60%	SPX CNC
22	ID 100-R-1000-105°	0032281001	2x250A	2x350A	✓
23	ID 100-R-1500-105°	0032281501	2x250A	2x350A	\checkmark
24	ID 150-R-1000-105°	0034540009	2x250A	2x350A	✓
25	ID 150-R-1500-105°	0034540010	2x250A	2x350A	\checkmark
26	ID 150-R-1000-90/180°	0039010007	2x300A	2x300A	\checkmark
27	ID 150-R-1500-90/180°	0039010008	2x300A	2x300A	\checkmark
19	Accessory box for TIG ^{er} -1 lance	0033842901	-	-	-



Video monitoring

▶ Advantages

- The operator can easily monitor and follow the process remotely
- Resistant to high temperature
- Prooven reliability

- Repositionning and/or inspection
- Outstanding image quality
- Perfect picture with and without arc
- Viewing/recording in real time





All video controls on the same screen





Real time monitoring

- SCC

▶ Complementary information

To monitor the weld overlay process, the operator can be assisted by a video system.

This supplementary feature consists of cameras mounted near the torches (or integrated in more complex cases), umbilicals and a rack or container with the instrumentation and control functions (lighting and filter control, focal distance adjustment and viewing monitors).

A single camera per torch viewing the melting of the wire is usually sufficient for weld overlay or buttering.

Depending on the level of integration, the camera may be external with their own cooling circuit or replaced by a micro-camera installed in the body of the torch adapted to the application.

For cameras, it is usual to be faced with severe heat conditions combined with space constraints. That is why the equipment is water-cooled.



TIG WP 27 torch with external camera and light



TIG lance with integrated camera and light



TIGer lance with integrated camera



Administrative, packing and logistics costs

▶ Order processing & administrative fees

Order processing & administrative fees for France, E.U. countries, Switzerland, Norway	100088347
Order processing & administrative fees for Algeria, Azerbaijan , Libya, Russia, Ukraine, Belorussia	100088348
Order processing & administrative fees for Japan, Canada, US, China	100088349
Order processing & administrative fees for Korea, Taiwan, Singapore, Malaysia, Vietnam, Morocco, Tunisia, Turkey	100088350
Order processing & administrative fees for South America (except Brazil), Argentina, Chile, Mexico, Venezuela	100088351
Order processing & administrative fees for South America, Pakistan, Indonesia, the Philippines, Africa (except South Africa, Morocco, Tunisia)	100088352
Order processing & administrative fees for The Middle East (Saudi Arabia, Egypt, UAE, Qatar, Oman, Kuwait, Jordania, Israel, Iran, etc.)	100088353
Order processing & administrative fees for India	100088354
Order processing & administrative fees for Other countries	Contact us

▶ Additional costs

Additional costs for letter of credit treatment	100062317
Certificates on documents	100062318
Certificates of conformity - VERITAS type	100083958

► Specific loading costs for trucks, containers & oversized cargo

Loading cost for partial loading - over 5 standard equipment	100062319
Loading cost for full truck	100062327
Loading cost for full container 20ft Dry or Open Top	100062329
Loading cost for full container 40ft Dry or Open Top	100062332
Additional charges for loading oversized cargo or Open Top container with heavy or bridge crane	100062334
Additional charges for wedging/lashing any package over 3 tons on truck or container	100062337

▶ Packing costs

Packing cost for PC Smart Welding Station (except AC/DC and MIG MAG)	100063024
Packing cost for RFC 30 type cooling unit	100063028



Sales conditions

Our prices are quoted

- In euros (€)
- · Per unit
- Ex-works Nantes (EXW Nantes INCOTERMS ICC 2010)
- Administrative, packing and logistics costs not included
- Excluding French VAT

Warranty

Twelve months from delivery date, against all construction defects (for second hand equipment, six months from delivery date). The warranty is limited to the exchange of parts acknowledged as defective.

Extract from Polysoude general sales conditions:

Application of warranty terms

Vendor guarantees that all goods sold will be free from malfunctioning resulting from defects in material, workmanship or design for a period of twelve (12) months from delivery and where the product is used for the intended purpose. Warranty is void where malfunctioning results from unauthorised servicing to the product by the purchaser, normal wear and tear, carelessness or lack of maintenance, caused by a third party or force majeure occurrence.

Performance of warranty

Under the warranty, the vendor shall replace free of charge any components acknowledged as defective by its technical department. The warranty shall not include labour and costs resulting from the following operations: disassembly, reassembly, shipping to site, etc. Replacement of components shall not be construed as an extension of warranty period.

Repairs, commissioning and training

These services will be invoiced as per lump-sum prices stipulated in the valid price list.

Technical documentation

At the date of delivery, one free copy on USB stick is supplied to you. Additional copies will be supplied at additional costs.

Minimum amount of invoice

For each order (for example spare parts) with a net total amount inferior to 150 € (exclusive of packing and transportation costs), we will invoice an additional fee of 30 € to cover the administrative costs for such small orders.

Payment terms

Within the limits of agreed total running:

30% payable with the order placement - due immediately

65% once notified that the machine is ready for shipment; due 30 days from the date of notification-payable before shipment

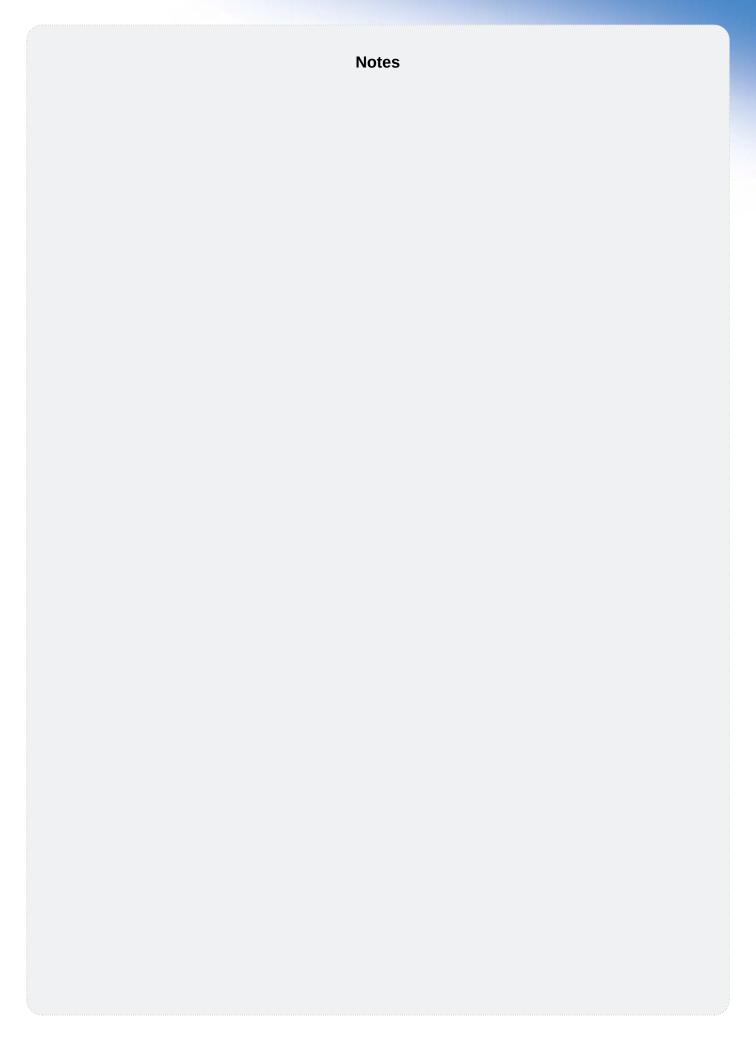
5% on commissioning or at the latest 2 months after being notified that the machine is ready for shipment (whichever occurs first)

Reserve of ownership

Polysoude retains the title of the goods until paid for in full. This close also applies if payment is subject to security or bank warranty.

Any modification of sales terms and conditions must in all cases be confirmed by Polysoude.







POLYSOUDE: Related services

Guidance and technical support

A welding application specialist in your area will advise you on the

Commissioning / Training

equipment immediately and in the best way possible.



Your partners worldwide

ARGENTINA POLYSOUDE S.A.S. ②+33 (0) 2 40 68 11 00 info@polysoude.com

AUSTRALIA

POLYSOUDE AUSTRIA GmbH

SALWO TRADING Ltd. ② +971 (0) 48 81 05 91 salwo@emirates.net.ae

BELGIUM POLYSOUDE BENELUX BV ② +31 (0) 653 84 23 36 k.meurs@polysoude.com

POLYSOUDE BENELUX BV (SERVICE) () +31 (0) 653 38 85 58

BULGARIA

POLYSOUDE SHANGHAI CO. Ltd

EUROARC D.O.O. ② +385 (0) 1 2 40 60 77 euroarc@euroarc.hr

CZECH REPUBLIC

POLYSOUDE CZ ② +420 602 60 28 55 m.matousek@polysoude.cz

DENMARK HALL & CO. INDUSTRI② +45 (0) 39 56 06 76

STEEL TECH

2 +2 02 22 02 99 79 info@steeltecheg.com

POLYSOUDE S.A.S.

+33 (0) 2 40 68 11 00 info@polysoude.com

FINLAND

SUOMEN TEKNOHAUS OY 2 +358 (0) 927 47 2 10 info@teknohaus.fi

GERMANYPOLYSOUDE DEUTSCHLAND GmbH **DUSSLINGEN**(2) +49 (0) 7072 60076 0 info@polysoude.de

POLYSOUDE S.A.S. ② +33 (0) 2 40 68 11 00 info@polysoude.com

POLYWELD Kft.② +36 (0) 20 29 88 708
polyweld@polyweld.hu

POLYSOUDE INDIA

INDONESIA
POLYSOUDE S.A.S.

2) +33 (0) 2 40 50

STD CO ②+98 21 88525206-7 najco_ir@hotmail.com

POLYSOUDE S.A.S.② +33 (0) 2 40 68 11 00 info@polysoude.com

POLYSOUDE ITALIA SRL

🗸 +39 02 93 79 90 94 info@polysoude.it

ISRAEL

JAPAN GMT CO Ltd - KAWASAKI 2 +81 (0) 44 222 6751 gmt@e-gmt.co.jp

GMT CO Ltd - OSAKA

POLYSOUDE S.A.S.② +33 (0) 2 40 68 11 00 info@polysoude.com

SALWO TRADING Ltd. 2 +971 (0) 48 81 05 91

POLYSOUDE S.A.S.② +33 (0) 2 40 68 11 00 info@polysoude.com

•:::

Maintenance / Repair

Rental service

SALWO TRADING Ltd.

POLYSOUDE S.A.S.(2) +33 (0) 2 40 68 11 00 info@polysoude.com

UNIDAWELD - BEDZIN

SUPRA ELCO ② +48 500 004 804 jacek.szulc@supraelco.waw.pl

SINGAPORE
POLYSOUDE SINGAPORE OFFICE

+65 0734 8452
Jmpan@singnet.com.sg

POLYSOUDE CZ ② +420 602 60 28 55 m.matousek@polysoude.cz

CHEMIKO CO Ltd ② +82 (0) 2 567 5336 chemiko@chemiko.net

POLYSOUDE IBERIA OFFICE 2 +34 609 154 683 la.deandres@polysoude.com

HALL & CO. INDUSTRI

POLYSOUDE (SWITZERLAND) Inc.

TAIWAN R.O.C.

FIRST ELITE ENT. CO. Ltd ② +886 (0) 287 97 88 99 auto.pipe@msa.hinet.net

THAILAND
POLYSOUDE S.A.S.

(2) +33 (0) 2 40 68 11 00 info@polysoude.com

EGE MAKINE 2 +90 (0) 212 237 40 40 info@egemakine.com

UNITED ARAB EMIRATES

UNITED KINGDOM

POLYSOUDE UK
2 +44 (0) 1942 820 935
admin.uk@polysoude.com

POLYSOUDE RUSSIA

UNITED STATES
ASTRO ARC POLYSOUDE Inc.
2 +1818 (859) 7600
sales@astroarc.com

ENRIVA C.A. ② +58 (0) 412 34 82 602 enriva@gmail.com

VIETNAM ANH DUONG IT Ltd

POLYSOUDE S.A.S.

3 +33 (0) 2 40 68 11 00 info@polysoude.com

POLYSOUDE BENELUX BV (2) +31 (0) 653 84 23 36

POLYSOUDE BENELUX BV

(SERVICE) 2 +31 (0) 653 38 85 58 service.benelux@polysoude.com

NEW ZEALAND POLYSOUDE S.A.S. (2) +33 (0) 2 40 68 11 00 info@polysoude.com

TEMA NORGE AS ② +47 (0) 51 69 25 00

POLYSOUDE IBERIA OFFICE ② +34 609 154 683 la.deandres@polysoude.com

SALWO TRADING Ltd. ② +971 (0) 48 81 05 91 salwo@emirates.net.ae

REPUBLIC OF IRELAND

POLYSOUDE UK② +44 (0) 1942 820 935 admin.uk@polysoude.com

DEBISUD CONCEPT S.R.L.

RUSSIA + C.I.S. POLYSOUDE RUSSIA

SAUDI ARABIA

SALWO TRADING Ltd. ② +971 (0) 48 81 05 91 salwo@emirates.net.ae











