

PC SERIES

TIG - AC/DC - Cold Wire, Hot Wire and Plasma

Full function power source
for orbital or automated welding and cladding



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Full function power source
for orbital or automated welding and cladding

Compatible with all POLYSOUDE™ welding or
cladding heads and manipulators

Advantages

- The most simple to use and reliable system available
- A multitude of unique features and solutions as well as a data acquisition system to meet the highest quality control standards
- High precision power sources for perfectly controlled heat input and welding penetration

Resulting from 50 years' experience
in mastering welding and cladding
technologies



General characteristics

PO-WIN: powerful Windows® based
welding and cladding software
PC offline or online programming,
transfer and storage of weld and clad
procedures

Error-diagnostic system

Integrated controller with individual
axis cards for all welding and cladding
motions
Unique synchronisation possibilities
between current, torch and workpiece
motion
Closed loop regulation of all welding
and cladding motions: welding and
cladding speed, wire speed, AVC, OSC...
Programming by angular degrees in
mm/min or inch/min

Built-in closed loop watercooling
system for head and torch

Programmable mass flowmeter with
flowsafety valve, for torch gas, backing
gas and other protection gases



Integrated controller



Realtime monitoring system



Full function remote control with
LCD screen, display of real values
Welding or cladding programs
are directly selected by the full
function remote control

Associated Welding Heads



► MU + Polycar Series

Open and carriage type
welding heads with AVC
and OSC for
TIG tube to tube welding



► TS Series

Welding heads
with AVC and filler
wire for TIG tube
to tubesheet
welding

Wire feeders



► Polyfil series

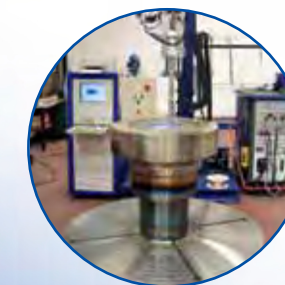
External portable wire
feeders with spool
protection

Welding and cladding solutions



► Automated welding systems

TIG— Cold Wire,
Hot Wire, Plasma



► Automated cladding systems

TIG— Cold Wire, Hot Wire

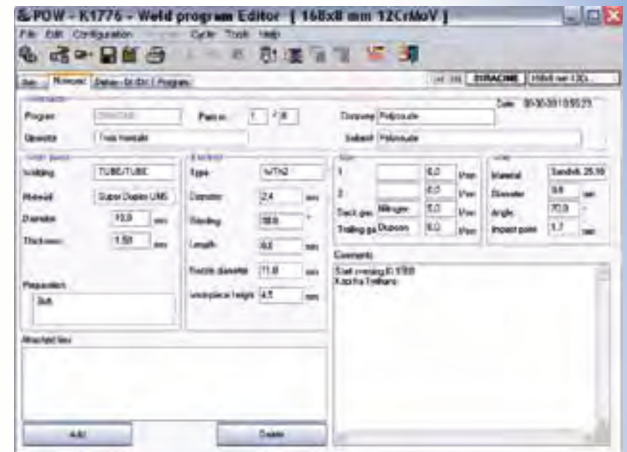


PO-WIN: powerful Windows® based welding and cladding software PC offline or online programming

- Multilingual, intuitive software



- Procedure library and notepad



- Numerous functions/possibilities for tailor-made welding and cladding programs

- Quality assurance

No.	Level	Station	Material	Function	Parameter	Value	Unit	1
1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3
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Technical specification

PCSeries	PC 100 TR CW	PC300 TR CW	Control unit PC350 CW with AC/DCpower source	PC600-3 CW	PC600-3 HW
Process	TIG/Microplasma - DCCold Wire	TIG- DCCold Wire	TIG- AC/DCCold Wire	TIG/Plasma- Cold Wire	TIG/Plasma- Hot Wire
Type of powersource	Transistor (secondary)	Transistor (secondary)	Inverter	Inverter	Inverter
Current range	0.5-100 A	3-300 A	5-350 A	5-550 A	5-550 A
Duty cycle	64 A/ 100%- 100A/ 60%	240 A/ 100%- 300 A/ 60%	350 A/ 60%- 300 A/ 100%	420 A/ 100%- 540 A/ 60%	420 A/ 100%- 540 A/ 60%
Input power For other voltage, please contact us	200 V/ 230 V/400 V /415V/ 500V Three phase (±10%) 50/60 Hz	200 V/ 230 V/400 V /415V/ 500V Three phase (±10%) 50/60Hz	380 V/ 400 V/ 415V Three phase (±10%) 50/60Hz	380 V/ 400 V/ 415V Three phase (±10%) 50/60Hz	380 V/ 400 V/ 415V Three phase (±10%) 50/60Hz
Rated load	4,5 kVA	14KW	16 kVA	28 KW	28 KW
Current pulse frequency (max.)	500 - 10000 Hz	500 - 10000 Hz	50 - 200 Hz(AC) 50 - 3000 Hz(DC)	500 - 2000 Hz	500 - 2000 Hz
Current slope time	250 A/ 250 μs	250 A/ 250 μs	/	250 A/ 1ms	250 A/ 1ms
Hot Wire max. current	/	/	/	/	160 A/ 100%
Plasma welding	Option	/	/	Option	Option
Controlled axes	- Torch movement control - Wirefeeder control - Multi-axis control for welding manipulators		- Torch Oscillation Control (OSC) - Arc Voltage Control (AVC)		
Gas control (on option with programmable mass flow meters/ security valve)	- Shielding gas - Backing gas		- Bi-gas - Trailing gas		
Procedure user memory	Up to 100 programs				
Procedure storage / transfer	Hard disc / USB memory stick				
Procedure print out	External standard printer				
Realtime monitoring system	Option				
Overall dimensions L x W x H	1270 x 740 x 1370mm	1270 x 740 x 1370mm	Control unit 1270 x 740 x 1370 Power source 1270 x 740 x 1370	1270 x 740 x 1370mm	1270 x 740 x 1370mm
Weight	310 kg	330 kg	Control unit (PC350) 250 kg Tetrix power source 144 kg	330 kg	330 kg
Standards	EN60974-1- EN60974-10 (2003)				
Cooling	Integrated			External and integrated*	External

* Duty cycle: 270 A/ 100%- 350 A/ 60%



Options and Accessories

- Laptop
- AVC- Arc Voltage Control
- OSC- Torch Oscillation Control
- Multi-axis interface for welding and cladding manipulators (positioner, column and boom, seam welder...)
- Extension cable (15m) for welding heads
- Additional gas control
- 2nd integrated cooling unit
- External heavy duty water cooling unit
- Realtime monitoring system
- ...



POLYSOUDE: Related services

► Guidance and technical support

A welding application specialist in your area will advise you on the welding process and appropriate equipment for your application.

► Commissioning/ Training

A complete training program will enable you to start using the equipment immediately and in the best way possible.

► Maintenance / Repair

Maintenance and repair operations can be carried out at the Polysoude plant as well as on site by our service network.

► Rental service

Increase the flexibility of your production! A large range of equipment is available for rental from our hire fleet.



Your partners worldwide

ARGENTINA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

AUSTRALIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

AUSTRIA

POLYSOUDE AUSTRIA GmbH
☎ +43 (0) 3613200 36
austria@polysoude.at

BELGIUM

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

POLYSOUDE BENELUX (SERVICE)

☎ +31 (0) 653 38 85 58
h.milder@polysoude.com

BRAZIL

AJADE COMÉRCIO INSTALAÇÕES
ESERVIÇOS Ltda.
☎ +55 (0) 114524 3898
fernando@ajade.com.br

BULGARIA

KARWELD EOOD
☎ +359 (0) 29 73 32 15
Karweld@bg400.bg

CANADA

MAGTool - West
EDMONTON - ALBERTA
☎ +1800 6619983
magtool@magtool.com

MAGTool - East

TORONTO - ONTARIO
☎ +1905 699 - 5016
ray@magtool.com

CHINA

POLYSOUDE SHANGHAI CO. Ltd
☎ +86 (0) 2164 09 78 26
jm.pan@polysoude.com.cn

CROATIA

EUROARC D.O.O.
☎ +385 (0) 12 40 60 77
euroarc@euroarc.hr

CZECH REPUBLIC

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

DENMARK

HALL & CO. INDUSTRI
☎ +45 (0) 39 56 06 76
p.lorenzen@polysoude.com

EGYPT

POLYSOUDE UK
☎ +44 (0) 1942820 935
info@polysoude.com

ESTONIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

FINLAND

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

FRANCE

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

GERMANY

POLYSOUDE DEUTSCHLAND GmbH
DUSSLINGEN
☎ +49 (0) 7072 60076 0
info@polysoude.de

ISRAEL

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

ITALY

POLYSOUDE ITALIA SRL
☎ +39 (0) 2 9379 90 94
info@polysoude.it

JAPAN

GMT COLtd - KAWASAKI
☎ +81 (0) 44 222 6751
gmt@e-gmt.co.jp

GMT COLtd - OSAKA

☎ +81 (0) 798 35 6751
gmt.kansai@e-gmt.co.jp

NEW ZEALAND

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

NORWAY

TEMA NORGE AS
☎ +47 (0) 5169 25 00
tema@tema-norge.no

PAKISTAN

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

PHILIPPINES

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

SLOVAKIA

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

SOUTH AFRICA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

SOUTH KOREA

CHEMIKO COLtd
☎ +82 (0) 2 567 5336
chemiko@chemiko.net

SPAIN

POLYSOUDE IBERIA OFFICE
☎ +34 609 154683
la.deandres@polysoude.com

SWEDEN

HALL & CO. INDUSTRI
☎ +45 (0) 39 56 06 76
p.lorenzen@polysoude.com

SWITZERLAND

POLYSOUDE (SWITZERLAND) Inc.
☎ +41 (0) 43 243 50 80
contact@polysoude.ch

TAIWAN R.O.C.

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

THAILAND

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

TURKEY

EGEMAKINE
☎ +90 (0) 212237 36 00
onurakin@egemakina.com.tr

UNITED ARAB EMIRATES

SALWO TRADING Ltd.
☎ +971 (0) 48 8105 91
salwo@emirates.net.ae

UKRAINE

POLYSOUDE RUSSIA
☎ +7 (0) 495 564 86 81
polysoude@co.ru

UNITED STATES

ASTRO ARC POLYSOUDE Inc.
☎ +1661702 0141
sales@astroarc.com

VENEZUELA

ENRIVA C.A.
☎ +58 (0) 41234 82 602
enriva@gmail.com

VIETNAM

ANH DUONGIT Ltd
☎ +84 22 159 532
an@anhduongco.com



GREAT BRITAIN

POLYSOUDE UK
☎ +44 (0) 1942820 935
info@polysoude.com

GREECE

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

HUNGARY

POLYWELDKft.
☎ +36 (0) 20 29 88 708
polyweld@polyweld.hu

INDIA

POLYSOUDE INDIA
☎ +91 (0) 20 40 03 59 31
ab.kulkarni@polysoude.in

INDONESIA

POLYSOUDE SINGAPORE OFFICE
☎ +65 0734 8452
Jmpan@singnet.com.sg

JORDAN

POLYSOUDE UK
☎ +44 (0) 1942820 935
info@polysoude.com

LATVIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

LITHUANIA

POLYSOUDE S.A.S.
☎ +33 (0) 2 40 68 1100
info@polysoude.com

MALAYSIA

POLYSOUDE SINGAPORE OFFICE
☎ +65 0734 8452
Jmpan@singnet.com.sg

NETHERLANDS

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

POLYSOUDE BENELUX (SERVICE)

☎ +31 (0) 653 38 85 58
h.milder@polysoude.com

POLAND

UNIDAWELD - BEDZIN
☎ +48 (0) 32 267 05 54
dariusz.szota@unidaweld.pl

PORTUGAL

POLYSOUDE IBERIA OFFICE
☎ +34 609 154683
la.deandres@polysoude.com

ROMANIA

DEBISUD CONCEPT S.R.L.
☎ +40 (0) 255 2157 85
office@debisud.ro

RUSSIA + C.I.S.

POLYSOUDE RUSSIA
☎ +7 495 564 86 81
info@polysoude.ru

SAUDI ARABIA

ALRUQEE INDUSTRIAL
MARKETING Co. Ltd
☎ +966 (0) 3857 6383
11Manager.Khaldoun@alruqee.com

SINGAPORE

POLYSOUDE SINGAPORE OFFICE
☎ +65 0734 8452
Jmpan@singnet.com.sg

