

Providing the Ultimate Solution

Woosung Electric Machinery provides TOTAL WELDING SOLUTION.

Since 1979, it has been acknowledged in manufacturing of customised <Special Welding Machinery> with its outstanding quality of <Automated Welding System> for heavy industry such as shipbuilding, steel construction and so forth.

Now, Woosung Electric Machinery is ready to lead the 4th Industrial Revolution around the corner by development of brand new welding system in fusion of big data, cloud computing and ICT(Information and Communication Technology) that belongs to another level rather than conventional systems

WOOSUNG



▪ Company Profile

WOOSUNG Electric Machinery

- President : Nam Dong Su
- Establishment : Jan, 1979
- Business Condition : Manufacture
- Registry Number : 126-81-19547
- Location : 542, Docheogwit-ro, Docheok-myeon, Gwangju-si, Gyeonggi-do, Korea
- Web Site : www.wsweld.co.kr
- E-Mail : ws1047@chol.com
- Contact : +82-31-764-1641~2

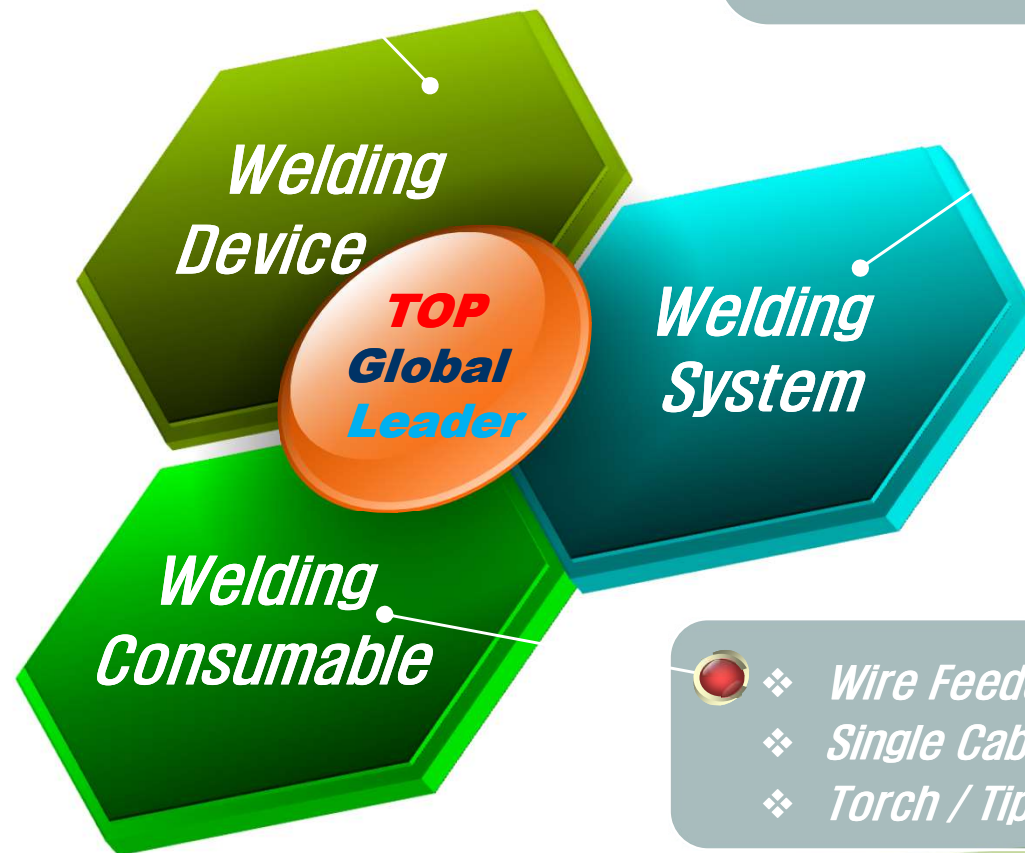




▪ Business area

- ❖ *Welding Machine*
- ❖ *Auto-Carriage*
- ❖ *Welding Automation*

- ❖ *Weld Monitoring System*
- ❖ *Automatic Girth Welder*
- ❖ *Automatic Vertical Welder*
- ❖ *Welding Manipulator*



- ❖ *Wire Feeder*
- ❖ *Single Cable*
- ❖ *Torch / Tip*



■ Main Product



Submerged Welding System



Welding Machine



Tank Auto Welding Machine

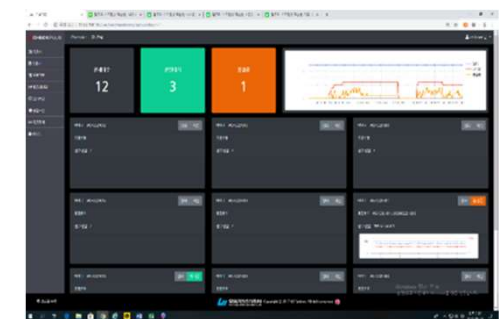
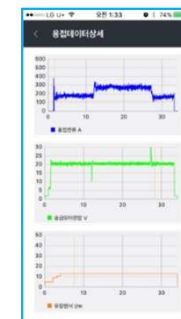


Welding Wire Feeder



Welding Consumables

WELD PRODUCTION MONITORING SYSTEM





■ History

1990s

Obtain KS Certification for thyristor DC arc welder
Obtain KS Certification for KSC9605
Switch from individual company to limited company, Factory relocation
Produces SUBMERGED POWER SOURCE and Carriage
Produces AIR ARC BLASTING TORCH
Produces CO2 WIRE FEEDER
Produces WATER COOLING MIG TORCH
Produces EXTENSION FEEDER
Produces SUBMERGED 2 POLE CARRIAGE
Produces CO2 LIGHT WEIGHT MINI WIRE FEEDER
(Registration of design NO. 0237247)



2000s

Produce PORTABLE CO2 WELDER (SINGLE 160A/200A)
Produce HIGH CURRENT WELDING MACHINE
Produce High Current Welding CARRIAGE for ALUMINIUM
Produce ALUMINIUM MIG WELDING MACHINE
Develop FULL DIGITAL CO2 / MAG WELDING MACHINE
Develop AUTOMATIC GIRTH WELDER 및 MULTI GANTRY
Develop and Produce V-GROOVE TRACE CARRIAGE
Develop and Produce FLUX RECYCLEING SYSTEM
Develop HIGH VOLTAGE TIG WELDER
Delvelop GOUGING & SUBMERGED Multi POWER SOURCE
Inaugurated the 9th Chairman of KWIC

1980s

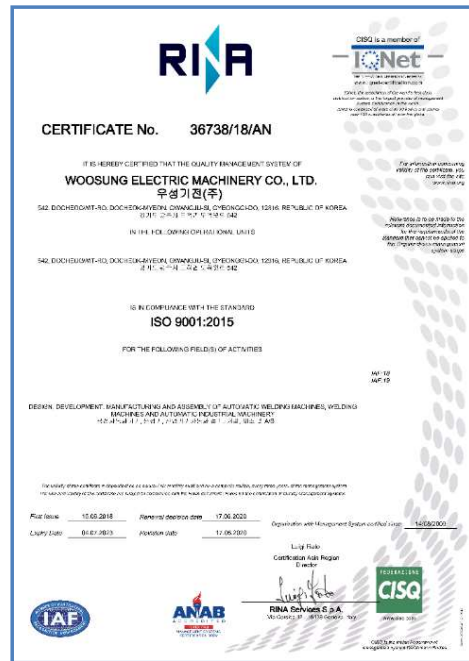
Produces DC arc welder & TIG control box
Produces AIR ARC GOUGING MACHINE
Selected as a lead company in Korea welding field by Promote Industry Administration

1979

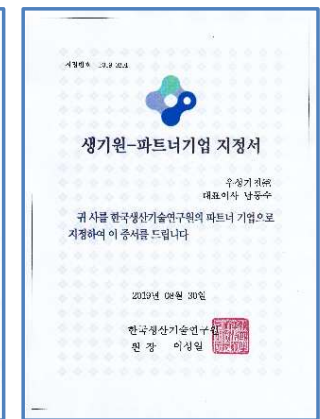
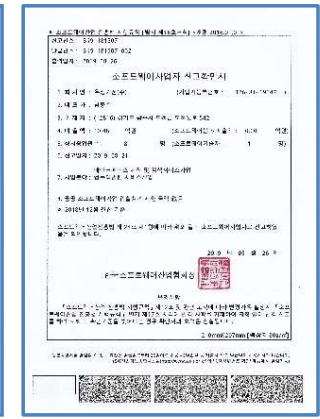
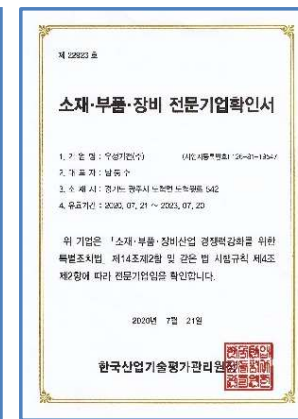
Establish WooSung Electric Co.,
Produces DC TIG WELDER
Produces AC/DC TIG WELDER



■ Technical Certification



■ ISO 9001 & Others



[Patents and Various Certifications]



▪ Major Customers





■ Product

- SUBMERGED ARC WELDING SYSTEM (SAW)
- SUBMERGED ARC CARRIAGE
- SEAM TRACKING SYSTEM
- CO2/MAG ARC WELDING MACHINE
- CO2 AUTO CARRIAGE FOR SHIP BUILDING YARD
- TIG WELDING SYSTEM
- GOUGING MACHINE
- ELECTRO GAS WELDING SYSTEM (EGW)
- AUTOMATIC GIRTH WELDER (AGW)
- TANK WELDING SYSTEM
- **Weld Production Monitoring System [Newly Developed]**



We have the technical skill which can lead Korea to the most competitive position in the Field of welding.

As a leader of welding field, we start to find new markets now

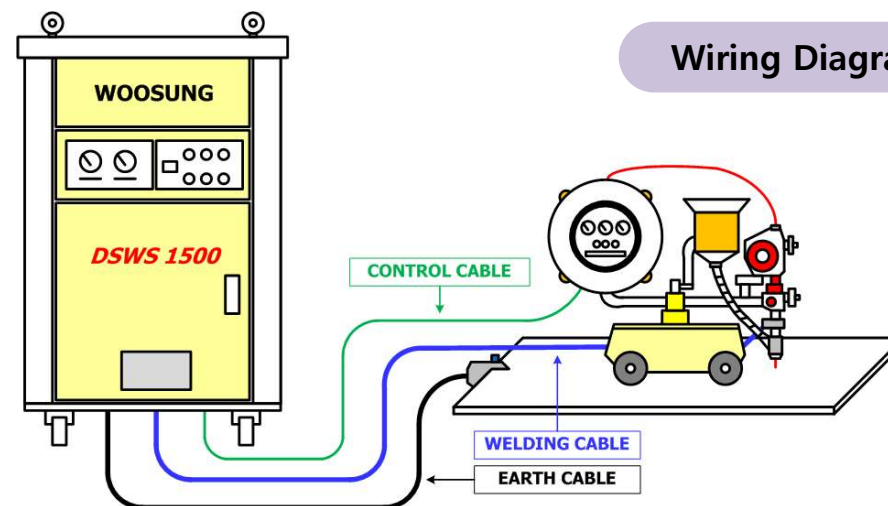
SUBMERGED POWER SOURCE

WS-DSWS 1000/1500/2000 Series



- Thyristor DC phase control system easy to change constant current and constant voltage properties with simple switch.
- Also can use as a Gouging machine. Materialize perfect durability.
- Keep steady welding current even though power voltage or arc voltage change.

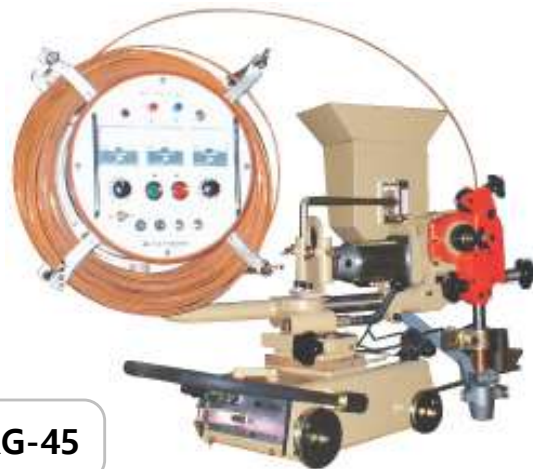
Model	WS-DSWS 1000/1500/2000		
Input Voltage	3Ø 220/380/440V		
Rated Frequency	50 / 60Hz		
Rated Input	80 KVA	130 KVA	180 KVA
Output Current	100-1000 A	150-1500 A	200-2000 A
No-load Voltage	80 V	88 V	90 V
Load Voltage	50 V	50 V	50 V
Duty Cycle	60~100 %	60~100 %	60~100 %



Wiring Diagram

SUBMERGED ARC CARRIAGE

WS-CRG-45



Model	WS-CRG-45	WS-TD-DA
Welding Current	300A~1500A	1500A 2 Electrodes
WIRE DIA.	(3.2) 4.0 4.8 6.4 mm	
Wire Feed Motor	60W DC MOTOR	100W DC MOTOR
Feed Speed Control	S.C.R Arc Voltage Control	
Nozzle Adjust Range	Vertical 50 mm Horizontal 50 mm	Vertical 75 mm Horizontal 100 mm
Travel Speed	10-100 cm/min	15-500 cm/min
Travel Speed Control	S.C.R Constant Speed Control	
Hopper	6 liter	12 liter

WS-TD-DA & Seam Tracker System



SENSOR



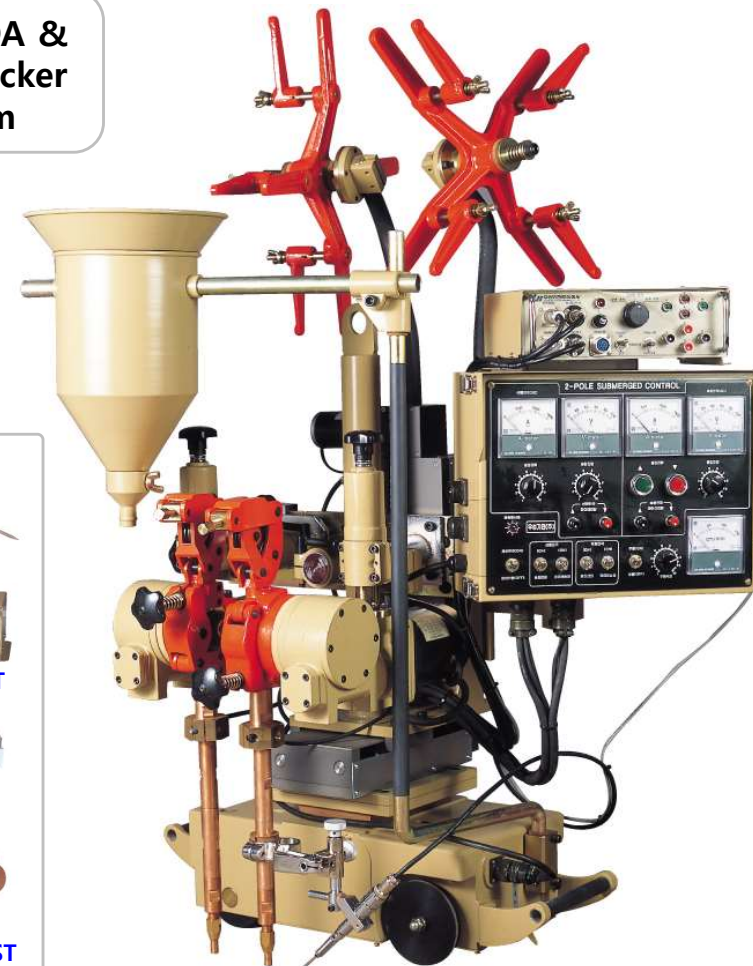
CONTROL UNIT



SLIDE UNIT



SENSOR ADJUST



CO₂ ARC WELDING MACHINE

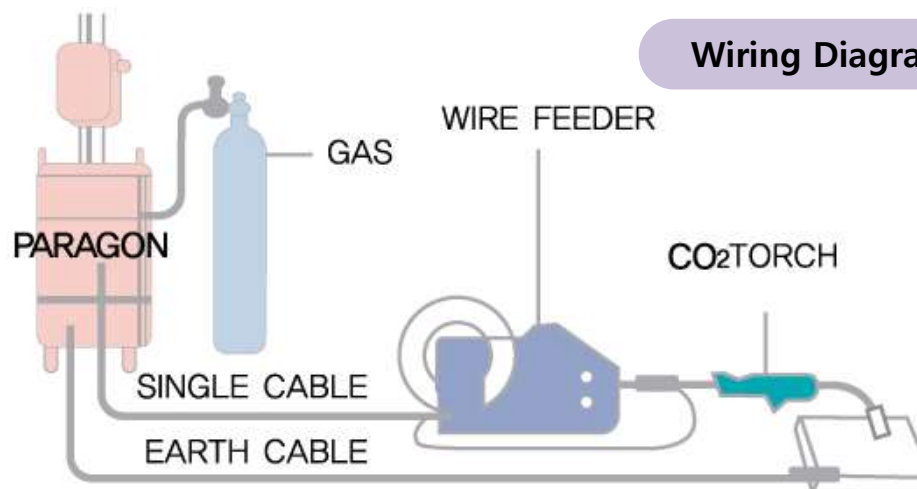
PARAGON α 500/600A Series



- CO₂ , MMA , and Gouging are possible by one machine.
- Digital Control system and various functions make high productivity possible
- By Commercial frequency and input voltage tracking function, steady arc and voltage can be gained
- Two level welding starts make smooth welding possible

Model	PARAGON α 500	PARAGON α 600
Input Voltage	3Ø 220/380/440V	
Rated Input	30 KVA	39 KVA
Output Current	60~500 A	80~600 A
Output Voltage	16-45 V	16~50 V
Duty Cycle	60~100 %	60~100 %
Applicable Wire	1.2 1.4 1.6 mm	1.2 1.4 1.6 mm
Dimensions & Weight	450x700x820 mm (164 Kg)	480x720x850 mm (194 Kg)

Wiring Diagram





CO2 AUTO CARRIAGE

WS-100

General Fillet Carriage



Model	WS-100	WS-600	WS-800
Dimension (mm)	260 X 200 X 270	160 X 290 X 330	144 X 360 X 860
WEIGHT (Kg)	4.9	8.5	7.5
Travel Type	Rubber Wheel	Rubber Wheel	Rackgear Guide Rail
Travel Speed (mm/min)	0~1000	0~1000	0~600
Travel Motor	BLDC 24V 3500 rpm	2 Phase Stepping 1/250 Gear Box	2 Phase Stepping
Remote Control	X	O	O

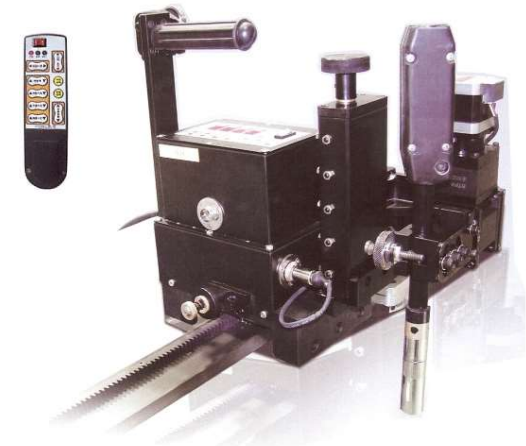
WS-600

Wireless Remote V-UP CARRIAGE



WS-800

Multi Function Weaver Carriage



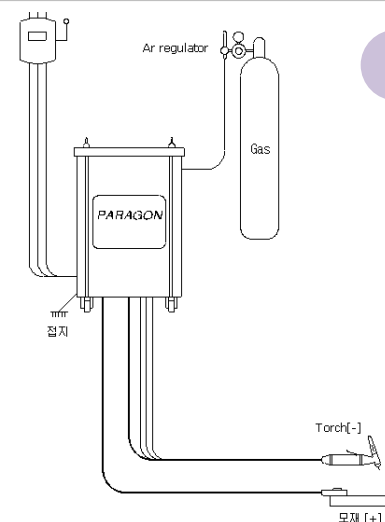
TIG ARC WELDING MACHINE

DWT500 / ADT500



- By high performance magnetic amplifier, control range of output current is wide. And steady drooping characteristic makes face of weld beautifully.
- Movable core operating method power transformer is controlled straight. And steady drooping characteristic make face of weld beautifully.
- DC TIG, DC ARC, AC TIG, AC ARC welding are possible by one machine.

Model	DWT 500	ADT 500
Input Voltage	3Ø 220/380/440V	1Ø 220/440V
Rated Input	39KVA	43 KVA
Output Current	30~500 A	30~500 A
Output Voltage	TIG 24 V / ARC 40 V	
Duty Cycle	60%	
Crater	YES / NO / REPEAT	
Dimensions & Weight	550 x 820 x 1100 mm	



Wiring Diagram

GOUGING MACHINE

WS-DWGS 800



Model	WS-DWGS 1000
Rated Input	80KVA
Output Current	1000A
Output Voltage	40V
Duty Cycle	60%
Dimensions	590(W) x 940(L) x 1120(H)
Weight	560 KG

- Built-in electric prevention circuit. No danger of electric shock.
- Built-in Constant Current circuit. It makes that output current doesn't change under the fluctuation of power, voltage, and arc length.
- H insulation makes good heat-resisting property and durability.

WELDING CABLE (WCT)



AIR ARC BLASTING TORCH



AIR ARC GOUGING TORCH



WCT CABLE

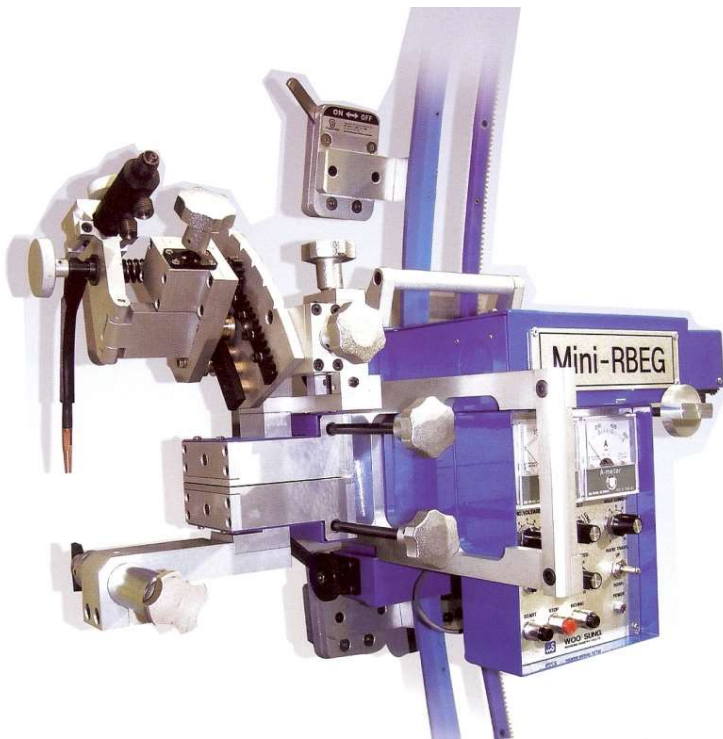


TYPE	WCT
CONDUCTOR	SMOOTH COPPER WIRE
TAPE	PAPER
INSULATOR	NATURAL RUBBER



ELECTRO GAS WELDING SYSTEM

Round Rail EGW Carriage [WS-210]



- Elector-Gas Welding machine possible vertical butt welding using copper shoe.
- Use Flexible Rail for curved work metal.
- ON/OFF Type Rail Magnet makes rail can be removable easily.
- Diving doesn't shake because of the Balance arc for carriage balance maintenance and driving stability.

Composition	Item	Specification
Body	Dimension	400W X 285L X 310H
	Weight	16 Kg
	Travel Type	Rack & Pinion Gear Travel
	Travel Speed	0~250 mm/min (AUTO) 550 mm/min (MANUAL)
	Torch Adjustment	20mm (Lateral Adjustsutment) ±20mm (Right & Left Adjustment) ±15mm (Vertical Adjustment) 20° (Angle Adjustment)
Rail	Form	Flexible SUS Rail
	Connect Rail	ON/OFF Magnet Type
	Quantity	Right and Left 2EA – 4Point, Length 1.5m

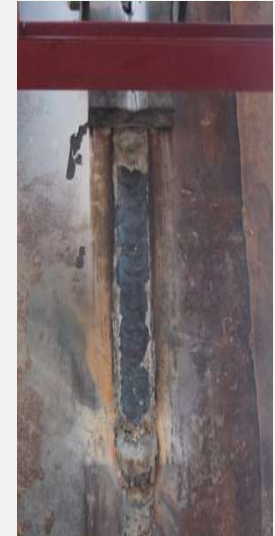


Girth Welding for Tank Erection



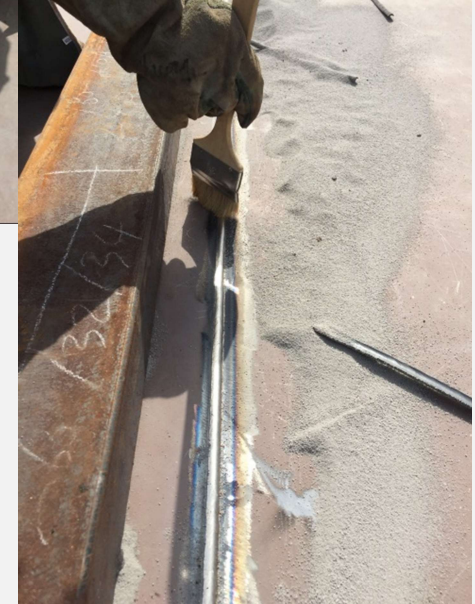


Vertical Welding for Tank Erection



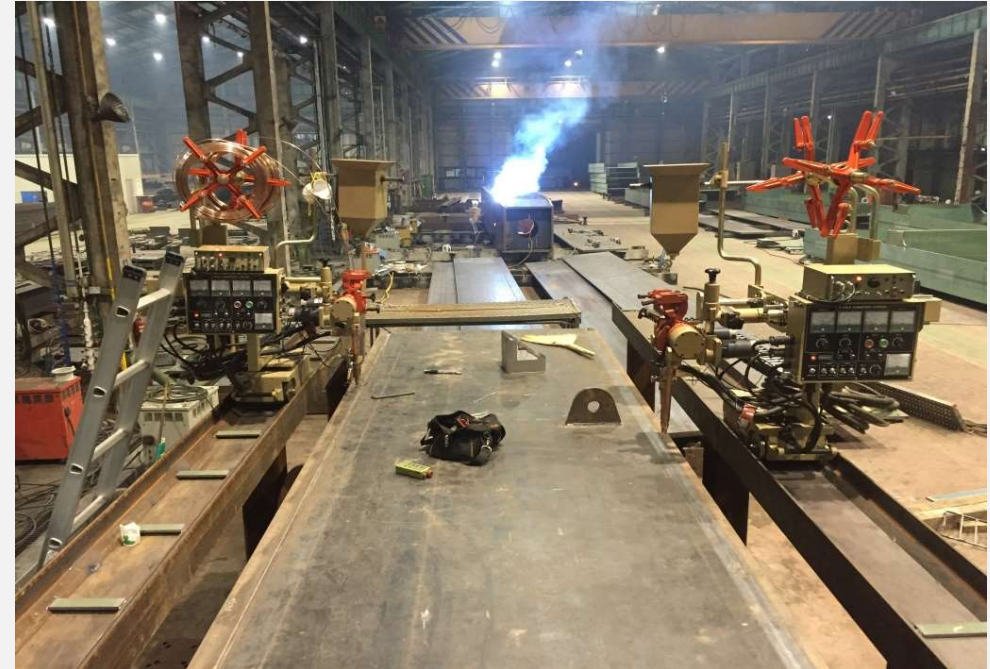


Bottom Welding for 9% Nickel LNG Tank Erection





Submerged Welding for B-H & BOX Production





Plasma & Mig Welding for Stainless Line





Submerged Welding for Site Duct Production





Gantry Welding Machines





Aluminum MIG Welding for MOSS LNG Shipbuilding





Welding Machinery for Pressure Vessle



Longi. Seam Welding



Girth Seam Welding



Welding Machinery for Pressure Vessle



Nozzle Welding System



What is " Check-Plus"



YouTube

[Weld Production Monitoring System]

<https://www.youtube.com/watch?v=KzbSYjMVR0w&t=63s>

- 24-hour working **Industrial Monitoring System**
- Cloud-based system → Purchase of IT Hardware and Software x
(No need to invest in expensive IT Manpower & Hardware equipment)
- Monitoring of equipment anywhere in the world
- **Create objective data** of arc rate / working time / consumption of consumables and **Central management system**
- Create objective data of Idle equipment / work productivity / worker management

Production
Management

Quality
Control



NEED MONITORING



SOFTWARE

- No Software to Buy, Install or Upgrade with Standard Edition
- No IT Hardware
- Just Log In and Start Using It



Always We Do Our Best for you

Thank you.