



## CONTEXT

The Lincoln Electric Company has over 110 years of experience in the welding industry and 42 factories around the world. This knowledge and resource base is currently being applied to expand and further develop the product range for the process industry. Lincoln Electric continues to look into the future by investing in new alloy grades and advanced welding technology.

The Lincoln Electric consumables factories that are servicing the process industry are Lincoln Smitweld in Nijmegen (The Netherlands), Metrode Products Ltd. in

Chertsey (United Kingdom), Lincoln Electric in Rouen (France), The Lincoln Electric Company in Cleveland (USA).

Lincoln Electric has a proven track record in all relevant fields :  
Welding carbon to low and high alloy steels, including nickel base; Manufacturing of low to high-pressure equipment. And in a workshop as well as on site.

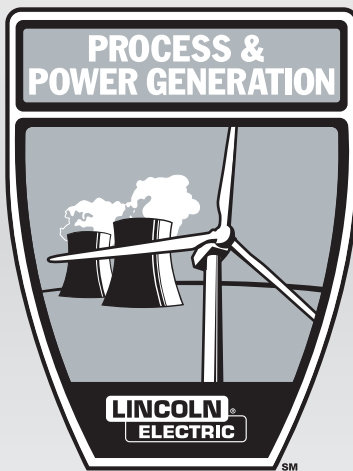
## APPLICATIONS

### INDUSTRIES

- Power Generation
- Chemical plants
- Food and Dairy
- Petrochemical
- Refinery
- Oil & Gas
- LNG
- Nuclear
- Military (Submarine)

### EQUIPMENT

- Power boilers: nuclear, coal, oil, gas
- Black recovery boilers
- Pressure vessels
- Columns and towers
- Reactors
- Drums and tanks
- Piping
- Valves



## LINCOLN SOLUTION

Lincoln Electric offers optimized solutions for process industry applications, both in the workshop as well as on site.

Lincoln Electric's offering includes:

- ✓ Consumables for all processes : GTAW, SMAW, GMAW, FCAW, SAW.
- ✓ Carbon and high strength steels.
- ✓ CrMo creep resisting steels.
- ✓ Ferritic, Martensitic and Austenitic stainless steel.
- ✓ High temperature alloys.
- ✓ Nickel base alloys.
- ✓ Consumables manufactured according to ISO 9001.
- ✓ Dedicated portfolio for Nuclear applications (ASME and RCCM).
- ✓ Moisture Resistant (EMR®) and low hydrogen consumables.
- ✓ Fit-for-purpose packaging.
- ✓ Proven power source technology including AC-DC Power Wave® power sources with Wave Form Control Technology®.
- ✓ Global resources and Technical support.



# PROCESS INDUSTRY

## EQUIPMENT

Wide range to support your needs covering all welding processes

- STT® and Power Wave® STT® series for your root passes.
- Invertec® series, 270SX & 400SX for SMAW and the V270T & V320T AC/DC for GTAW.
- Idealarc®, CV-420 & CV-505 for GMAW and FCAW.
- Power Wave®, C300, S350, S500 for GMAW and FCAW.

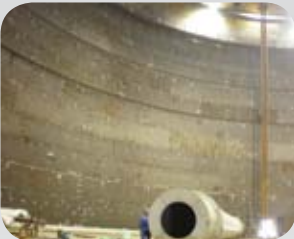


- Idealarc® DC655 and DC1500, Power Wave® AC/DC 1000® SD for AW.
- Engine driven welders, Ranger® 305D and Vantage® 400 & 500 for on-site applications.

## LNG APPLICATIONS

Equipment :

- Precision TIG® 375 allowing 200 m cables on site.
- Power Wave® AC/DC 1000® SD for 2G circumferential welding.



Consumables :

- Nyloid 2 electrode, the reference for 9% Ni steel.
- Superglaze® aluminum wire for roof construction
- Cor-A-Rosta® flux-cored wire for stainless piping
- Wire and flux for 2G welding.

## CARBON STEEL



- Full range of solid wires and electrodes Omnia®, Baso®, Conarc®.
- Sub arc applications:
  - P240, 888, 8500, Mil 800 H (Diffusible H<sub>2</sub> < 2ml/100g) fluxes.
  - L50M, LNS 164, 165 wires.
- Full range of metal and flux cored wires such as the Outershield® MC 700 series.
- Dedicated solutions for heavy walls such as the Narrow Gap system.

## LOW ALLOY STEEL



electrodes meeting «step cooling» requirements.

- High strength electrodes, Conarc® series.
- Low temperature electrodes, Kryo® series.
- Creep resistant electrodes : SL series, SL® 19G(STC) and SL® 20G(STC), basic low hydrogen electrodes meeting «step cooling» requirements.
- Dedicated range of Outershield® FCAW for high strength, low temperature and creep resistant use: Outershield® 19-H and 20-H, all position, mix gas shielded CrMo alloyed rutile cored wires.

## CORROSION AND HEAT RESISTANT STEEL



- Full range of stainless and nickel based solid wires.
- Stainless steel and Duplex (including Zeron® 100X) electrodes: Limarosta®, Vertarosta®, Arosta® and Jungo®.
- Cor-A-Rosta® Stainless steel gas shielded cored wires.
- Subarc welding applications, P2007 flux.
- Nickel based electrode series NiCro, NiCro 31/27 fully austenitic NiCrMoCu for phosphoric and sulfuric acid plants.

## PACKAGING

- Sahara ReadyPack® eliminates the need of a conditioned warehouse and redry oven.
- EMR-Sahara® basic electrodes range achieves 3 or 5 ml/100g diffusible hydrogen.
- Linc Can™ is available for an extensive range of products.

