

## WELDING PRODUCT PROGRAMME FOR THE NUCLEAR INDUSTRY

- Know-how and expertise
- Quality control and quality assurance
- ISO 9001 certification
- Reactivity and flexibility
- Experience in worldwide major projects
- High performance welding consumables
- Tailor-made solutions







**FSH Welding Group** works to ensure its customers get the full benefit of its very extensive expertise.

For more than six decades FSH Welding Group has played a crucial role in the development of welding technology. Wherever arc welding processes are being used, you will find FSH Welding Group products and knowhow. Selectarc Industries' arc welding electrodes manufacturing plant has built up a reputation for leading expertise in the field, ranking it one of the global market leaders in welding technology.

High Quality Products, its services and its highly focused Research & Development has over the years made the group a benchmark among the largest manufacturers in the world.

A comprehensive range of high-quality products for welding and cutting, combined with a flexible range of services, forward-looking research and development and reliability becomes first choice of Customer for FSH welding consumables.

Our aim is simple yet ambitious: to constantly improve to ensure the satisfaction of every single customer.

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#### WELDING PRODUCT PROGRAMME FOR THE NUCLEAR INDUSTRY



**Nuclear energy** represents about 12% of worldwide electricity production and 75% in France. Over 60 reactors are being built around the world, in China, South Korea, Russia, the United Kingdom and elsewhere. Many parts of a nuclear reactor require welding: the primary circuit, the steam generator and more; and a large number of alloys are involved. All work on any of the components of a nuclear power plant requires the most careful attention. All welding is carried out under strict safety rules, while the products used in the welding process must themselves be manufactured according to the most stringent quality assurance requirements to ensure compliance with the various applicable standards.

**Selectarc Welding** today is an internationally recognized player in the nuclear industry.



Seen in section by a nuclear reactor

# CHOICE

## **Product range**

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Welding process	SELECTARC Product	ASME II PART C	EN / ISO	Base Metal	Applications
SMAW	B7018S	E7018-1	E 46 4 B 3 2 H5	P295GH P355GH 16MND5 18MND5	Surge nozzle welding of steam generator and pressurizer: Man-way
GTAW	TIG F56	ER70S-3	W 42 2 W2Si		
GTAW	TIG F57	ER70S-6	W 46 4 W3Si1		
GTAW	TIG F57N	ER70S-G	WO		Root pass for Primary piping against corrosion-erosion
SMAW	<b>INOX 308B</b>	E308L-15	E 19 9 L B 4 2	Z3 CN20-09 Z2 CN18-10 AISI 304L	Primary circuit: piping, valves, safety pool
SMAW	<b>20/10BC</b>	E308L-16	E 19 9 L R 3 2		
GTAW	TIG 20/10	ER308L	W 199L		
SAW	UP 308L + WP380	-	S 19 9 L + S F CS 2 5742DS		
SMAW	INOX 316NG	E316L-15	E 19 12 3 L B 4 2	Z2 CND 17-12 Z3 CND 19-10 Z2 CN 18-10 AISI 316L	Primary circuit: pressure vessels, steam generator, intern elements
SMAW	INOX 316L	E316L-17	E19 12 3 L R 3 2		
GTAW	TIG 20/10M	ER316L	W 19 12 3 L		
SAW	UP 316L + WP380	-	S 19 12 3 L + S F CS 2 5742DS		
SMAW	<b>INOX 13/4</b>	E410NiMo-15	E 13 4 B 4 2	Z 6 CND 13-4 Z 12 C 13	-
SMAW	<b>309LB</b>	E309L-15	E 23 12 L B 4 2	Heterogeneous steel	Intern element: joining steel / stainless steel, First layer Cladding
GTAW	<b>TIG 24/12</b>	ER309L	W 23 12 L		
SMAW	NI182	E NiCrFe-3	E-Ni 6182	Nickel base 16 MND 5 18 MND 6	-
GTAW	TIG NI82	ERNICr-3	S-Ni 6082		
SMAW	NI690	E NiCrFe-7	-	Alloy 690 M4107-M4108-M4109 16 MND 5 18 MND 6	Steam generator
GTAW	TIG NI690	ERNICrFe-7	-		

Technical datasheets available on: www.fsh-welding.com/en/datasheets.htm



## SELECTARC references

**Selectarc Welding** is one of the leading companies in the supply of nuclear welding consumables. Expertise and knowledge in the production of coated electrodes and solid wires according to the highest quality nuclear standards allow us to supply many customers around the world. Our products comply with high demanding requirements for new nuclear power stations, maintenance or prototype. Our top skilled team has been

involved in several major projects like the welding of the last generation of nuclear power plant such as EPR or ITER, and has operated with largest nuclear operators for many years now.

We focus on quality control and on providing all required documentation and certification. Our manufacturing plant is regularly audited by nuclear operators and their contractors or third party inspection companies and delivers welding consumables according to ASME and RCC-M codes. Selectarc Welding is also KTA1408 and EN ISO 13479 certified.

We understand the requirements of the leaders of the nuclear industry and offer dedicated products with numerous customer specifications in terms of spool type, high surface cleanness, chemistry, mechanical properties, etc.

Do not hesitate to contact Selectarc Welding for any request, anywhere in the world.

## Packaging

- MMA: 5 kg plastic boxes or Metcan
- TIG: 5 kg tubes
- MIG/Orbital TIG: D300 (15 kg), D200 (5 kg), D100 (1 kg)
- SAW: D40 (25 kg), Flux: 25 kg bags

## **Services**

### • Advice and assistance

A team of experienced engineers and welders assist customers in the selection of the most appropriate materials for each application.

### • Research and Development (R&D)

The R&D department carries out product tests (mechanical and non-destructive tests) in accordance with customer requests.

### • Customer service

The sales department is available to respond quickly to any request.

Quality ISO 9001 certified.















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