



Officine ORSI S.p.a. Special piping solutions since 1954

Today most industrial plants - and especially those in the oil and gas, offshore, seawater desalination and power generation industries - work with very critical operating conditions.

Therefore they increasingly require the use of special alloys which are resistant to corrosion, high temperatures and pressures. Officine Orsi manufactures a full range of standard and tailor-made products in a wide range of materials.

For over sixty years Officine Orsi has specialized in providing piping solutions for some of the most challenging applications in the world. Over the decades the family-owned company has grown in the wealth of knowledge and expertise that it has in-house and which allow it to offer tailor-made solutions and expert advice to customers. One of the core strengths the company has consistently brought to the table in that time is its willingness to be flexible in order to provide just-in-time delivery to customers and provide an increasingly

By Joanne McIntyre

Heavy wall pipes and fittings

As part of this clearly defined vision the company continuously strives to achieve further improvements in product quality and dimensions.

Continuous expansion, investments in human resources, equipment and qualifications have made Officine Orsi unique in its field, as the company is able to produce entirely by itself a complete range of pipes, fittings, prefabricated pipes and pressure vessels.

“After the extension of the production departments made in recent years and the extension of the production range to include heavy wall welded pipes, we now have opened a new department for hot formed products, in which we have started to produce heavy wall fittings like tees (up to 24”) and elbows,” Marco explains. Until recently the products made by Officine Orsi were made exclusively by cold forming, but their aim to increase the wall thicknesses of their fittings pushed them to invest in hot forming technologies.

At present the company employs 80 people and occupies an area of 22,000 square meters, of which 13,000 are covered.

Your partner for problem solving

“We work with a very clearly defined vision foremost in our minds,” begins Angelo. “We aim to be a point of reference and excellence for all users of pipes, fittings and pressure vessels manufactured from special alloys,

which are highly resistant to corrosion and high temperatures. What enables us to do this is our ability to produce a full range of both standard and tailor-made products, achieving excellent quality with the required characteristics to meet our customers’ needs. This is complemented by our ability to achieve flexible and just-in-time delivery, and a large on-site stock of products. These factors all provide huge advantages for our customers.”

The company’s long history has allowed it to build up a great deal of experience in processing and welding special alloys, including all nickel alloys, titanium, duplex, super duplex, super austenitic stainless steels and special alloys for corrosion problems such as urea, nitric acid, sulphuric acid.

Just-in-time production, fast deliveries for maintenance and emergencies

Orders arriving at Officine Orsi are initially divided into three main types:

- Small quantities which are quickly supplied from the extensive on-site stock of pipes and fittings of up to 8 inches in alloys C276, C22, Ti Gr.2, 254SMO, super duplex, 825 and 625.
- Items which can rapidly be manufactured by using the on-site stock of plate and pipes as raw materials;
- Large orders with a longer delivery time for which the company buys in the raw materials from mills.



wide range of products and dimensions. Stainless Steel World spoke to the three men behind the Orsi name to learn more about this Italian specialist.

Speaking to the son of the company’s founder Mr Angelo Orsi (Managing Director) and grandsons Luca (Export Manager) and Marco (General Manager), the sense of history and pride in the company is palpable. This is an enterprise which has been run for over six decades with a clear vision and focus on specialized products for the very toughest applications.



The company now has the capacity to produce hot formed heavy wall fittings like tees (up to 24”) and elbows.

Full packages in special alloys

Welded and seamless pipes,
Welded and seamless b.w. fittings,
Forged fittings, flanges, gaskets, bolts, nuts,
Made to measure products...

“We stay in very close communication with our customers to achieve just-in-time delivery which means they get the products they have ordered exactly when they need them,” explains Luca. “It’s a challenging service to offer because our production is divided into four different departments: welded pipe, cold formed butt welded fittings, hot formed fittings and pressure vessels. Production needs to be carefully organized across these four departments to achieve this, and this is where our flexibility is key. Our production systems team is very skilled in working across the departments to ensure the smooth fulfilment of each order. We believe that this flexibility is one of the factors that allows us stand out from our competitors.”

Tailor made products and services

Officine Orsi prides itself on being able to produce a full range of products in all quantities and dimensions according to the application required by its customers, and on having the capability to produce unique parts according to the drawings and specifications of its customers. “When we deal directly with end users we also have the expertise to suggest materials or dimensions for products and the relevant testing



Heavy wall welded elbows and welded pipes (w.t. 50mm).

in order to guarantee the best quality and products and the shortest possible delivery time,” explains Angelo.

“We have the expertise in house to recommend the very best solution for every customer.”

“The good relationships and co-operation we have built up with the major steel mills and our ability to understand customer problems and offer them solutions is of course critical to our success,” Angelo states. “All of these factors combined allow us to offer high quality products for industrial plants in the chemical, petrochemical, pharmaceutical, offshore, oil & gas and power generation industries, and oxygen service.”

Quality above all else

“Our primary commitment is to achieve customer satisfaction and to get it we aim at the continuous innovation of our

production processes, combined with on-going improvements in the quality of our products,” explains Angelo.

“For this purpose, we have implemented a management system certified by Lloyd’s Register for quality assurance, safety at work and environmental protection in accordance with ISO 9001, ISO 14001 and OHSAS 18001. In addition we are qualified by TUV for the supply of products complying with Directive PED 97/23/EC, AD 2000-MERKBLATT W0 and HPO and also for products used in the nuclear field.”

“We are also qualified for production according to NORSOK M-650 and have obtained the qualification “ASME U-Stamp” as manufacturers of pressure vessels parts or complete equipments”. “For welding procedures, we have implemented a quality assurance system in accordance with UNI EN ISO 3834-2,

Production

WELDED PIPES

- made from plates with diameters range from 80 to 2500 mm, thickness from 2 to 60 mm and lengths up to 12 m.

FITTINGS

- elbows, tees, reducers, stub ends, caps, s.w. and npt fittings, tailor made fittings. Diameters from 21.3 to 1016 mm, thickness from 2 to 50 mm.

PRESSURE VESSELS

- reactors, tanks, heat exchangers, columns and flare tips. Diameters up to 4000 mm and thicknesses up to 30 mm

PREFABRICATIONS

- piping spools, manifolds, headers, according to customer’s drawings.



The company specializes in producing a full range of both standard and tailor-made products

High performance materials

Nickel alloys

(200, 201, 400, 600, 601, 602CA, 617, 625, 800H/HT, 825, 20, B3, B4, C276, C22, C2000, C4, 59, X, G30, G35, HR120, CU/NI 90/10)

Titanium

(Gr.1, 2, 7, 12)

Austenitic stainless steel

(304, 304L, 304H, 321, 321H, 347, 347H, 316, 316L, 316LS, 316H, 316TI, 317L, 317LN, 317LNM, 309, 309S, 310S, 330, S1)

Superaustenitic stainless steel

(310 MoLN, 310L NAG, 904L, 6Mo, 926, 254SMO, 28, 31, 33)

Austeno-ferritic stainless steels

(duplex, super duplex)

Zirconium

(702)

Stock

Pipes: seamless and welded

B.W. Fittings: seamless and welded

From 1/2" to 8"

Sch. 10s and 40s

Titanium Gr.2, alloy C276, alloy C22, alloy

625, alloy 825, duplex, super duplex,

904L, 254 SMO.

certified by TÜV. Welding activities are carried out by qualified personnel, under the direction of an International Welding Technologist (I.W.T.) qualified by IIS (Italian Institute of Welding). All of our welding procedures (automatic and



Officine Orsi carries extensive stock of welded and seamless pipes and fittings ready for shipping at a moments' notice.

manual) are according to international codes (ASME IX and EN ISO 15614-1) and certified by TÜV, LLRR, Bureau Veritas, etc.”

Furthermore our entire range of products is manufactured in compliance to international standards and regulations (ASTM, ASME, EN, PED) and can be supplied fully inspected by RINA, LLOYD'S REGISTER, Norske Veritas, Bureau Veritas, TUV (certificate EN 10204 / 3.2).”

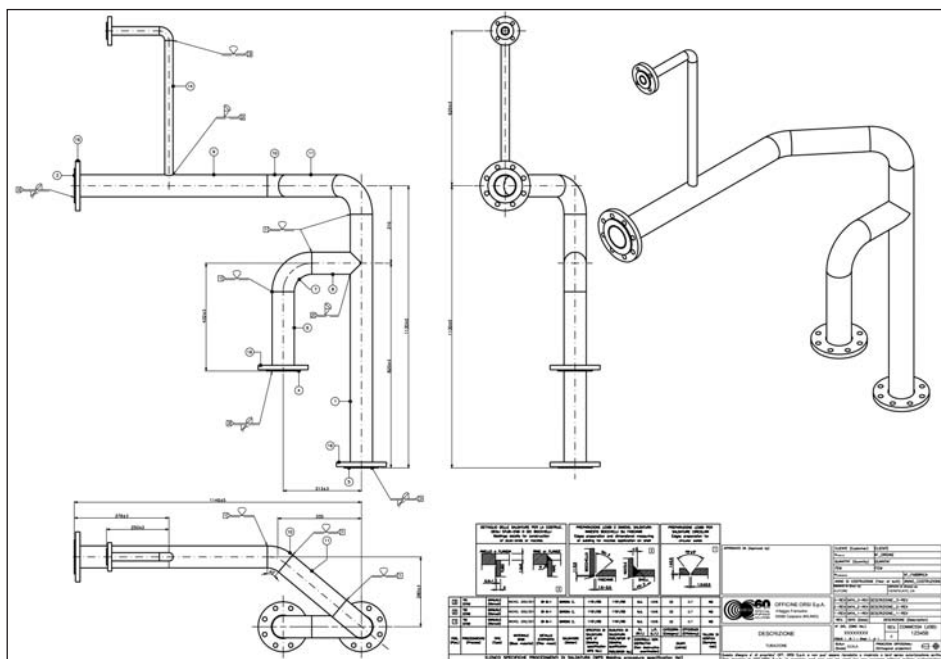
“The dimensions and tolerances of our products can either be in accordance with all international standards ANSI, UNI EN ISO and DIN, or the special requirements of the customer.”

The company has its own department for non-destructive testing staffed with qualified personnel according to

SNT-TC1 A and UNI EN 9712 (473), for the following methods: RT (X-ray), PT (liquid penetrant) and UT (ultrasonic). In addition, products undergo visual, dimensional, metallographic, ferrite, hardness and roughness inspections, PMI and hydrostatic testing. Other controls such as destructive mechanical testing and corrosion tests are performed by external laboratories, qualified and accredited ACCREDIA, in accordance with the requirements of the UNI CEI EN ISO / IEC 17025 and operating in accordance with international standards (ASME, ASTM, DIN, AFNOR) and to customer specifications.

Overview of certifications

- ISO 9001
- ISO 14001
- OHSAS 18001
- PED 97/23/EC
- AD 2000-MERKBLATT W0 and HPO
- UNI EN ISO 3834-2
- NORSOK M-650
- ASME U-Stamp



Isometric drawing of a prefabricated piping spool in Titanium gr.2



Facts & Figures

Name: Officine Orsi S.p.A.
 Headquarters: Carpiano, Milan, Italy
 Products: Pipes, Fittings, Pressure vessels, Prefabrications
 Materials: Nickel alloys, Titanium, Special stainless steels, Zirconium
 Employees: 80