The Schulz Group of Companies: A passion for piping

Wilh. Schulz GmbH is well known for its capability to produce heavy wall, large diameter fittings.

With over seventy years of experience in the piping industry, the Krefeld (Germany) based company Wilhelm Schulz is best known for its unique cold forming technology. Today it approaches the market with the same passion and dedication to excellence that its founder Wilhelm Schulz first exhibited all those decades ago. It continues to evolve and adapts to stay ahead of market needs i. e. adding substantial experience as manufacturer not only of heavy wall cold formed fittings, but as manufacturer of high quality seamless pipes in all corrosion resistant alloys. Stainless Steel World spoke to Dr. Iris Rommerskirchen, Senior Vice President Business & Product Development and Stefan Zwickardt, Sales & Marketing Manager about its new focus on OCTG products, its successful API certification, and its plans for growth in the future.

By Joanne McIntyre

It is not common to encounter a familyowned business in the stainless steel industry, yet today the 2nd and 3rd generations of the Schulz family are still successfully leading the company. In 2015, the company celebrated its 70th birthday at locations around the world and it continues to evolve and expand in terms of both product range and market coverage.

"One of the first things that impressed me about the company was how 'people driven' it is," begins Dr. Rommerskirchen. "Passion and ambition really characterise the company's work culture." A



well-known and respected figure in the international stainless steel industry, Dr. Rommerskirchen joined the company in 2015 to fulfil a role in business and product development.

Global presence

The Schulz Group has been globally active for many decades. Its representative offices and companies around the world are well established in the local markets. Schulz is known for covering a lot of products and services in piping and components of CRAs, from own production or by making sure that packages are completed with products that meet the respective requirements of the individual project. Customer orientation and "passion for piping" is the red line in daily operational work throughout the entire Schulz Group of Companies.

While it has production facilities in Germany, Brazil and the US, the company also maintains warehouses in Germany, USA, South Korea and Brazil. These all house a large variety of products including fittings, pipes (both welded and seamless), and flanges in stainless steels and sophisticated materials such as duplex, super duplex and nickel alloys. "The level of stock we hold is very much focussed on the needs of the industry based on our wide range available from our product portfolio," explains Mr. Zwickardt. "This means we can offer customers shorter delivery times and high quality products directly from stock."

Growth into OCTG

The biggest leap forward was made at the Schulz Groups state-of-the art seamless pipe mill, Schulz Xtruded Products (SXP) in Tunica, Mississippi, U.S.A. Since production started in 2012, SXP has built up an excellent reputation for hot extruded and cold finished seamless pipe. The implementation of phase 2 of this plant, which included the start-up of a large cold pilger mill, is now complete and working smoothly.

Today, SXP is spread out over two production facilities housing a large extrusion press and three cold pilger mills, one of them being the biggest in the Western hemisphere.

Roughly 200 employees are focussed on the production of first class piping products.

With the current capacity of 30,000 tons for hot extrusion and 15,000 tons for cold finished products, SXP has grown fast.



Dr. Iris Rommerskirchen, Senior Vice President Business & Product Development and Stefan Zwickardt, Sales & Marketing Manager.

[COVER STORY]



SXP's new pilger mill is the biggest in the Western hemisphere.

"The Tunica plant manufactures both hot and cold finished seamless pipes in stainless steel grades, duplex and super duplex grades, nickel alloys, and various titanium grades. The maximum outside diameter produced is 20", while wall thicknesses range from 10S up to XXS in lengths up to 12 meters or even longer if need arises," explains Mr. Zwickardt. "Our capability to produce heavy wall, large diameter fittings in Krefeld, Germany also compliments the traditional oil and gas market segment for ASTM pipes." After completion of their cold pilger mill SXP is producing OCTG tubing, casing and corresponding coupling stock in duplex, super duplex and nickel alloys as well.

"Being involved in the oil & gas business for so many years, the hot extrusion and the cold pilger mill enable us to expand into a market segment which is rather new for the Schulz Group," continues Mr. Zwickardt. "Today one of our focuses is the OCTG business. The speciality of the large pilger mill is that we can produce large size OCTG casings and tubing up to 13-3/8" OD in Range 3 lengths including the corresponding coupling stock. With our equipment not only the diameter range and lengths of OCTG pipes produced set a new benchmark, but also the mechanical properties and the surface quality remains without any compromise."

[COVER STORY]

World's 1st API 5CRA certification

In addition to investments in plants and technology, the company has also continued to invest in quality assurance and this was recently rewarded with a very special certification.

"Our SXP plant is the very first plant in the entire world which has been certified by the American Petroleum Institute in accordance with API 5CRA: we actually hold the certificate number API 5CRA-0001," smiles Dr. Rommerskirchen. "Our COO, Mr. Sebastien Leclerc, was instrumental in leading a team to gain this coveted API certification which will open more doors for the company. It really is a remarkable achievement and we are all very proud of it." "The API certification officially documents the quality level that SXP is achieving. This certification provides official approval that our pipes meet all the criteria OCTG products have to fulfil. This gives us a leading edge over our competitors."



SXP COO Sebastien Leclerc (4th from left) and his team successfully achieved the coveted API 5CRA certification.

The company collaborates with many customers around the globe to research and develop products. "We are continuing our development of producing the seamless co-extruded clad pipe," continues Dr. Rommerskirchen. "In the future we expect to see strong demand for these products for deep water exploration, for instance in the Gulf of Mexico and we continue to market this special product in order to participate in these demands."



The world's first API 5CRA certificate goes to SXP.

[COVER STORY]

Complete packages for the oil & gas industry

"An important part of the Schulz Group of Companies' product range is the production of seamless co-extruded clad pipes", explains Mr. Zwickardt. "By co-extrusion, even OD / wall relations, which seem far off being producible by cold forming and longitudinal welding of clad plates, can be produced. Compared to internally overlay-welded seamless carbon steel pipes, the co-extruded clad pipe offers many advantages in terms of industrial reproducibility, non-destructive testability and inside surface quality. The latter positively influences the flow conditions in service. Complementary we are also working on welded metallurgical bonded clad pipes."

Based on seamless or welded clad pipe, with their fitting production capacity Schulz is able to produce the full range of fittings as well. This has the advantage that pipes and fittings are produced from the same heat, sharing the same mechanical and chemical properties, so less testing is necessary. The comprehensive production range of the Schulz Group with all kinds of CRA, clad pipes and fittings is one of its own in the entire world.

"Our evolution over the past decades proves the Schulz Group to be able to provide complete packages to customers: welded and seamless pipes, nickel alloys, duplex, super duplex and clad, fittings, forgings and flanges and now also for OCTG: we produce the casings, the tubing and the coupling stock ...we really are producing a complete package."

Take off with SXP

Aerospace is a growing market for the company and this diversity of markets is a key factor in the company's business strategy. 18 inches, which are today still made from a machined forging. SXP is able to extrude such profiles near net shape, which will minimize the titanium scrap and will save the aerospace companies a

"Passion and ambition characterise the company's work culture."

"In addition to our long-standing contract with Boeing for titanium profiles, we are able to extrude very large titanium profiles with a cross section of up to tremendous amount of money", explains Dr. Rommerskirchen.

"We're currently working on getting approval by Airbus and are also



Today SXP is also extruding very large titanium profiles with a cross section of up to 18 inches for the aerospace industry.

working together with a lot companies in the supply chain for the aeronautical industry. This market will continue to grow in importance for us in the years ahead,"

The SXP team works closely with its aerospace clients to develop parts.

"Throughout the approval process there is always some new development going on. Whenever new planes or parts have to be developed, we carry out joint research with those companies to decide on the best way of producing them and how costs can be saved during the production process. They rely on both our materials expertise and our production expertise with extrusion to find the best solution."

ITER agreement

Recently Wilhelm Schulz was awarded a large order for the ITER project in Cadarache, France. ITER is an international project to design and build an experimental fusion reactor based on the tokamak concept. The agreement is to supply various types of pipes and fittings, including stainless steel and carbon steel. Some parts of the agreement require the equipment to be produced with a special chemical composition due to the nuclear application.

"This is a very prestigious project to be involved in," explains Dr. Rommerskirchen. "The technology is an important step on the path to dramatically reducing CO_2 production. We are proud to be a part of a technology that is leading into the future."

Facts & Figures	
Name:	Schulz Group of Companies
Materials:	Standard stainless steels, special stainless steels, high nickel alloys, duplex and super duplex steels, 6 Mo grades, super austenitics, titanium alloys, clad steels, CuNi grades
Key markets:	Water treatment, oil and gas, nuclear, chemical, petrochemical, aerospace
Employees:	Approx. 650 employees worldwide
Website:	www.wschulz.com