



Your specialist for HFI welded steel pipe





Salzgitter Mannesmann Line Pipe in Siegen

Salzgitter Mannesmann Line Pipe – your worldwide partner for HFI (high frequency induction) longitudinally welded steel pipe. (Definition according to technical rules and regulations: HFW (high-frequency welded); EW (electrically welded); ERW (electric resistance welded))

We offer:

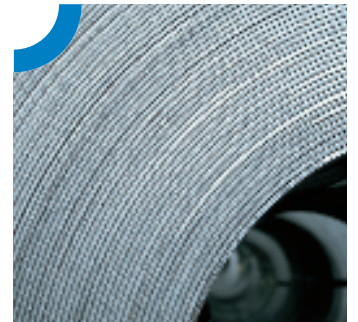
- 100 years of experience in pipe production
- expertise covering the complete value-added chain at both locations, from steel production to pipe coating
- a wide range of dimensions and material grades
- short delivery periods through optimized rolling schedules
- heightened flexibility through two production locations
- optimised delivery capacity through targeted stock management
- technical advice from the planning desk to the construction site
- a worldwide sales network

Finally, but not least, we cooperate closely with the Group's research centre, Salzgitter Mannesmann Forschung GmbH, as part of our commitment to total product quality and ongoing improvement.

HFI welded steel pipe has been used successfully for decades in technically demanding applications and severe service conditions. Line pipe designed for high operating pressures ensures reliable transportation and distribution of gas, oil, water and other media. And without welded steel pipe, the exploration and extraction of essential resources would be impossible. Even in machinery and plant construction, welded steel pipe has established itself as an indispensable structural element.



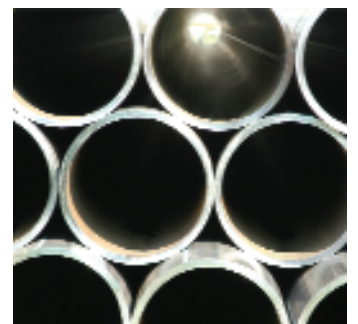
Salzgitter Mannesmann Line Pipe in Hamm



Innovative research and ongoing developments have made Salzgitter Mannesmann Line Pipe a byword for highest standards and comprehensive expertise in HFI welding technology. From our Hamm and Siegen locations in the industrial heartland of Germany, we maintain close contact with national and international institutes, notably the Salzgitter Mannesmann research centre, because we aim not only to continuously improve the HFI welding process but also to promote and support new product developments for the benefit of our customers.

Our development efforts focus especially on the quality and safety of welded pipe. Starting material inspection, 100 percent production monitoring using ultra-modern test methods and equipment, as well as final inspection at both works ensure that the properties of our steel pipes meet the most exacting requirements. This claim is backed by decades of experience in our own state-of-the-art laboratories and it has top priority in the production of HFI-welded steel pipe.

As part of the Tubes division of Salzgitter AG, Salzgitter Mannesmann Line Pipe stands for exemplary flexibility and a "can-do" approach to special customer requirements a partner to rely on for present and future projects.



Range of dimensions, standards and materials

Our activities are oriented towards one goal: being a strong, expert partner for our customers. So all our efforts, creative and practical, are tailored to further increasing customer satisfaction.

That's why uniform, high product quality is so important for us. At the same time, all our products and processes are subject to our comprehensive optimization regime. Intensive research and development work in cooperation with suppliers, universities and research institutes form the basis for the advancement and manufacture of technically mature products. Our investment decisions are guided by this commitment to improving the quality of our products and our own efficiency.

Standards
DIN EN 10208-1
DIN EN 10208-2
API 5L/ISO 3183
DIN EN 10224
API 5CT/ISO 11690
DIN EN 10210
DIN EN 10217-1
DIN EN 10217-2
DIN EN 10217-3
DIN EN 10217-4
DIN EN 10219
DIN EN 10296-1
ASTM A53
ASTM A252
ASTM A333
Former standards:
DIN 1626
DIN 1628

Standards of application
DIN 2470-1 DVGW G 462
DVGW G 463, TRFL, DIN EN 1594
DIN 2460
DIN 18800
AD 2000 W4 - DGRL 97/23/EG
AD 2000 W4 - DGRL 97/23/EG
AD 2000 W4 - DGRL 97/23/EG
AD 2000 W4 - DGRL 97/23/EG
DIN 18800
DIN 2470-1, DIN 2460
DIN 2470-1, DIN 2460

Materials
L235GA - L360GA
L245NB - L555MB
Grade B - X80M/L245NB - L555MB
L235 - L355
H 40, J 55, K55FBN, N 80 T1, N80 QT
S235JRH - S460NLH
P235TR1 - P265TR2
P235GH - P265GH
P275NL1 - P460NL2
P265NL
S235JRH - S460MLH
E235 - E460M
Grade B
Grade 2, Grade 3
Grade 6
St 37.0 - St 52.0
St.37.4 - St 52.4

Other rules and specifications on request

Manufacturing programme – Steel pipe dimensions (in kg/m)

Diameter			Wall thickness in mm / inches																	
ø	DN		3.20	3.60	4.00	4.50	5.00	5.60	6.35	7.13	8.00	8.38	8.74	9.53	10.3	11.1	11.9	12.7	14.3	15.9
mm	mm	Inch	0.126	0.142	0.157	0.177	0.197	0.220	0.250	0.281	0.315	0.330	0.344	0.375	0.406	0.438	0.469	0.500	0.562	0.625
114.3	100	4 1/2	8.77	9.83	10.9	12.2	13.5	15.0	16.9											
117.5		4 5/8	9.02	10.1	11.2	12.5	13.9	15.5	17.4											
159.0		6 1/4	12.3	13.8	15.3	17.1	19.0	21.2	23.9	26.7	29.8	31.1	32.4	35.1	37.8					
168.3	150	6 5/8	13.0	14.6	16.2	18.2	20.1	22.5	25.4	28.3	31.6	33.0	34.4	37.3	40.1					
177.8		7	13.8	15.5	17.1	19.2	21.3	23.8	26.8	30.0	33.5	35.0	36.4	39.5	42.5					
193.7		7 5/8	15.0	16.9	18.7	21.0	23.3	26.0	29.3	32.8	36.6	38.3	39.9	43.3	46.6	50.0	53.4	56.7		
203.0		8	15.8	17.7	19.6	22.0	24.4	27.3	30.8	34.4	38.5	40.2	41.9	45.5	48.9	52.5	56.1	59.6		
216.8		8 1/2	16.9	18.9	21.0	23.6	26.1	29.2	33.0	36.9	41.2	43.1	44.8	48.7	52.5	56.3	60.1	63.9		
217.8		8 1/2	16.9	19.0	21.1	23.7	26.2	29.3	33.1	37.0	41.4	43.3	45.1	48.9	52.7	56.6	60.4	64.2		
219.1	200	8 5/8	17.0	19.1	21.2	23.8	26.4	29.5	33.3	37.3	41.6	43.5	45.3	49.3	53.0	56.9	60.8	64.6		
229.0		9	17.8	20.0	22.2	24.9	27.6	30.9	34.9	39.0	43.6	45.6	47.5	51.6	55.6	59.6	63.7	67.7		
244.5		9 5/8	19.0	21.4	23.7	26.6	29.5	33.0	37.3	41.7	46.7	48.8	50.8	55.2	59.5	63.9	68.3	72.6	81.2	
273.0	250	10 3/4		23.9	26.5	29.8	33.0	36.9	41.8	46.7	52.3	54.7	57.0	61.9	66.7	71.7	76.6	81.5	91.2	101
323.9	300	12 3/4			31.6	35.4	39.3	44.0	49.7	55.7	62.3	65.2	67.9	73.9	79.7	85.6	91.6	97.5	109	121
339.7		13 3/8				37.2	41.3	46.1	52.2	58.5	65.4	68.5	71.3	77.6	83.7	90.0	96.2	102	115	127
355.6	350	14			34.7	39.0	43.2	48.3	54.7	61.3	68.6	71.8	74.8	81.3	87.7	94.3	101	107	120	133
382.0		15					46.5	52.0	58.8	65.9	73.8	77.2	80.5	87.5	94.4	102	109	116	130	144
406.4	400	16					49.5	55.4	62.6	70.2	78.6	82.3	85.7	93.3	101	108	116	123	138	153
419.0		16 1/2						57.1	64.6	72.4	81.1	84.9	88.4	96.2	104	112	119	127	143	158
445.0		17 1/2						60.7	68.7	77.0	86.2	90.2	94.0	102	110	119	127	135	152	168
457.0	450	18						62.4	70.6	79.1	88.6	92.8	96.7	105	114	122	131	139	156	173
473.1		18 3/8						64.6	73.1	81.9	91.8	96.0	100	109	118	126	135	144	162	179
508.0	500	20						69.4	78.6	88.1	98.6	103	108	117	126	136	146	155	174	193
530.0	530	20 3/8						72.4	82.0	91.9	103	108	112	122	132	142	152	162	182	202
610.0	600	24							94.5	106	119	124	130	141	152	164	176	187	210	233



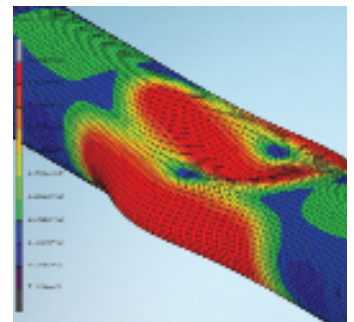
As the bedrock for this ongoing improvement of our quality standard, we have implemented an all-embracing quality management system according to DIN EN ISO 9001:2000 and API Q1 which covers every area at Salzgitter Mannesmann Line Pipe and all our activities.

This quality management system starts with the suppliers of our starting materials. All the certificates and delivery data are entered online into our monitoring system. The relevant process data are recorded and collected for each individual pipe under its own unique pipe ID number. At every production stage, the inspection and test status of the previous stage is verified.

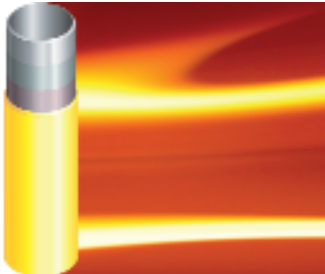
This means that all the data along the production chain – from the steelworks through the strip rolling and welding mills right up to the shipping department – are available at any time, even after delivery, for each individual pipe.

Service, fittings and accessories

Our service starts long before the placement of an order, with expert advice in the selection of the best pipe, pipe coating and lining for the project in hand. Deliveries are made to the construction site or the customer's location on a just-in-time basis, even at short notice. For pipe laying and processing, we are at our customers' side with expert practical hints and recommendations. Salzgitter Mannesmann Line Pipe can also offer a broad selection of joining techniques, including various welded, socket, or clamped joints for all applications and service conditions. In addition to the full range of steel pipe, Salzgitter Mannesmann Line Pipe offers a whole variety of pipe accessories for practically every application requirement. This includes fittings for water and wastewater pipes, pipe-laying equipment for axially force-locking joints, recommendations for pipe handling and laying, and the necessary field coating or lining material, e.g. for pipes lined with cement mortar and/or coated with fibrous cement mortar.



17.5	19.1	20.6	22.2	23.8	25.4
0.688	0.750	0.812	0.875	0.938	1
132	144	154			
146	159	170			
168	182	196	210	225	239
190	206	222	238	254	270
197	214	230	247	264	280
212	230	248	266	284	302
221	241	259	278	297	316
256	278	299	322	344	366



Line pipe for oil and gas

Pipelines are the safest and most cost-effective way of transporting mineral oil, natural gas and chemical products over long distances. The transport means and route in one, pipelines will become even more important in the future, given that the resources indispensable for human survival are found in increasingly remote regions, far away from the centres of consumption. Salzgitter Mannesmann Line Pipe is on site around the globe, wherever new pipelines have to be laid.



Line pipe for water and wastewater

Health is the most precious thing in life, hygiene an essential factor for its maintenance. Steel pipe from Salzgitter Mannesmann Line Pipe has firmly established itself in the transportation of drinking water over long distances and in its distribution via pipe systems in towns and villages. The corrosion problems encountered here have long been solved by protecting the pipes with plastic coatings and cement mortar linings.



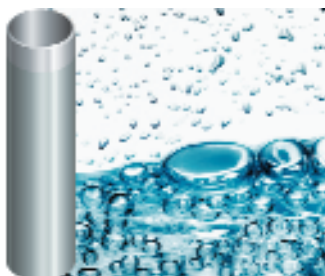
Oil Country Tubular Goods OCTG

Our growing demands on the material quality of life mean that ever greater efforts have to be made to ensure reliable supplies of resources and energy. However, the deposits of primary energy and resources have to be tapped before they can be exploited. Here, steel pipe is indispensable. Welded casings from Salzgitter Mannesmann Line Pipe are involved wherever exploratory drillings are carried out for new oil and gas reservoirs.



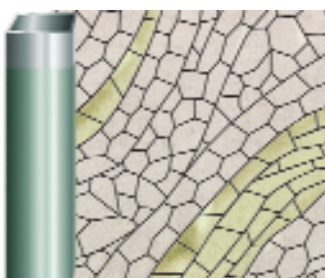
Pipes for general applications

In our technology-driven day, steel pipes are taken for granted in nearly every sphere of life. Without them, energy production would be unfeasible, as would the collection and distribution of water. Cars could not run, planes could not fly, and chemical substances could not be combined to form new products. Steel pipes are the lifelines in a technicized world, and not only in the highly industrialised countries. Welded steel pipes and the names Salzgitter and Mannesmann have belonged together for over a century.



District heating- / district cooling pipes

Steam that turns turbines linked to a generator is still the most important intermediate energy carrier, irrespective of whether the water which generates the steam is heated with fossil – i.e. conventional – or with nuclear fuels. The pipes used in energy production must resist extreme operating temperatures and pressures linked to high cyclic loads. Salzgitter Mannesmann Line Pipe can supply the pipes needed to meet these continuously rising demands.



Structural Tubes / MSH sections

Machinery and plant construction must adapt to new methods for the production of an ever-growing range of the most varied products. Here the steel pipe plays a major role as a versatile structural element, mainly due to its outstanding stability and relatively low weight. Because of their plane connecting surfaces, pipes from Salzgitter Mannesmann Line Pipe with square or rectangular cross sections are particularly well-suited for welded joints in load-bearing or supporting frame structures for all types of machinery and equipment. In combination with circular pipes, these sections also lend themselves to countless other applications in modern steel construction.

We offer coatings and linings for our HFI steel pipe with custom-tailored materials and processes optimally suited to soil conditions and media everywhere.

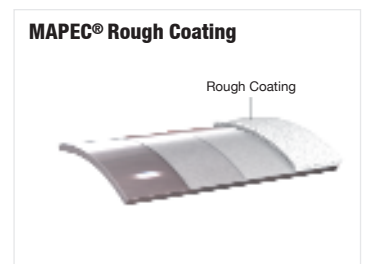
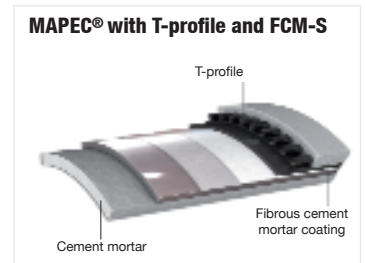
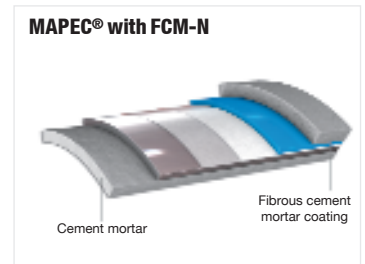
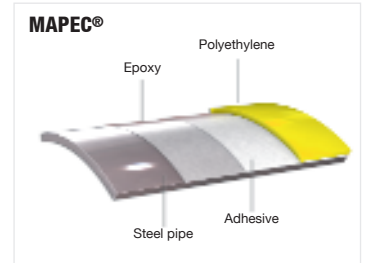
The MAPEC® polyethylene (PE), polypropylene (PP) and Polyamid (VESTAMID®) coatings developed by Salzgitter Mannesmann Line Pipe protect the pipe safely against corrosion and mechanical damage. They are available in standard (n) or increased (v) thicknesses. On request, we can also supply line pipe with customized coating thicknesses to match individual project requirements.

MAPEC® coating with axial PE/PP-ribbing provides additional protection against mechanical stresses. Pipes coated in this way can, for example, be pulled into existing pipelines in the course of revamp projects

Our additional FCM (fibrous cement mortar) coating provides even more effective protection against e.g. the stresses encountered when pipes are laid in rocky terrain. Compared with smooth PE/PP, this coating increases the pipe's impact resistance many times over. Should this not suffice, we recommend our PE/PP T-profile in combination with an FCM-S coating. This pipe protection system ensures that the outer cement coating remains firmly fixed to the pipe even under extreme loads.

Our epoxy flow coat lining reduces friction in gas line pipe significantly, resulting in substantial energy savings, especially in gas transmission lines of great lengths. Cement mortar lining has proved itself particularly in water pipelines. It reduces friction on the pipe inside wall, protects it against corrosion and prevents incrustation.

Rough MAPEC®-PE- and PP-coatings round off our range of coatings and linings. This special coating type is used either for its non-slip property when pipes have to be walked on, or to prepare offshore line pipe for a heavy coat of concrete.



Salzgitter Mannesmann Line Pipe GmbH
In der Steinwiese 31
57074 Siegen
Germany
Phone: +49 271 691-0
Fax: +49 271 691-299

Postal address:
Postfach 12 01 52
57022 Siegen
Germany

info@smlp.eu
www.smlp.eu