

# **SAW Steel Pipe**

#### What is SAW?

Submerged arc welding (SAW) is a common arc welding process.

SAW pipe is made of hot rolled coiled steel by automatic submerged arc weld under normal atmospheric temperature. All the pipes are produced according to API Spec 5L, ASTM A252-89 standard. These pipes mainly used in petroleum and natural gas industry to transport flammable and non-flammable liquid and steel construction.

SAW means submerged arc weld ,it can be classified into LSAW and SSAW.

**SSAW** pipe full name is Spiral Submerged arc welding pipe. The pipe is formed by spiral submerged arc welding technology which is called SSAW pipe. Generally speaking, when it comes to the same standard and steel grade, the price of SSAW pipe is cheaper or lower than ERW pipe and LSAW pipe. The strength is higher than the straight seam welded pipe.

**LSAW** (Longitudinal double submerge arc welding) carbon steel pipe is a type of SAW pipe made of steel plates that were hot rolled by JCOE or UOE forming technology. JCOE technology represents the shaping and forming processes involved during manufacturing as well as the inner and outer welding and cold expansion carried out after welding.

When compared to UOE LSAW steel pipes, LSAW pipe manufacturers in China can produce more sizes as thus: OD 406 mm - 1829 mm, thickness 6 mm - 23 mm, pipe length 2 m - 18 m with the LSAW pipe having superiority.

















## **API 5 L SSAW Steel Pipes**



Certification	ISO 9001						
Standard	API 5L						
Grade	Gr.B/X42/ X46/ X52/ X56/ X60/ X65						
Out Diameter (mm)	219 - 3500 mm						
Wall Thickness (mm)	6 - 25 mm						
Length (m)	6M/ 12M /SRL/ DRL or Customized						
Usage	Water transfer pipes/ Oil pipes and Gas pipes						
Surface	Bare/ Black/ Galvanized/ /FBE/ 3PE/ 3PP, etc						

#### **SSAW Steel Pipes Size**

SSAW steel pipe, also known as spiral submerged arc welded steel pipe, is a spiral welded steel pipe produced by double-sided submerged arc welding. Spiral welded pipes are formed using narrower sheets or hot rolled coils, which greatly reduces their production costs. The spiral welding process allows the production of large diameter pipes suitable for transporting large quantities of oil and gas.

OD		Wall Thickness(mm)																		
(mm )	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
219.1	•	•	•	•																
273	•	•	•	•																
323.9	•	•		•	•	•	•													
325	•		•	•	•	•	•													
355.6	•	•	•	•	•	•	•													
377	•	•	•	•	•	•	•	•												
406.4	•	•	•	•	•	•	•	•												
426	•	•	•	•	•	•	•	•												
457	•	•	•	•	•	•	•	•												
478	•	•	•	•	•	•	•	•												
508	•	•	•	•	•	•	•	•	•											
529	•	•	•	•	•	•	•	•	•											
630	•	•	•	•	•	•	•	•	•	•										
711	•	•	•	•	•	•	•	•	•	•	•									
720	•	•	•	•	•	•	•	•	•	•	•									
813		•	•	•	•	•	•	•	•	•	•	•	•							
820		•	•	•	•	•	•	•	•	•	•	•	•							
920			•	•	•	•	•	•	•	•	•	•	•							













OD		Wall Thickness(mm)																		
(mm )	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1020			•	•	•	•	•	•	•	•	•	•	•	•	•					
1220			•	•	•	•	•	•	•	•	•	•	•	•	•					
1420					•	•	•	•	•	•	•	•	•	•	•					
1620						•	•	•	•	•	•	•	•	•	•					
1820							•	•	•	•	•	•	•	•	•					
2020							•	•	•	•	•	•	•	•	•					
2220							•	•	•	•	•	•	•	•	•					
2500								•	•	•	•	•	•	•	•	•	•	•	•	•
2540								•	•	•	•	•	•	•		•	•	•	•	•
3500									•	•	•	•	•	•	•	•	•	•	•	•



# **EN 10219 SSAW Steel Pipes**



Certification	ISO 19001/ TUV Turingen e.V/ FPC						
Standard	EN 10219						
Grade	S235JRH/ S275JOH/ S275J2H/ S355JOH /S355J2H						
Out Diameter (mm)	8" - 48" ( DN25 - DN1200)						
Wall Thickness (mm)	2 - 25 mm						
Length (m)	6M/ 12M or customized						
Surface	Black/ Vanish/ Galvanized, etc						

## **SSAW Steel Pipes Size**

Outs	ide Dia	meter	Tube weight in kg/m with wall thickness												
	(O.D)		(mm)												
DN	in.	mm	4	5	6	6.3	8	10	12	12.5	16	20	25	30	
200	8"	219.1	21.22	26.40	31.53	33.06	41.65	51.57	61.29	63.69					
225	9"	244.5		29.53	35.29	37.01	46.66	57.83	68.81	71.52					
250	10"	273		33.05	39.51	41.44	52.28	64.86	77.24	80.30					
300	12"	323.9		39.32	47.04	49.34	62.32	77.41	92.30	95.99					
350	14"	355.6		43.23	51.73	54.27	68.58	85.23	101.7	105.8	134.0	165.5			
400	16"	406.4			59.25	62.16	78.60	97.76	116.7	121.4	154.0	190.6	235.1		
450	18"	457			66.73	70.02	88.58	110.2	131.7	137.0	174.0	215.5	266.3	315.9	
500	20"	508			74.28	77.95	98.65	122.8	146.8	152.7	194.1	240.7	297.8	353.6	
600	24"	610			89.37	93.80	118.8	148.0	177.0	184.2	234.4	291.0	360.7	429.1	
700	28"	711			104.3	109.5	138.7	172.9	206.9	215.3	274.2	340.8	422.9	503.8	
750	30"	762			111.9	117.4	148.8	185.5	222.0	231.0	294.4	366.0	454.4	541.6	
800	32"	813					158.8	198.0	237.0	246.8	314.5	391.1	485.8	579.3	
900	36"	914					178.7	222.9	266.9	277.9	354.3	440.9	548.1	654.0	
1000	40"	1016					198.9	248.1	297.1	309.3	394.6	491.3	611.0	729.5	
1050	42"	1067						260.7	312.2	325.1	414.7	516.4	642.4	767.2	
1150	46"	1168						285.6	342.1	356.2	454.6	566.2	704.7		
1200	48"	1219						298.2	357.2	371.9	474.7	591.4	736.1		













# **API 5 L LSAW Steel Pipes**



Certification	ISO 9001						
Standard	API 5L						
Grade	Gr.B/X42/ X46/ X52/ X56/ X60/ X65						
Out Diameter (mm)	16" - 72"						
Wall Thickness (mm)	6 - 23 mm						
Length (m)	6M/ 12M /SRL/ DRL or Customized						
Usage	Water transfer pipes/ Oil pipes and Gas pipes						
Surface	Bare/ Black/ Galvanized/ /FBE/ 3PE/ 3PP, etc						

### **LSAW Steel Pipes Size**

LSAW pipe also named as JCOE pipe by manufacturing procedures, forms in J Shape – C Shape – O Shape and E Cold Expansion.

0	.D.	W.T.											
				Min.Y	ield Strength	(Mpa)							
Inch	mm	245(B)	290(X42)	360(X52)	415(X60)	450(X65)	485(X70)	555(X80)					
16	406	6.0-14.0	6.0-13.0	6.0-12.0	6.0-11.0	6.0-10.5	6.0-10.0	6.0-9.0					
18	457	6.0-15.0	6.0-14.0	6.0-13.0	6.0-12.0	6.0-11.5	6.0-11.0	6.0-10.0					
20	508	6.0-16.0	6.0-15.0	6.0-14.0	6.0-13.0	6.0-12.5	6.0-12.0	6.0-11.0					
22	559	6.0-17.0	6.0-16.0	6.0-15.0	6.0-14.0	6.0-13.5	6.0-13.0	6.0-12.0					
24	610	6.0-18.0	6.0-17.0	6.0-16.0	6.0-15.0	6.0-14.5	6.0-14.0	6.0-13.0					
26	660	6.0-19.0	6.0-18.0	6.0-17.0	6.0-16.0	6.0-15.0	6.0-15.0	6.0-14.0					
28	711	6.0-20.0	6.0-19.0	6.0-18.0	6.0-17.0	6.0-16.5	6.0-16.0	6.0-15.0					
30	762	7.0-21.0	7.0-20.0	7.0-19.0	7.0-18.0	7.0-17.5	7.0-17.0	7.0-16.0					
32	813	7.0-22.0	7.0-21.0	7.0-20.0	7.0-19.0	7.0-18.5	7.0-18.0	7.0-17.0					
34	864	7.0-23.0	7.0-22.0	7.0-21.0	7.0-20.0	7.0-19.5	7.0-19.0	7.0-18.0					
36	914	8.0-24.0	8.0-23.0	8.0-22.0	8.0-21.0	8.0-20.5	8.0-20.0	8.0-19.0					
38	965	8.0-25.0	8.0-24.0	8.0-23.0	8.0-22.0	8.0-21.5	8.0-21.0	8.0-20.0					
40	1016	8.0-26.0	8.0-25.0	8.0-24.0	8.0-23.0	8.0-22.5	8.0-22.0	8.0-21.0					
42	1067	8.0-26.0	8.0-25.0	8.0-24.0	8.0-23.0	8.0-22.5	8.0-22.0	8.0-21.0					
44	1118	9.0-27.0	9.0-26.0	9.0-24.5	9.0-23.5	9.0-22.8	9.0-22.0	9.0-21.0					
46	1168	9.0-27.0	9.0-26.0	9.0-24.0	9.0-23.5	9.0-22.8	9.0-22.0	9.0-21.0					
48	1219	9.0-28.0	9.0-27.0	9.0-25.4	9.0-24.0	9.0-23.5	9.0-23.0	9.0-22.0					
52	1321	9.0-28.0	9.0-27.0	9.0-25.4	9.0-24.2	9.0-23.5	9.0-23.0	9.0-22.0					
56	1422	10.0-29.0	10.0-28.0	10.0-26.0	10.0-24.5	10.0-23.8	10.0-23.0	10.0-22.0					
60	1524	10.0-29.0	10.0-28.0	10.0-26.0	10.0-24.5	10.0-23.8	10.0-23.0	10.0-22.0					
64	1626	10.0-30.0	10.0-29.0	10.0-27.0	10.0-25.4	10.0-24.8	10.0-24.0	10.0-23.0					
68	1727	10.0-30.0	10.0-29.0	10.0-27.0	10.0-25.4	10.0-24.8	10.0-24.0	10.0-23.0					
72	1829	10.0-30.0	10.0-29.0	10.0-27.0	10.0-25.4	10.0-24.8	10.0-24.0	10.0-23.0					







