

JIS Seamless Pipe

Steel Pipe- Seamless Pipe- JIS Seamless Pipe- 【Steel Grade】			
Standard No	Steel Grade	Standard Name	Dimension Range
JIS G3429	STH38, STH55, STH67	Seamless Steel Tubes for High Pressure Gas Cylinder	
JIS G3439	STO-G, STO-H, STO-J, STO-N, STO-C, STO-D, STO-E	Seamless Steel Oil Well Casing, Tubing and Drill Pipe	
JIS G3441	SCr 420TK, SCM415TK, SCM418TK, SCM420TK, SCM430TK, SCM435TK, SCM440TK	Alloy Steel Tubes for General Structural Purpose	
JIS G3444	STK 30, STK 41, STK 50, STK 51, STK 55	Carbon Steel Tubes for General Structural Purpose	21.7-1016.0 mm
JIS G3445	STKM11A, STKM12A, STKM12B, STKM12C, STKM13A, STKM13B, STKM13C, STKM14A, STKM14B, STKM14C, STKM15A, STKM15C, STKM16A, STKM16C, STKM17A, STKM17C, STKM18A, STKM18B, STKM18C, STKM19A, STKM19C, STKM20A	Carbon Steel Tubes for Machine Structural Purposes	
JIS G3454	STPG 38, STPG 42	Carbon Steel Pipes for Pressure Service	10.5-660.4 mm
JIS G3455	STS 38, STS 42, STS 49	Carbon Steel Pipes for High Pressure Service	10.5-660.4 mm
JIS G3456	STPT 38, STPT 42, STPT 49	Carbon Steel Pipes for High Temperature Service	10.5-660.4 mm
JIS G3458	STPA 12, STPA 20, STPA 22, STPA 23, STPA 24, STPA 25, STPA 26	Alloy Steel Pipes for Service	10.5-660.4 mm
JIS G3460	STPL 39, STPL 46, STPL 70	Steel Pipes for Low Temperature Service	10.5-660.4 mm
JIS G3461	STB 35, STB 42, STB 52	Carbon Steel Boiler and Heat Exchanger Tubes	15.9-139.8 mm
JIS G3462	STBA12, STBA13, STBA20, STBA22, STBA23, STBA24, STBA25, STBA26	Alloy Steel Boiler and Heat Exchanger Tubes	15.9-139.8 mm

JIS Seamless Pipe

JIS G3464	STBL 39, STBL46, STBL 70	Steel Heat Exchanger Tubes for Low Temperature Service	15.9-50.8 mm
JIS G3465	STM-C55, STM-C65, STM-R60, STM-R70, STM-R80, STM-R85	Seamless Steel Tubes for Drilling	For Casing: 43-142 mm For Hollow Pipes: 34-180 mm For Drilling: 33.5-50 mm
JIS G3467	STF 42, STFA12, STFA22, STFA23, STFA24, STFA25, STFA26	Steel Tubes for Fired Heater	60.5-267.4 mm

Steel Pipe- Seamless Pipe- JIS Seamless Pipe- 【Dimension】							
Outside Diameter -“D” (mm)	Wall Thickness -“S” (mm)		Outside Diameter -“D” (mm)	Wall Thickness -“S” (mm)		Outside Diameter -“D” (mm)	Wall Thickness -“S” (mm)
Calculation of Unit Weight: W= 0.02466 * S * (D-S)							
10.5	1.7-2.4		57.1	2.0-12.5		139.8	3.6-18.0
13.8	2.2-3.0		60.5	2.0-12.5		142.0	4.5
15.9	1.2-2.9		63.0	3.0		144.0	5.25
17.3	2.3-3.2		63.5	2.3-12.5		165.2	4.5-18.2
19.0	1.2-2.9		64.0	4.75		180.0	6.00
21.7	1.2-4.7		65.0	2.3-12.5		190.7	4.5-7.0
25.4	1.2-3.5		70.0	2.3-12.5		216.3	4.5-23.0
27.2	1.2-5.5		73.0	3.0		267.4	6.0-28.6
31.8	1.2-4.5		74.0	4.75		318.5	6.0-33.3
33.5	5.25		76.3	2.3-12.5		355.6	6.3-35.7
34.0	1.6-6.4		82.6	3.2-12.5		406.4	6.4-40.5
38.1	1.6-5.5		83.0	3.0		457.2	6.4-45.2
40.5	4.75		84.0	4.75		500.0	9.0-14.0
42.0	5.0		88.9	3.2-12.5		508.0	6.4-50.0
42.7	2.0-6.4		89.1	4.5-11.1		558.8	6.4-54.0
43.0	3.0		97.0	3.5		600.0	9.0-16.0
44.0	4.75		99.0	5.25		609.6	6.4-59.5
45.0	2.0-6.5		101.6	3.2-12.7		660.4	7.9-64.2
48.6	2.0-7.1		112.0	3.5		700.0	9.0-16.0
50.0	6.5		114.0	5.25		711.2	9.0-22.0
50.8	2.0-12.5	114.3	3.2-14.0	812.8	9.0-22.0		
53.0	3.0	127.0	4.0-12.5	914.4	12.0-22.0		
54.0	2.0-12.5	129.0	5.25	1016.0	12.0-22.0		

JIS Seamless Pipe

Steel Pipe- Seamless Pipe- JIS Seamless Pipe- 【Dimension Tolerance】

Table 1 Tolerance on Outside Diameter in JIS G3441, JIS G3444, JIS G3445

Application	Tolerance on Outside Diameter (mm)	
JIS G3441 JIS G3444 JIS G3445	≤50	±0.5
	>50	±1%
JIS G3441 JIS G3444 JIS G3445	≤50	±0.25
	>50	±0.5%
JIS G3441 JIS G3445	≤25	±0.12
	>25-40	±0.15
	>40-50	±0.18
	>50-60	±0.20
	>60-70	±0.23
	>70-80	±0.25
	>80-90	±0.30
	>90-100	±0.40
	>100	±0.5%
JIS G3441	≤13	±0.25
	>13-25	±0.40
	>25-40	±0.60
	>40-65	±0.80
	>65-90	±1.00
	>90-140	±1.20
	>140	By agreement

Table 2 Tolerance on Wall Thickness in JIS G3441, JIS G3444, JIS G3445

Application	Tolerance on Wall Thickness (mm)	
JIS G3441 JIS G3444 JIS G3445	≤4	-0.5, +0.6
	>4	-12.5%, +15%
JIS G3441 JIS G3444 JIS G3445	≤3	±0.3
	>3	±10%
JIS G3441 JIS G3445	≤2	±0.15
	>2	±8%

JIS Seamless Pipe

Table 3 Tolerance on Outside Diameter and Wall Thickness in JIS G3454

Application	Tolerance on Outside Diameter		Tolerance on Wall Thickness	
Hot Rolled Seamless Pipes	<40A	±0.5mm	≤4mm	+0.6mm -0.5%
	>50A, <125A	±1%		
	150A	±1.6mm	>4mm	+15% -12.5%
	>200A	±0.8%		
	More than 350mm, the Tolerance is ±0.5%			
Cold Drawn Seamless Pipes and Electric Resistant Welded Pipes	<25A	±0.3mm	≤3mm	±0.3mm
	>32A	±0.8%	>3mm	±10%
	But more than 350mm, the Tolerance is ±0.5%			

Table 4 Tolerance on Outside Diameter and Wall Thickness in JIS G3455, JIS G3456, JIS G3458, JIS G3460

Application	Tolerance on Outside Diameter		Tolerance on Wall Thickness	
Hot Rolled Seamless Pipes	≤50mm	±0.5mm	≤4mm	±0.5mm
	>50-160mm	±1%		
	>160-200mm	±1.6mm	>4mm	±12.5%
	>200mm	±0.8%		
	More than 350mm, the Tolerance is ±0.5%			
Cold Drawn Seamless Pipes and Electric Resistant Welded Pipes	≤40mm	±0.3mm	≤2mm	±0.2mm
	>40mm	±0.8%	>2mm	±10%
	More than 350mm, the Tolerance is ±0.5%			

Table 5 Tolerance on Outside Diameter in JIS G3461, JIS G3462, JIS G3464

Outside Diameter	Tolerance on Outside Diameter				
	Hot Rolled Seamless Pipes	Seamless Pipes Through Quench and Normalized	Cold Drawn Seamless Pipes through the Hot Treatment Except Quench and Normalized	Electric Welded Pipes Except Cold Drawn	Cold Drawn Electric Welded Pipes

JIS Seamless Pipe

mm					
≤25	+0.4 -0.8	±0.25	±0.10	±0.15	±0.10
>25-40		±0.25	±0.15	±0.20	±0.15
>40-50		±0.25	±0.20	±0.25	±0.20
>50-60		±0.25	±0.25	±0.30	±0.25
>60-80		±0.30	±0.30	±0.40	±0.30
>80-100		±0.40	±0.40	-0.60, +0.40	±0.40
>100-120	+0.4	-0.60, +0.40	-0.60, +0.40	-0.80, +0.40	-0.60, +0.40
>120-160	-1.2	-0.80, +0.40	-0.80, +0.40	-1.00, +0.40	-0.80, +0.40
>160-200	-1.8, +0.4	-1.20, +0.40	-1.20, +0.40	-1.20, +0.40	-1.20, +0.40
>200	-2.4, +0.4	-1.60, +0.40	-1.60, +0.40	-1.60, +0.40	-1.60, +0.40

Table 6 Tolerance on Wall Thickness in JIS G3461, JIS G3462, JIS G3464

Wall Thickness (mm)	Hot Rolled Seamless Pipe		Cold Drawn Seamless Pipe		Electric Welded Pipe	
	Outside Diameter, mm		Outside Diameter, mm		Outside Diameter, mm	
	≤100	>100	≤40	>40	≤40	>40
	(%)					
≤2	—	—	-0, +0.4mm	+22 -0	-0, +0.3mm	+18 -0
>2-2.4	-0, +40	—	+20 -, 0			
>2.4-3.8	-0, +35	-0, +35				
>3.8-4.6	-0, +33	-0, +33				
>4.6	-0, +28	-0, +28				

Table 7 Tolerance on the Length in JIS G3461, JIS G3462, JIS G3464

Item		Tolerance on Length
OD<50mm	<7m	-0, +7mm
	≥7m	Every 3m increase in length, the plus tolerance shall be increased by 3mm with a maximum of 15mm.
OD≥50mm	<7m	-0, +10mm
	≥7m	Every 3m increase in length, the plus tolerance shall be increased by 3mm with a maximum of 15mm.
OD: Outside Diameter		

Table 8 Tolerance on Outside Diameter in JIS G3465

Application	Tolerance on Outside Diameter (mm)	
Hot Rolled	≤50	±0.5
	>50	±1%
Cold Drawn	≤40	±0.2