

DIN17175

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•Production Standard of DIN17175

•DIN17175

DIN 17175 is a German standard for seamless steel tubes. These pipes are ideal for manufacturing steam boilers, pipes, pressure vessels, and instruments that operate at temperatures up to 600° C. Our DIN17175 pipes are crafted from heat-resistant steels, making them a reliable choice for industries such as power generation, petrochemical, and chemical industries.

•Dimensions and Sizes of DIN17175

Standard	DIN17175
Usage	Steel possessing good mechanical properties even under long-time stressing at high temperature, up to 600°C , shall be regarded as being heat-resistant at
	high temperatures, for the purpose of this standard.
Out Diameter	21mm-914mm
Wall Thickness	SCH10,SCH20,SCH30,SCH40,SCH60,SCH80,SCH160,SCHXXS
Length	3M-12M or Customized
Pipe End	Plain End, Bevel End, Thread...
Pipe Surface	Oil-dip, Varnish, Passivation, Phosphating, Shot Blasting.

Manufacturing	The steel pipe to which this standard relates may be produced by hot rolling, cold rolling, hot pressing, hot drawing or cold drawing.							
	The tube steel can be smelted in a flat furnace or an electric furnace according to the oxygen blowing method, and all steels should be cast in a static manner.							
Grade	St35.8	St45.8	15Mo3	13CrMo4 4	10CrMo91 0	—	—	—
Chemical	Grade	C	Mn	P	S	Si	Cr	Mo
Composition %	St35.8	≤0.17	0.40-0.8 0	≤0.40	≤0.040	0.1-0.35	/	/
	St45.8	≤0.21	0.40-1.2 0	≤0.40	≤0.040	0.1-0.35	/	/
	15Mo3	0.12-0.2 0	0.04-0.8 0	≤0.030	≤0.030	0.10-0.3 5	—	0.25-0.3 5
	13CrMo44	0.10-0.1 8	0.04-0.7 0	≤0.030	≤0.030	0.10-0.3 5	0.70-1.1 0	0.44-0.6 5
	10CrMo91 0	0.08-0.1 5	0.04-0.7 0	≤0.030	≤0.030	≤0.50	2.00-2.5 0	0.90-1.2 0
	14MoV63	0.10-0.1 8	0.40-0.7 0	≤0.025	≤0.020	0.1-0.35	0.30-0.6 0	0.50-0.7 0
	12Cr1MoV	0.08-0.1 5	0.40-0.7 0	≤0.025	≤0.020	0.17-0.3 7	0.90-1.2 0	0.25-0.3 5
Mechanical Property	Grade	Tensile Strength(Mpa)		Yield Strength(Mpa)			Elongation(%)	
	St35.8	360-480		≥235			≥25	
	St45.8	410-530		≥255			≥21	
	15Mo3	450-600		≥270			≥20	
	13CrMo44	440-590		≥290			≥20	
	10CrMo91 0	450-600		≥280			≥18	
	14MoV63	460-610		≥310			≥18	
	12Cr1MoV	690-840		≥490			≥14	
Tolerance	Out diameter	Hot roll steel pipe	OD ≤ 100mm				± 0.75%(Min ± 0.5mm)	
			OD> 100~ 320mm				± 0.9%	
		Cold drawn steel pipe	OD ≤ 120mm				± 0.6%(Min ± 0.25mm)	
	Wall Thickness	OD≤130mm	WT ≤ 2Sn				+15%~-10%	
			WT > 2Sn~4Sn				+12.5%~-10%	
			WT > 4Sn				± 9%	
			130<OD≤320mm				WT ≤ 0.05OD	

			0.05OD < WT ≤ 0.11OD	± 12.5%
			WT > 0.11OD	± 10%
			Note: Sn–Normal wall thickness according DIN2448	

●Chemical Composition of DIN17175

Elements	Grade A	Grade B	Grade C
Carbon max. %	0.25	0.3	0.35
Manganese %	0.27 to 0.93	0.29 to 1.06	0.29 to 1.06
Phosphorous, max. %	0.025	0.025	0.025
Sulfur, max. %	0.025	0.025	0.025
Silicon, min. %	0.1	0.1	0.1

●Mechanical Properties Tensile Strength and Yield Strength of DIN17175

	Grade A	Grade B	Grade C
Tensile Strength, min., psi	48,000	60,000	70,000
Yield Strength, min., psi	30,000	35,000	40,000