

ASTM A451/ASME SA451 STANDARD SPECIFICATION FOR CENTRIFUGALLY CAST AUSTENITIC STEEL PIPE FOR HIGH TEMPERATURE SERVICE¹

1. Scope

1.1 This specification² covers austenitic alloy steel pipe for use in high-temperature, corrosive, or nuclear pressure service.

1.2 Several grades of austenitic stainless steel are covered as indicated in Table 1.

1.3 Optional supplementary requirements are provided when additional testing may be required.

1.4 The values stated in inch-pound units are to be regarded as the standard.

Note 1 - This specification is not intended to cover centrifugal pipe made from alloys containing more than 0.20% carbon, such as are covered by Specification A297.

Material Comparison Tables (ASTM, KS, JIS, DIN, BS, NF, UNI)

ASTM Standard	UNS NO.	KOREA/JAPANESE			GERMAN				BRITISH			FRENCH			ITALIAN		
		KS/JIS Symbol	KS/JIS Number	Remarks	DIN Type	DIN Number	Material Number	Remarks	B.S Number	B.S Grade	Remarks	AFNOR Type	NF Number	Remarks	UNI Type	UNI Number	Remarks
A 451 Centrifugally Cast Austenitic Steel Pipe for High Temperature Service																	
Grade CPF 8	J92600			(3)	G-X6 CrNi 18 9	17445	1.4308	(3b)	4534	1	(3a)			(3)			
Grade CPF 8C	J92710			(3)	G-X7 CrNiNb 18 9	17445	1.4552	(3b)			(3)			(3)			(3)
Grade CPF 8M	J92900			(3)	G-X6 CrNiMo 18 9	17445	1.4408	(3b)	4534	3	(3a)			(3)			
Grade CPF 20	J94202			(3)	G-X15 CrNi 25 20		1.4840	WBL-595(3b)	4534	7	(3a)			(3)			