

NF A49-211-89 STEEL TUBES SEAMLESS PLAIN END UNALLOYED STEEL TUBES FOR FLUID PIPING AT ELEVATED TEMPERATURES**1. Chemical Composition**

Grade	Mfg. Process	Chemical Composition (%)								
		C	Si	Mn	P	S	Ni	Cr	Mo	Others
TUE220	S	0.15Max	0.30Max	0.80Max	0.025Max	0.025Max	-	-	-	-
TUE250	S	0.21Max	0.30Max	1.00Max	0.025Max	0.025Max	-	-	-	-
TUE275	S	0.23Max	0.30Max	1.35Max	0.025Max	0.025Max	-	-	-	-

2. Mechanical Properties

Grade	Tensile Test MPa or N/mm ²		Remarks (Similar to JIS)
	Min Yield point	Tensile Strength	
TUE220	220	370~490	(STPT370)
TUE250	250	410~530	(STPT410)
TUE275	275	470~590	(STPT480)

JIS Number and Corresponding Foreign Standards

JIS			DIN			NF			ISO			Index Number
Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	
G3455	STPT370	C	1630	St37.4	C	A49-211	TU37b	C	2604/2	TS4	C	C003
	(STS38)					A49-410	TUE220b	C				
	STS411	C	1630	St44.4	C	A49-210	TU42b	C	2604/2	TS9	C	
	(STS42)					A49-410	TUE220b	C				
	STS480	C	1630	St52.4	C				2604/2	TS13		
	(STS49)											

JIS Number and Corresponding Foreign Standards

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