

NF A49-240-83 STEEL TUBES LONGITUDINALLY BUTT WELDING PLAIN END FOR PRESSUE VESSELS AND PIPE SYSTEMS USED AT LOW TEMPERATURES

1. Chemical Composition

Grade	Mfg. Process	Chemical Composition (%)								
		C	Si	Mn	P	S	Ni	Cr	Mo	Others
TS42BT	S, W	0.22Max	0.05~0.40	0.20~1.15	0.040Max	0.040Max	-	-	-	Nb 0.040Max
TS17N2	S, W	0.23Max	0.40Max	1.60Max	0.045Max	0.045Max	0.6~0.8	0.20Max	-	V 0.050Max
TS10N9	S, W	0.17Max	0.035Max	1.00Max	0.035Max	0.035Max	2.0~2.6	0.20Max	-	V 0.050Max

2. Mechanical Properties

Grade	Tensile Test MPa or N/mm ²	
	Min Yield point	Tensile Strength
TS42BT	240	415~510
TS17N2	325	490~640
TS10N9	245	450~600

JIS Number and Corresponding Foreign Standards

JIS			ASTM			BS			DIN			NF			ISO			Index Number
Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	Standard Number	Grade	Type	
G3454	STPG370 (STPG38)	C	A135	Gr A	C	3601	ERW360	C	1626	St37.0	C	A49-112	TS27b	C	559	TS4	C	C002
			A587	-	C	"	S360	C	1629	St37.0	C	A49-141	TS37a	C	2604/2	TS4	C	
									17172	StE210.7	C	A49-142	TS37a	C	2604/3	TW4	C	
												"	TS37b	C				
												A49-150	TSE235	C				
												A49-212	TS37c	C				
												A49-242	TS37c	C				
												A49-250	TAE24a	C				

												A49-400	TSE220	C				
	STPG410 (STPG42)	C	A135	GrB	C	3601	ERW410	C	1626	St44.0	C	A49-112	TS42b	C	559	TS9	C	
			A524	-	C	"	S410	C				A49-141	TS42b	C	2604/2	TW9	C	
												A49-212	TS42c	C	2604/3	TW9	C	
												A49-242	TS42c	C	3183	E24-1	C	
												A49-250	TSE26b	C	"	E24-2		
												A49-400	TSE250	C				