

上海越启实业有限公司
SHANGHAI YUEQI INDUSTRIAL CO., LTD

Common materials of Chinese steel rail

Q235	Mechanical property					Chemical composition					
	Yield strength		Tensile strength		Elongation	Hardness	C	Si	Mn	S	P
	MPa	kg/mm ²	MPa	kg/mm ²	min	HB		≤		≤	≤
	24	375-460	38-47	26%			0.12-0.22	0.3	0.30-0.70	0.05	0.045

55Q	Mechanical property					Chemical composition						
	Yield strength		Tensile strength		Elongation	Hardness	C	Si	Mn	S	P	Cu
	MPa	kg/mm ²	MPa	kg/mm ²	min	HB				≤	≤	≤
		685min			197	0.5-0.6	0.15-0.35	0.6-0.9	0.05	0.045	0.4	

50Mn	Mechanical property					Chemical composition								
	Yield strength		Tensile strength		Elongation	Hardness	C	Si	Mn	S	P	Cr	Ni	Cu
	MPa	kg/mm ²	MPa	kg/mm ²	min	HB				≤	≤	≤	≤	
	40	645min	66	13%	255max	0.48-0.56	0.17-0.37	0.70-1.00	0.035	0.035	0.25	0.3	0.25	

U71Mn	Mechanical property					Chemical composition						
	Yield strength		Tensile strength		Elongation	Hardness	C	Si	Mn	S	P	
	MPa	kg/mm ²	MPa	kg/mm ²	min	HB				≤	≤	
		880min			9%	260	0.65-0.77	0.15-0.35	1.10-1.50	0.04	0.04	