

Metallurgy

Cross Coupling Cable Protector clamps manufactured from Carbon Steel ASTM A216 grade WCB complete with pre-engaged swing bolt locking mechanism and hinge pin manufactured from ASTM A193 grade B7M

ASTM A216 Grade WCB Material specification

Chemical Composition Requirements:

C%	Mn%	Si%	P%	S%
0.30 Max	1.0 Max	0.60 Max	0.04 Max	0.045 Max

Heat Treatment: Normalizing

YS in MPa	UTS in MPa	Elongation	Hardness
250 Min	485 Min	22% Min	22 HRC Max

ASTM A193 Grade B7M

Chemical Composition Requirements:

C%	Mn%	P%	S%	Si%	Mo%	Cr%
0.37-0.49	0.65-1.10	0.035 Max	0.040 Max	0.15-0.35	0.15-0.25	0.75-1.20

Heat Treatment: - Quenching & Tempering.

YS in MPa	UTS in MPa	Elongation	Hardness
552 Min	690 Min	50% Min	22 HRC Max



Inspection and Testing

Each Cross-Coupling Cable undergoes the following tests before leaving the facility to ensure conformity to design, protector acceptance criteria and operational parameters.

Material Chemistry

Material chemistry of each casting heat lot is tested to ensure its conformity to predetermined material grades and the results are recorded and communicated to customer in the form of MTCs.

Mechanical Properties

Test coupons/pieces prepared from each casting lot undergoes mechanical testing to confirm its compliance to predetermined mechanical properties of material and the results are recorded and communicated to customer in the form of MTCs.