

## ThyssenKrupp N-A-XTRA® M 700 Structural Steel

Category : Metal , Ferrous Metal , Carbon Steel , Low Carbon Steel

### Material Notes:

This Material Specification applies to quenched and tempered heavy plates made of the special structural steel N-A-XTRA®. This steel can be supplied in 3 different grades with a minimum yield strength of 550, 620 and 700 MPa. All steel grades can be delivered in two qualities with different toughness properties. 1) Quality for low service temperature with minimum impact energy at - 40 °C (N-A-XTRA® M) in a thickness range from 3 to 100 mm. 2) Special quality for low service temperature with minimum impact energy at - 60 °C (classic N-A-XTRA®) in a thickness range from 3 to 50 mm. Application: The steels are used for welded constructions of all kinds, such as pressure vessels, penstocks, bridges and structures, as well as transport vehicles, mobile cranes, mining equipment, hoistings and earth moving equipment, which are utilized in different types of climatic conditions. If continuous yielding occurs, the yield strength is determined as Rp0.2. Information Provided by Thyssen Krupp

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ThyssenKrupp-N-A-XTRA-M-700-Structural-Steel.php](http://www.lookpolymers.com/polymer_ThyssenKrupp-N-A-XTRA-M-700-Structural-Steel.php)

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	760 - 930 MPa	110000 - 135000 psi	
	@Thickness >=65.0 mm	@Thickness >=2.56 in	
	770 - 940 MPa	112000 - 136000 psi	
	@Thickness 65.0 mm	@Thickness 2.56 in	
Tensile Strength, Yield	>= 650 MPa	>= 94300 psi	
	@Thickness >=65.0 mm	@Thickness >=2.56 in	
	>= 700 MPa	>= 102000 psi	
	@Thickness 65.0 mm	@Thickness 2.56 in	
Elongation at Break	>= 14 %	>= 14 %	
Charpy Impact	27.0 J	19.9 ft-lb	Transverse
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	30.0 J	22.1 ft-lb	Transverse
	@Temperature -20.0 °C	@Temperature -4.00 °F	
	30.0 J	22.1 ft-lb	Longitudinal
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	35.0 J	25.8 ft-lb	Transverse
	@Temperature 0.000 °C	@Temperature 32.0 °F	
	40.0 J	29.5 ft-lb	Longitudinal

Mechanical Properties	@Temperature -20.0 °C Metric	@Temperature -4.00 °F English	Comments
	50.0 J	36.9 ft-lb	Longitudinal
	@Temperature 0.000 °C	@Temperature 32.0 °F	

Component Elements Properties	Metric	English	Comments
Aluminum, Al	<= 1.5 %	<= 1.5 %	
Carbon, C	<= 0.20 %	<= 0.20 %	
Chromium, Cr	<= 1.5 %	<= 1.5 %	
Manganese, Mn	<= 1.6 %	<= 1.6 %	
Molybdenum, Mo	<= 0.60 %	<= 0.60 %	
Phosphorous, P	<= 0.020 %	<= 0.020 %	
Silicon, Si	<= 0.80 %	<= 0.80 %	
Sulfur, S	<= 0.010 %	<= 0.010 %	

## Contact Songhan Plastic Technology Co.,Ltd.

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