

ArcelorMittal FB 590 Hot rolled ferrite-bainite steel

Category : Metal , Ferrous Metal , Alloy Steel

Material Notes:

Available in the following: uncoated (HDT590F)Description: This range of hot-rolled high strength steels has been developed to meet weight reduction requirements. It comprises four strength levels: FB 450, 540, 560 and 590. This family of steels extends the HSLA range of micro-alloyed steels to include products combining high tensile strength (UTS) with excellent formability and hole expansion (stretch flangeability) based on their ferrite-bainite microstructure.Applications: These steels are cold-drawn. The main applications are:structural parts (longitudinal beams, cross beams, car-body and ground liason parts),wheels,mechanical parts (ground liason parts, gear boxes...).ArcelorMittal has an extensive database relating to the forming and service properties of the entire range of ferrite-bainite steels. To integrate these steels at the design stage, a team of experts is available to perform specific studies based on modeling or laboratory tests.Information provided by ArcelorMittal

Order this product through the following link:

http://www.lookpolymers.com/polymer_ArcelorMittal-FB-590-Hot-rolled-ferrite-bainite-steel.php

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	590 - 670 MPa	85600 - 97200 psi	
Tensile Strength, Yield	480 - 600 MPa	69600 - 87000 psi	
Elongation at Break	>= 16 %	>= 16 %	L₀=80 mm, th<3 mm
	>= 21 %	>= 21 %	L₀=5.65v ₀ mm, th<3 mm
Fatigue Strength	<= 490 MPa	<= 71100 psi	
	@# of Cycles 2.00e+6	@# of Cycles 2.00e+6	
	<= 490 MPa	<= 71100 psi	
	@# of Cycles 1.00e+7	@# of Cycles 1.00e+7	
	<= 550 MPa	<= 79800 psi	
	@# of Cycles 100000	@# of Cycles 100000	

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.10 %	<= 0.10 %	
Iron, Fe	>= 98.15 %	>= 98.15 %	as balance
Manganese, Mn	<= 1.6 %	<= 1.6 %	
Silicon, Si	<= 0.15 %	<= 0.15 %	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China