SONGHAN Plastic Technology Co., Ltd.

## **ArcelorMittal Speed 35-440 Electrical Steel**

Category : Metal , Ferrous Metal , Alloy Steel

## Material Notes:

Properties: The iCARe<sup>™</sup> Speed product family comes with guaranted losses at 400Hz and indicative maximum values at 700Hz. These values are representative of the steel's behaviour at high frequencies..Advantages: The Speed grades provide an excellent compromise between mechanical properties and lossesApplications: Speed has been developed for very high speed rotors. This enables manufacturers to make more compact machines for a given mechanical outputRecommendations for use: Speed grades can be used immediately after lamination punching. The effect of punching can be eliminated if a stress relief annealing is applied. This optimises the performance of the Speed grades in applications with fine teeth. It can also provide substantial performance improvements in the lower frequency range. To achieve these effects, a C5 type coating is advised. Speed stacks can be produced using any existing assembly technique such as interlocking or welding.Information provided by ArcelorMittal

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_ArcelorMittal-Speed-35-440-Electrical-Steel.php

Physical Properties	Metric	English	Comments
Density	7.60 g/cc	0.275 lb/in³	
Mechanical Properties	Metric	English	Comments
Hardness, Vickers	210 - 240	210 - 240	L direction
	210 - 240	210 - 240	T direction
Tensile Strength, Ultimate	570 - 620 MPa	82700 - 89900 psi	L direction
	590 - 640 MPa	85600 - 92800 psi	T direction
Tensile Strength, Yield	440 - 490 MPa	63800 - 71100 psi	L direction
	485 - 515 MPa	70300 - 74700 psi	T direction
Elongation at Break	20 - 30 %	20 - 30 %	L direction
	20 - 30 %	20 - 30 %	T direction

Magnetic Properties	Metric	English	Comments
Core Loss	<= 23.0 W/kg	<= 10.4 W/lb	at 1T, Guaranteed
	@Frequency 400 Hz	@Frequency 400 Hz	
	<= 60.0 W/kg	<= 27.2 W/lb	at 1T, Indicative
	@Frequency 700 Hz	@Frequency 700 Hz	

Descriptive Properties	Value	Comments
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Descriptive Properties	Value	Comments
Polarization	>1.51 T	at 2,500 A/m
	>1.62 T	at 5,000 A/m
	>1.72 T	at 10,000 A/m

## Contact Songhan Plastic Technology Co.,Ltd.

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