### SSAB Tunnplat Docol® 1200 DP High-strength Steel

Category : Metal , Ferrous Metal , Alloy Steel , Low Alloy Steel

#### Material Notes:

The steels are annealed at temperatures between 750ŰC and 850ŰC, depending on the grade of steel, and then are hardened by quenching in water. Tempering is the next stage, in which the steel is heated to 200-400ŰC and then acquires its final structure to which the steel owes it toughness and good formability. This unique annealing procedure produces a tempered martensitic structure that accounts for the high strength of the steel. Both annealing and tempering are carried out in an inert atmosphere to prevent the steel from oxidizing, and the steel strip runs through a pickling bath between quenching and tempering, in order to remove the thin oxide film formed in the quenching process.Comments: Docol - Cold Rolled Steel - Ultra high-strength steel (UHS). Property values are for cold-rolled steel; thicknesses 0.5 -1.6 mm.Applications: Tubes, Transport cages, Child seats for cars, Truck load stays, Venetian blinds, Washers, Hose clips, Clutch plates, Hedge cutters, Springs, Spades, Safes, Knives, Train seats, Ladders, Circlips, Saw blades, Chains, Bumpers, Bicycles, Containers, ClipsData provided by SSAB Tunnplat.

#### Order this product through the following link:

http://www.lookpolymers.com/polymer\_SSAB-Tunnplat-Docol-1200-DP-High-strength-Steel.php

Physical Properties	Metric	English	Comments
Density	7.87 g/cc	0.284 lb/in³	Estimated by MatWeb
Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	1200 - 1400 MPa	174000 - 203000 psi	
Tensile Strength, Yield	>= 1100 MPa	>= 160000 psi	After bake hardening
	950 - 1250 MPa	138000 - 181000 psi	
	@Strain 0.200 %	@Strain 0.200 %	
Elongation at Break	>= 4.0 %	>= 4.0 %	A <sub>80</sub>
Bend Radius, Minimum	>= 4.0 t	>= 4.0 t	90° bend

Component Elements Properties	Metric	English	Comments
Aluminum, Al	0.040 %	0.040 %	
Carbon, C	0.17 %	0.17%	
Iron, Fe	98 %	98 %	As remainder
Manganese, Mn	1.6 %	1.6 %	
Niobium, Nb (Columbium, Cb)	0.015 %	0.015 %	
Phosphorous, P	0.015 %	0.015 %	

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Silicon, Si	n 60 %	o 50 %	Comments
Component Elements Properties	Metric	English	
Sulfur, S	0.0020 %	0.0020 %	

## Contact Songhan Plastic Technology Co.,Ltd.

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