DOMEX® HIGH STRENGTH STEEL
Structural steel for sustainable & lightweight solutions.

HARDOX® WEAR PLATE
Wear plate for maximum payload & longer service life.

DOCOL® HIGH STRENGTH STEEL
Cold rolled steel for lightweight & safe components.

WELDOX® HIGH STRENGTH STEEL
Structural steel for heavy & demanding applications.

PRELAQ® COLORFUL BUILDING
Pre-painted steel for sustainable & durable buildings.

TOOLOX® ENGINEERING & TOOL STEEL
Ready-to-use engineering & tool steel for saving time to market.

Domex

Steel grade	Yield strength [MPa]	Tensile strength [MPa]		Elongation		Bending radius 90° bend			Thickness [mm]
				A_{80} [%] t < 3	A_5 [%] t ≥ 3				
	Min	Min	Max	Min	Min	t ≤ 3 mm	3 < t ≤ 6 mm	t > 6 mm	
Domex MC – Cold forming steels distinguished by high strength, excellent formability and weldability.									
Domex 460 MC	460	520	670	15	19	0.5 x t	0.7 x t	0.9 x t	2.00–12.00
Domex 500 MC	500	550	700	14	18	0.6 x t	0.8 x t	1.0 x t	2.00–12.00
Domex 550 MC	550	600	760	14	17	0.6 x t	1.0 x t	1.2 x t	2.00–12.00
Domex 600 MC	600	650	820	13	16	0.7 x t	1.1 x t	1.4 x t	2.00–10.00
Domex 650 MC	650	700	880	12	14	0.8 x t	1.2 x t	1.5 x t	2.00–10.00
Domex 700 MC	700[1]	750	950	10	12	0.8 x t	1.2 x t	1.6 x t	2.00–10.00
Domex 960	960	980			8		3.0 x t	3.0 x t	4.00–6.00
Domex 1100[2]	1100	1250			7		4.0 x t		3.00–6.00
Domex W – Domex 550 W and 700 W are high strength, weather resistant steels. They are characterised by good formability, impact toughness and weldability.									
Domex 550 W	550	600			18		1.0 x t	1.5 x t	2.00–6.10
Domex 700 W	700	750			12		2.0 x t		3.00–6.00

1. For thickness > 8 mm, may be 20 MPa lower.
2. New grade under development with preliminary specification.

Hardox

Steel grade	Hardness Nominal [HBW]	Impact toughness CVL typical 20 mm	Bending properties Transverse t < 8 mm R/t	Rel. service life interval[1]	CEV/CET[2] Typical 20 mm	Thickness [mm]
Hardox – Workshop friendly abrasion resistant wear plates for all purposes, enabling lighter, stronger and more durable applications.						
Hardox HiTuf	350	95 J – 40 °C[3]			0.55/0.36[3]	40–130[4]
Hardox 400[5]	400	45 J – 40 °C	2.5	1	0.41/0.28[7]	3–6
Hardox 400	400	45 J – 40 °C	2.5	1	0.43/0.29	4–130[4]
Hardox 450	450	40 J – 40 °C	3.5	1.1–4.0	0.47/0.34	3–80[6]
Hardox 450	450		4.0		0.39/0.31[8]	1–2
Hardox 500	500	30 J – 40 °C	4.0	1.3–5.6	0.62/0.41	4–80
Hardox 550	550	30 J – 40 °C		1.5–8.1	0.72/0.48	10–50
Hardox 600	600	20 J – 40 °C		1.8–12.3	0.73/0.55	8–50
Hardox Extreme	650 – 700	< 15 J – 40 °C		2.4–17.9	0.84/0.59	8–25

All plates are produced with AccuRollTech™ precision guarantee or closer.

1. Max/min sliding wear by SSAB WearCalc (mild steel 0.2–0.8).
2. CEV=C+Mn/6+(Cr+Mo+V)/5+(Cu+Ni)/15; CET=C+(Mn+Mo)/10+(Cr+Cu)/20+Ni/40
3. 70 mm
4. Thicknesses up to 160 mm are available upon request.
5. ≤ 1600 mm, preferred widths are 1260, 1500 or 1600 mm.
6. Thicknesses up to 120 mm are available upon request.
7. Typical values 3.00–6.00 mm
8. Typical values 0.70–2.10 mm

Docol

Steel grade	Yield strength [MPa]		Yield strength after bake hardening [MPa]	Tensile strength [MPa]		Elongation A_{80} [%]	Bending radius 90° bend	Thickness [mm]
	Min	Max	Min	Min	Max	Min	Min	Min
Docol LA – Cold-rolled high strength low alloyed steels for light weight structures.								
Docol 420 LA	420	520		470	590	17	0.25 x t	0.50–3.00
Docol 500 LA	500	620		570	710	14	0.50 x t	0.50–3.00
Docol Roll – Cold-rolled steels designed for roll forming.								
Docol Roll 800	600			800	950	10		0.50–2.10
Docol Roll 1000	850			1000	1200	5		0.50–2.10
Docol DP – Cold-rolled dual phase steels with a microstructure mix of ferrite and martensite giving good formability and high strength. DP steels are suitable for advanced forming such as pressing.								
Docol 500 DP	290	370	400	500	600	20	0 x t	0.50–2.10
Docol 500 DL	230	300	350	500	600	24	0 x t	0.50–2.10
Docol 600 DP	350	450	500	600	700	16	0 x t	0.50–2.10
Docol 600 DL	280	360	450	600	700	20	0 x t	0.50–2.10
Docol 600 GC	280	360	450	600	700	20	0 x t	0.50–2.10
Docol 800 DP	500	650	600	800	950	10	1.0 x t	0.50–2.10
Docol 800 DL	390	540	550	800	950	13	1.0 x t	0.50–2.10
Docol 1000 DP[1]	700	950	850	1000	1200	7	2.0 x t	0.50–2.10
Docol M – Fully martenistic steels, suitable for applications with very high demands of strength and weldability. Best choice for ultimate weight reduction.								
Docol 900 M[1]	700		900	900	1100	3	3.0 x t	0.50–2.10
Docol 1200 M[1]	950		1150	1200	1400	3	3.0 x t	0.50–2.10
Docol 1300 M[1]	1030	1300		1300	1500	3	3.0 x t	0.50–2.10
Docol 1400 M[1]	1150		1350	1400	1600	3	3.0 x t	0.50–2.10
Docol 1500 M[1]	1200			1500	1700	3	3.0 x t	0.51–2.00
Docol W – Weather resistant steels, creates a red oxide layer on the surface preventing the steel from corrosion, suitable for outdoor applications.								
Docol 700 W	700			800		5	2.0 x t	0.98–2.10
Docol Strap – Packaging strap steels delivered in quenched and tempered conditions.								
Docol Strap 800	750	900		750	900	15		
Docol Strap 930	930	1200		930	1200	12		
Dogal LA – Cold-rolled high strength low alloyed steels for light weight structures.								
Dogal 420 LAD	420	520		470	590	17	1.0 x t	0.60–2.50
Dogal 460 LAD	460	560		560	680	15	1.0 x t	0.80–2.00
Dogal 500 LAD	500	620		640	780	13	1.0 x t	0.80–2.00
Dogal H 550 LAD[2]	550	650		610	760	14	1.0 x t	2.00–2.50
Dogal H 700 LAD[2]	700	850		750	900	10	1.0 x t	2.00–2.50
Dogal DP – Galvanized dual phase steels with a microstructure mix of ferrite and martensite giving good formability and high strength. DP steels are suitable for advanced forming such as pressing.								
Dogal 500 DP	300	380	400	500	600	23	0.5 x t	0.80–2.00
Dogal 600 DP	350	480	500	600	700	16	1.0 x t	0.70–2.00
Dogal 800 DP	500	640	600	800	950	12	1.0 x t	0.80–2.00
Dogal 800 DPX	620	770	770	800	950	10	0.9 x t	0.80–2.00
Dogal 1000 DPX	800	1000		1000	1200	6	2.5 x t	1.00–2.00

1. Also available with electro galvanized surface.
2. Only available with hot-rolled substrate.

813en-GB-SSAB Product program-V3-2012. Confetti. Spreadcard.

Tech Support

Tech Support provides you with technical support over the phone and via e-mail. You will receive an answer straight away or at the latest within 24 hours. We welcome questions in any language and invite you to work closely with our Technical Managers and expert groups. Our aim is to simplify your work in design, materials selection, fatigue, deflection, bending, drilling, machining and welding.

Contact

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Weldox

Steel grade	Yield Strength [MPa] Min	Toughness CVT typical 20 mm	Bending properties Transverse t < 8 mm R/t	Tensile strength [MPa] Min	Tensile strength [MPa] Max	CEV/CET[1] typical	Thickness [mm]
Weldox – Versatile high strength structural steels, enabling lighter and more innovative structures.							
Weldox 700	700	165 J – 40 °C	1.5	780	930	0.43/0.29	4–140[2]
Weldox 900	900	88 J – 40 °C	2.5	940	1100	0.55/0.36	4–80[2]
Weldox 960	960	84 J – 40 °C	2.5	980	1150	0.55/0.37	4–50[2]
Weldox 1100	1100	67 J – 40 °C[3]	3.5	1250	1550	0.71/0.41	4–25[2]
Weldox 1300	1300	32 J – 40 °C[4]	4.0[5]	1400	1700	0.63/0.40	4–10

All plates are produced with AccuRollTech™ precision guarantee or closer.

1. CEV=C+Mn/6+(Cr+Mo+V)/5+(Cu+Ni)/15; CET=C+(Mn+Mo)/10+(Cr+Cu)/20+Ni/40 20 mm (8 mm above 800 MPa).
2. Thicker materials are available upon request, Weldox 700: 160 mm, Weldox 900: 120 mm, Weldox 960: 100 mm, Weldox 1100: 40 mm
3. For 6 mm
4. For 6 mm and half size test specimen.
5. t < 6: 3.5 t ≥ 6: 4.0

Prelaq

Customer offer	Customer segment	Steel grade	Paint system
Prelaq – Prepainted sheet steel in a rainbow of colors.			
Prelaq RWS	Manufacturers of effective and easy installed roof rainwater systems, based on double sided prepainted sheet steel.	FAX/PLX	Nova
Prelaq PLX/FA	Long strip roofing and fittings with strict demands on functionality, flexibility and appearance.	PLX/FAP	GreenCoat/ Nova/PVDF
Prelaq Energy	Energy saving objects, indoor and outdoor roofs and walls. Applications where low thermal movement is beneficial like doors and sandwich panels.	PLX/SUB 280/ SUB 350	Energy Exterior/ Energy Interior
Prelaq Profiling	Profiled sheet steel, steel roof tiles, casettes and sandwich panels.	SUB 280/ SUB 350/420YP	Nova/ Polyester/ Plastisol/PVDF

Zinc coatings available in 275–350 g/m².
The extensive color program can be found on the website www.prelaq.com.

Toolox

	Hardness guaranteed [HBW]	Impact energy guaranteed Min [J]	Yield strength $R_{p0.2}$ [MPa]*	Tensile strength R_m [MPa]*	Elongation A_5 [%]*	Compressive strength $R_{c0.2}$ [MPa]*	Impact energy [J]*	Thickness [mm]
Toolox 33 – A quenched and tempered tool steel, designed to have low residual stresses – resulting in good dimensional stability.								
-40 °C							27	
-20 °C							45	
+20 °C	275–325	35	850	980	16	800	100	
+200 °C			800	900	12	750	170	5–130
+300 °C						700	180	
+400 °C						590	180	
+500 °C						560		

	Hardness guaranteed [HBW]	Impact energy guaranteed Min [J]	Yield strength $R_{p0.2}$ [MPa]*	Tensile strength R_m [MPa]*	Elongation A_5 [%]*	Compressive strength $R_{c0.2}$ [MPa]*	Impact energy [J]*	Approximate Hardness [HRC]*	$R_{c0.2}$ [MPa] after 170 hrs soaking time at the actual temperature*	Thickness [mm]
Toolox 44 – A quenched and tempered tool steel with very low residual stresses. In spite of a hardness of 45 HRC it boasts very good machinability and is unmatched on the market.										
-40 °C							14			
-20 °C							19			
+20 °C	410–475	18	1300	1450	13	1250	30	45		
+200 °C			1200	1380	10	1120	60			5–130
+300 °C						1120	80			
+400 °C						1060	80		1060	
+500 °C						930			910	

The typical testing temperature for Toolox is room temperature.
All other values are tested randomly and they are for information only.
* Values are for guidance only.

Sales contacts

Find your local sales contact at
www.ssab.com

Certain restrictions apply to the product program.

This is an extract from the product data sheets and recommendations.

Consult www.ssab.com for complete recommendations and properties.