

PRODUCT PROGRAM

This program is a brief overview only. For detailed technical information please download our datasheets at www.docol.com

Steel family name	Steel grade name	Substrate (HR/CR)	Specification	UC	EG	GI	GA	ZA	Test Direction	Approximate mechanical limits for material selection purposes						
										Yield Strength (MPa)		Tensile Strength (MPa)		Elongation (A ₈₀ , %)	Elongation (A, %)	Hole Expansion (λ12, %)
										Min	Max	Min	Max	Min	Min	Typical
Martensitic steel (M)																
Docol 900M	DOCOL CR700Y900T-MS	CR	SSAB	■	■				L	700	1000	900	1100	3		
Docol 1100M	Docol CR860Y1100T-MS	CR	SSAB	■	■				L	860	1100	1100	1300	3	-	
Docol 1200M	Docol CR950Y1200T-MS	CR	SSAB	■	■				T	950	-	1200	1400	3	-	
	Docol HR900Y1180T-MS	HR	VDA 239-100:2016	■	■				L	900	1150	1180	1400	5	8	
Docol 1300M	Docol CR1030Y1300T-MS	CR	VDA 239-100:2016	■	■				L	1030	1330	1300	1550	3	-	
Docol 1400M	Docol CR1150Y1400T-MS	CR	SSAB	■	■				T	1150	-	1400	1600	3	-	
Docol 1500M	Docol CR1220Y1500T-MS	CR	VDA 239-100:2016	■	■				L	1220	1520	1500	1750	3	-	
	Docol HR1220Y1500T-MS	HR	SSAB	■	■				L	1220	1520	1500	1750	4	5	
Docol 1700M	Docol CR1350Y1700T-MS	CR	VDA 239-100:2016	■	■				L	1350	1700	1700	2000	3	-	
Docol 1900M		CR	SSAB	■	■											
Complex Phase (CP)																
Docol 600CP	Docol CR350Y600T-CP	CR	SSAB			■	■	■	L	350	500	600	740	16	-	
	HCT600C	CR	EN 10346:2015			■	■	■	L	350	500	600	-	16	-	
Docol 800CP	Docol CR570Y780T-CP	CR	VDA 239-100:2016	■		■	■	■	L	570	720	780	920	10	-	
	Docol HR660Y760T-CP	HR	VDA 239-100:2016	■		■			L	660	820	760	960	10	13	
	Docol HR800HER-75	HR	SSAB	■					L	660	820	760	960	11	14	
	Docol HR800HER-100	HR	SSAB	■					L	660	820	760	960	12	15	
	HCT780C	CR	EN 10338:2015	■					L	570	720	780	-	10	-	
	HCT780C	CR	EN 10346:2015			■	■	■	L	570	720	780	-	10	-	
	Docol Roll 800	CR	SSAB	■					T	600	750	800	950	10	-	
Docol 1000CP	Docol CR780Y980T-CP	CR	VDA 239-100:2016	■	■	■			L	780	950	980	1140	6	-	
	HCT980C	CR	EN 10338:2015	■	■				L	780	950	980	-	6	-	
	HCT980C	CR	EN 10346:2015			■			L	780	950	980	-	6	-	
	Docol HR800Y950T-CP	HR	SSAB	■	■				T	720	900	950	1050	-	9	
	Docol Roll 1000	CR	SSAB	■	■				T	800	950	980	1140	6	-	
	Docol Roll 1000 HY	CR	SSAB	■	■				T	850	-	1000	1200	5	-	
Docol 1200CP	Docol CR900Y1180T-CP	CR	VDA 239-100:2016	■	■				L	900	1100	1180	1350	5	-	
High Edge Ductility STEEL (HE)																
Docol 355HE	Docol HR355Y430T HE	HR	SSAB	■					L	355	-	430	540	19	23	110
Docol 420HE	Docol HR420Y480T HE	HR	SSAB	■					L	420	-	480	600	18	22	90
Docol 460HE	Docol HR460Y520T HE	HR	SSAB	■					L	460	-	520	640	16	20	80
Docol 500HE	Docol HR500Y550T HE	HR	SSAB	■					L	500	-	560	700	14	17	70

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										Yield Strength (MPa)		Tensile Strength (MPa)		Elongation (A _{80r} , %)	Elongation (A, %)	Hole Expansion (λ12, %)
										Min	Max	Min	Max	Min	Min	Typical
Dual Phase with High Formability STEEL (DH)																
Docol 600DH	Docol CR330Y590T-DH	CR	SSAB			■	■	■	L	330	430	590	700	26	-	
Docol 800DH	Docol CR440Y780T-DH	CR	VDA 239-100:2016			■	■	■	L	440	550	780	900	18	-	
Docol 1000DH	Docol CR590Y980T-DH	CR	SSAB			■	■		L	590	740	980	1180	14	-	
	Docol CR700Y980T-DH	CR	VDA 239-100:2016			■	■		L	700	850	980	1180	13	-	
Docol 1200DH	Docol CR850Y1180T-DH	CR	SSAB			■	■		L	850	1050	1180	1350	12	-	
Dual Phase steel (DP)																
Docol 500DP	Docol CR290Y490T-DP	CR	VDA 239-100:2016	■		■	■	■	L	290	380	490	600	24	-	
	HCT490X	CR	EN 10338:2015	■					L	290	380	490	-	24	-	
	HCT490X	CR	EN 10346:2015			■	■	■	L	290	380	490	-	24	-	
	Docol CR230Y500T-DL	CR	SSAB	■					T	230	300	500	600	24	-	
	Docol CR290Y500T-DP	CR	SSAB	■					T	290	370	500	600	20	-	
Docol 600DP	Docol CR330Y590T-DP	CR	VDA 239-100:2016	■		■	■	■	L	330	430	590	700	20	-	
	HCT590X	CR	EN 10338:2015	■					L	330	430	590	-	20	-	
	HCT590X	CR	EN 10346:2015			■	■	■	L	330	430	590	-	20	-	
	Docol CR280Y600T-DL	CR	SSAB	■					T	280	360	600	700	20	-	
	Docol CR350Y600T-DP	CR	SSAB	■					T	350	450	600	700	16	-	
Docol 800DP	Docol CR440Y780T-DP	CR	VDA 239-100:2016	■		■	■	■	L	440	550	780	900	14	-	
	HCT780X	CR	EN 10338:2015	■					L	440	550	780	-	14	-	
	HCT780X	CR	EN 10346:2015			■	■	■	L	440	550	780	-	14	-	
	Docol CR450Y780T-DP	CR	SSAB	■					L	450	550	780	900	15	-	
	Docol CR390Y800T-DL	CR	SSAB	■					T	390	-	800	950	13	-	
	Docol CR500Y800T-DP	CR	SSAB	■					T	500	650	800	950	10	-	
	Docol 800DPX	CR	SSAB			■			T	620	770	800	950	10	-	
Docol 1000DP	Docol CR590Y980T-DP	CR	VDA 239-100:2016	■	■	■	■	■	L	590	740	980	1130	10	-	
	Docol CR700Y980T-DP	CR	VDA 239-100:2016	■	■	■	■	■	L	700	850	980	1130	8	-	
	HCT980X	CR	EN 10338:2015	■	■				L	590	740	980	-	10	-	
	HCT980X	CR	EN 10346:2015			■	■	■	L	590	740	980	-	10	-	
	HCT980XG	CR	EN 10338:2015	■	■				L	700	850	980	-	8	-	
	HCT980XG	CR	EN 10346:2015			■	■	■	L	700	850	980	-	8	-	
	Docol CR700Y980T-DP-LCE	CR	SSAB	■	■	■	■	■	L	700	900	980	1130	8	-	
	Docol CR700Y1000T-DP	CR	SSAB	■	■				T	700	950	1000	1200	7	-	
	Docol 1000DPX	CR	SSAB			■			T	800	1000	1000	1200	6	-	
Docol 1200DP	Docol CR780Y1180T-DP	CR	SSAB			■	■		L	780	950	1180	1350	7	-	

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										Min	Max	Min	Max	Min	Min	Typical
Ferritic Bainitic steel (FB)																
Docol 600FB	Docol HR440Y580T-FB	HR	VDA 239-100:2016	■		■			L	440	600	580	700	15	17	
Docol 800FB	Docol HR600Y780T-FB	HR	VDA 239-100:2016	■					L	600	760	780	920	12	15	
Press Hardening Steel (PHS)																
Typical values for PHS																
Docol PHS 1500	Docol PHS CR1500	CR	SSAB	■					-	1100 ¹	-	1500 ¹	-	6	-	
	Docol PHS HR1500	HR	SSAB	■					-	1100 ¹	-	1500 ¹	-	10	-	
Docol PHS 1800	Docol PHS CR1800	CR	SSAB	■					-	1300 ¹	-	1800 ¹	-	6	-	
Docol PHS 2000	Docol PHS CR2000	CR	SSAB	■					-	1400 ¹	-	2000 ¹	-	5	-	
	Docol PHS HR2000	HR	SSAB	■					-	1400 ¹	-	2000 ¹	-	5	-	
High Strength Low Alloy Steel (HSLA)																
Docol 420LA	Docol CR420LA	CR	VDA 239-100:2016			■	■	■	L	420	520	480	600	17	-	
	Docol HR420LA	HR	VDA 239-100:2016	■	■	■			L	420	520	480	600	18	22	
	HC420LA	CR	EN 10268+A1:2013	■					T	420	520	470	600	17	-	
	HX420LAD	CR/HR	EN 10346:2015			■	■	■	T	420	520	470	590	17	-	
Docol 460LA	Docol CR460LA	CR	VDA 239-100:2016	■		■	■	■	L	460	580	520	680	15	-	
	Docol HR460LA	HR	VDA 239-100:2016	■					L	460	560	520	640	16	20	
	HC460LA	CR	EN 10268+A1:2013	■					T	460	580	510	660	13	-	
	HX460LAD	CR/HR	EN 10346:2015			■	■	■	T	460	560	500	640	15	-	
Docol 500LA	Docol HR500LA	HR	VDA 239-100:2016	■					L	500	620	560	700	14	17	
	HC500LA	CR	EN 10268+A1:2013	■					T	500	620	550	710	12	-	
	HX500LAD	CR/HR	EN 10346:2015			■	■	■	T	500	620	530	690	13	-	
Docol 550LA	Docol HR550LA	HR	VDA 239-100:2016	■		■			L	550	670	610	750	12	16	
Docol 600LA	Docol HR600LA	HR	SSAB	■					L	600	730	650	820	13	16	
Docol S600MC	Docol S600MC	HR	EN 10149-2	■					L	600		650	820	13	16	
Docol 650LA	Docol HR650LA	HR	SSAB	■					L	650	780	700	880	12	14	
Docol S650MC	Docol S650MC	HR	EN10149-2	■					L	650		700	820	13	14	
Docol 700LA	Docol HR700LA	HR	VDA 239-100:2016	■		■			L	700	850	750	950	10	13	
Docol S700MC	Docol S700MC	HR	EN 10149-2	■					L	700		750	950	10	12	
Docol 800LA	Docol CR800LA	CR	SSAB	■					L	800	950	800	950	9	-	

¹ Indicative values after hot stamping/die-quenching.

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										Min	Max	Min	Max	Min	Min	Typical
AHSS Tubes																
Dual Phase Tubes (DP Tubes)																
Docol Tube 590DP	Docol Tube CR500Y590T-DP	CR	SSAB						-	500	-	590	-	-	12	
	Docol Tube CR500Y590T-DH	CR	SSAB						-	500	-	590	-	-	20	
Docol Tube 780DP	Docol Tube CR600Y780T-DP	CR	SSAB						-	600	-	780	-	-	7	
	Docol Tube CR600Y780T-DH	CR	SSAB						-	600	-	780	-	-	12	
	Docol Tube CR700Y800T-DP	CR	SSAB						-	700	-	800	-	-	7	
Docol Tube 980DP	Docol Tube CR750Y980T-DP	CR	SSAB						-	750	-	980	-	-	5	
High Strength Low Alloy Tubes (HSLA Tubes)																
Docol Tube 420LA	Docol Tube CR420LA	CR	EN 10305-3/5:2016	■		■	■	■	-	420	-	490	-	-	12	
	Docol Tube HR420LA	HR	EN 10305-3/5:2016	■					-	420	-	490	-	-	12	
Docol Tube 500LA	Docol Tube CR500LA	CR	EN 10305-3/5:2016	■					-	500	-	540	-	-	8	
	Docol Tube HR500LA	HR	EN 10305-3/5:2016	■					-	500	-	540	-	-	8	
Docol Tube 600LA	Docol Tube HR600LA	HR	EN 10305-3/5:2016	■					-	600	-	640	-	-	6	
Docol Tube 700LA	Docol Tube HR700LA	HR	EN 10305-3/5:2016	■					-	600	-	740	-	-	5	

Are you looking for other grades?

We supply many steel grades according to SAE, other regional standards and OEM standards. If you don't find the steel grade you are looking for in this program, please let us know, by calling or sending us an e-mail and our technical support will give you more information.

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