

SELECTION OF COATING SYSTEMS

Based on ISO 12944:2018
For unalloyed and low-alloyed steel and hot-dip galvanized steel according to ISO 1461



TABLE 1: SOLVENT-BASED COATING SYSTEMS FOR STEEL

	SURFACE		COATING SYSTEM										CORROSIVITY CATEGORY – DURABILITY																	
Category	Substrate	Surface Preparation	Binder	Base	Primer		Intermediate Coat		Topcoat		System		System acc. ISO 12944-5 An. B		C2				C3				C4				C5			
					Product Name	DFT [µm]	Product Name	DFT [µm]	Product Name	DFT [µm]	NDFT [µm]	Layers	NDFT [µm]	MNOC	L	M	H	VH	L	M	H	VH	L	M	H	VH	L	M	H	VH
C2	Steel	Sa 2 1/2	1K AK	S	REM-AK CORROPRIMER	80			REM AK DS Glimmer Express	80	160	2	160	1																
	Steel	Sa 2 1/2	2K EP/PU	S	REMOPLAST Primer	60			REMOPLAST UVC Glimmer	60	120	2	120	1																
	Steel	Sa 2 1/2	2K PU	S	REMOPLAST UVC HS SBI (nur innen)	80					80	1	120	1																
	Steel	Sa 2 1/2	2K PU	S	REMOPLAST UVC PL HS ES *	80					80	1	120	1																
C3	Steel	Sa 2 1/2	1K AK	S	REM-AK CORROPRIMER	60	REM-AK CORROPRIMER	60	REM AK DS Glimmer Express	80	200	3	200	2																
	Steel	Sa 2 1/2	2K PU	S	REMOPLAST UVC PL HS ES *	120					120	1	180	2																
	Steel	Sa 2 1/2	2K EP/PU	S	REMOPLAST Speed Dry	80			REMOPLAST UVC PL HS ES *	80	160	2	180	2																
C4	Steel	Sa 2 1/2	2K EP/PU	S	REMOPLAST Speed Dry	120			REMOPLAST UVC PL HS ES *	80	200	2	240	2																
	Steel	Sa 2 1/2	2K EP/PU	S	REMOPLAST MSR Ultraprimer	120			REMOPLAST UVC PL HS ES *	80	200	2	240	2																
C5	Steel	Sa 2 1/2	2K EP/PU	S	REMOPLAST MSR Ultraprimer	120			REMOPLAST UVC PL HS ES *	120	240	2	300	2																
	Steel	Sa 2 1/2	2K EP/PU	S	REMOPLAST MSR Ultraprimer	110	REMOPLAST MSR Ultra IC	110	REMOPLAST UVC PL HS ES *	80	300	3	300	2																
	Steel	Sa 2 1/2 medium (G)	2K EP/PU	S	REMOPLAST EP Zink	80	REMOPLAST MSR Ultra IC	100	REMOPLAST UVC PL HS ES *	80	260	3	260	3																
	Steel	Sa 2 1/2 medium (G)	2K EP/PU	S	REMOPLAST EP Zink	60	REMOPLAST MSR Ultra IC	110	REMOPLAST UVC PL HS ES *	110	280	3	320	3																
	Steel	Sa 2 1/2 medium (G)	2K EP/PU	S	REMOPLAST EP Zink	60	REMOPLAST MSR Ultra IC	160	REMOPLAST UVC PL HS ES *	100	320	3	320	3																
	Steel	Sa 2 1/2 medium (G)	2K EP/PU	S	REMOPLAST EP Zink	70	REMOPLAST HS-TL GLIMMER NUS	120	2x 80 µm REMOPLAST HS UVC NUS	160	350	4	320	3																

* Alternatively acceleration with REMOPLAST UVC ACCELERATOR or use REMOPLAST UVC PL HS ES FAST.

TABLE 2: WATER-BORNE COATING SYSTEMS

	SURFACE		COATING SYSTEM										CORROSIVITY CATEGORY – DURABILITY																	
Category	Substrate	Surface Preparation	Binder	Base	Primer		Intermediate Coat		Topcoat		System		System acc. ISO 12944-5 An. B		C2				C3				C4				C5			
					Product Name	DFT [µm]	Product Name	DFT [µm]	Product Name	DFT [µm]	NDFT [µm]	Layers	NDFT [µm]	MNOC	L	M	H	VH	L	M	H	VH	L	M	H	VH	L	M	H	VH
C2	Steel, (HDG)	Sa 2 1/2, (sweepen)	1K AY	W	REM Aqua Plus SZ Primer	100					100 (80)	1	160 (80)	1																
C3	HDG	Sweep Blasting	1K AY	W	REM Aqua Plus	80					80	1	160	2																
	HDG	Sweep Blasting	1K AY	W	REM Aqua LAC DS-Glimmer	80					80	1	160	2																
C4	Steel	Sa 2 1/2	2K EP/PU	W	REMOPLAST Aqua EP Trafo Primer	60	REMOPLAST Aqua EP Trafo Primer	60	REMOPLAST Aqua UVC	60	180	3	240	2																
	Steel	Sa 2 1/2	2K EP/PU	W	REM Aquapox S31	100			REMOPLAST Aqua UVC	80	180	2	240	2																

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TABLE 3: SYSTEMS FOR HOT-DIP GALVANIZED STEEL ACCORDING TO ISO 1461 - t Zn K

	SURFACE		COATING SYSTEM										CORROSIVITY CATEGORY – DURABILITY																			
Category	Substrate	Surface Preparation	Binder	Base	Primer		Intermediate Coat		Topcoat		System		System acc. ISO 12944-5 An. B		C2				C3				C4				C5					
					Product Name	DFT [µm]	Product Name	DFT [µm]	Product Name	DFT [µm]	NDFT [µm]	Layers	NDFT [µm]	MNOC	L	M	H	VH	L	M	H	VH	L	M	H	VH	L	M	H	VH		
C3	HDG	Sweep Blasting	1K AY	W	REM Aqua LAC DS-Glimmer	80					80	1	160	2																		
	HDG	Sweep Blasting	1K AY	W	REM Aqua Plus	80					80	1	160	2																		
	HDG	Sweep Blasting	2K PU	S	REMOPLAST UVC PL HS ES **	120					120	1	120	2																		
C4	HDG	Sweep Blasting	2K EP/PU	S	REMOPLAST MSR Ultraprimer	80			REMOPLAST UVC PL HS ES *	80	160	2	160	2																		
	HDG	Cleaner Aqua 83-00 ***	2K EP/PU	S	REM 61 Primer	80			REMOPLAST UVC PL HS ES *	80	160	2	160	2																		
C5	HDG	Sweep Blasting	2K EP/PU	S	REM 61 Primer	80			REMOPLAST UVC PL HS ES *	120	200	2	200	2																		
	HDG	Sweep Blasting	2K EP/PU	S	REMOPLAST MSR Ultraprimer	120			REMOPLAST UVC PL HS ES *	80	200	2	200	2																		
	HDG	Sweep Blasting	2K EP/PU	S	REM 61 Primer	80	REMOPLAST MSR Ultra IC	80	REMOPLAST UVC PL HS ES *	80	240	3	240	2																		
	HDG	Sweep Blasting	2K EP/PU	S	REMOPLAST TL GLIMMER	60	REMOPLAST HS UVC NUS	80	REMOPLAST HS UVC NUS	80	220	3	240	2																		

*Alternatively acceleration with REMOPLAST UVC ACCELERATOR or use REMOPLAST UVC PL HS ES FAST.
** The accelerated variants (*) are not permitted. *** Areas exposed to condensation must be sweep blasted.

TABLE 4: REFURBISHMENT – PARTIAL AND MANUAL SURFACE PREPARATION

	SURFACE		COATING SYSTEM										CORROSIVITY CATEGORY – DURABILITY																	
Category	Substrate	Surface Preparation	Binder	Base	Primer		Intermediate Coat		Topcoat		System		System acc. ISO 12944-5 An. B		C2				C3				C4				C5			
					Product Name	DFT [µm]	Product Name	DFT [µm]	Product Name	DFT [µm]	NDFT [µm]	Layers	NDFT [µm]	MNOC	L	M	H	VH	L	M	H	VH	L	M	H	VH	L	M	H	VH
C2	Steel	PSt 2 / 3	1K AK	S	REM-AK CORROPRIMER	80			REM AK DS Glimmer Express	80	160	2	160	1																
	Steel, HDG	PSt 3	1K AY	W	REM Aqua Plus SZ Primer	80			REM Aqua Plus	80	160	2	160	1																
	Steel	PSt 2 / 3	1K EPE/AK	S	REM CORROBLOCK MB	80			REM AK DS Glimmer Express	80	160	2	160	1																
C3	Steel	PSt 2 / 3	1K EPE/AY	S/W	REM CORROBLOCK MB 50	50	REM Aqua LAC DS-Glimmer	80	REM Aqua LAC DS-Glimmer	80	210	3	200	2																
	Steel	PSt 2 / 3	2K EP/PU	S	REMOPLAST KUNSTSTOFFGRUND	100			REMOPLAST UVC PL HS ES *	80	180	2	180	2																
C4	Steel	PSt 2 / 3 Wa 2 (M)	2K EP/PU	S	REMOPLAST HS-KST Fast	160			REMOPLAST UVC PL HS ES *	80	240	2	240	2																
C5	Steel	PSt 3 Wa 2.5 (M)	2K EP/PU	S	REMOPLAST HS-KST Fast	110	REMOPLAST HS-KST Fast	110	REMOPLAST UVC PL HS ES *	80	300	3	300	2																
	Steel	PSt 3 Wa 2.5 (M)	2K EP/PU	S	REMOPLAST HS-KST Fast	110	REMOPLAST MSR Ultra IC	110	REMOPLAST UVC PL HS ES *	80	300	3	300	2																

* Alternatively acceleration with REMOPLAST UVC ACCELERATOR or use REMOPLAST UVC PL HS ES FAST.

KANSAI HELIOS offers many other corrosion protection systems. For further and more detailed information, please contact your local representative.

Abbreviations
Base: W = Waterr, S= Solvent
Substrate: HDG = Hot-dip galvanized steel
Durability: L = low (up to 7 years), M = medium (bis 7 - 15 years), H = high (15 - 25 years), VH = very high(> 25 years)