





REFERENCE LIST / GLAS TRÖSCH AG RAIL



Train Manufacture	Train Identification from Manufacture	Operator / Owner	Train Identification from Operator	Homologation Standard	Impact Speed (Test projectile)	Country of operation	Continent	Year of the first delivery	Other information	Photo
SIEMENS	GzL3	 广州地铁 Guangzhou Metro	Line 3	Norm: UIC 651	305 km/h	China	ASIA	2005	Front windscreen with wire heating system	
BOMBARDIER	BR 481		480 / 481	Norm: UIC 651	261 km/h	Germany	EUROPA	2000	Front windscreen with film heating system	
CAF	Metro Helsinki		M300	Norm: UIC 651	260 km/h	Finland	EUROPA	2014	Front windscreen with wire heating system	
CAF	Metro Chile Lines 3 & 6	 METRO DE SANTIAGO	--	Norm: EN 15152	260 km/h	Chile	South America	2015	Front windscreen with wire heating system	
SIEMENS	Metro Shanghai	 上海地铁 Shanghai Metro	--	CCC Norm: UIC 651	260 km/h	China	ASIA	2004	Front windscreen with wire heating system	
SIEMENS	Metro Riyadh	 قطار الرياض riyadh metro Metro Riyadh	Line 1 and 2	Norm: UIC 651	250 km/h	Saudi Arabia	ASIA	2015	Front windscreen without heating system	

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	Metro Istanbul line UUC	 Metro Istanbul	--	Norm: EN 15152	250 km/h	Turkey	EUROPA	2015	Front windscreen with wire heating system	
BOMBARDIER	MOVIA	 Delhi Metro Rail Corporation	--	Norm: UIC 651	245 km/h	India	ASIA	2008	Front windscreen without heating system	
	MLA	 Metro Brescia	111B	Norm: UIC 651	240 km/h	Italy	EUROPA	2009	Front windscreen with film heating system	
	MLA	 Metro Milan	5500	Norm: UIC 651	240 km/h	Italy	EUROPA	2009	Front windscreen with film heating system	
	Copenhagen	 Metro Copenhagen	--	Norm: UIC 651	240 km/h	Denmark	EUROPA	2012	Front windscreen with film heating system	
SIEMENS	OSMX	 Metro Oslo	--	Norm: UIC 651	240 km/h	Norway	EUROPA	2005	Front windscreen with film heating system	













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AnsaldoBreda A Finmeccanica Company	Riyadh	قطار الرياض riyadh metro Metro Riyadh	--	Norm: UIC 651	240 km/h	Saudi Arabia	ASIA	2010	Front windscreen with film heating system	
BOMBARDIER	HK06	Berlin	--	Norm: UIC 651	238 km/h	Germany	EUROPA	2005	Front windscreen with wire heating system	
ALSTOM	HDT-5	HOCHBAHN Hamburger Hochbahn AG	--	Norm: UIC 651	197 km/h	Germany	EUROPA	2012	Front windscreen with wire heating system	
SIEMENS	Metro Sofia	Metro Sofia	--	Norm: UIC 651	180 km/h	Bulgaria	EUROPA	2017	Front windscreen with film heating system	
SIEMENS	Inspiro	Metro Munich	--	Norm: UIC 651	180 km/h	Germany	EUROPA	2014	Front windscreen with wire heating system	
BOMBARDIER	U-Bahn München	Metro Munich	--	Norm: UIC 651	160 km/h	Germany	EUROPA	2000	Front windscreen with wire heating system	

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ALSTOM	Metro Caracas		--	Norm: NF F 15-818	160 km/h	Venezuela	South America	2013	Front windscreen without heating system	
SIEMENS	Rubin Nürnberg	 Metro Nuremberg	--	Norm: UIC 651	160 km/h	Germany	EUROPA	2003	Front windscreen with wire heating system	
BOMBARDIER	C30	 SL stockholm	--	Norm: EN 15152	135 km/h	Sweden	EUROPA	2016	Front windscreen with film heating system	
BOMBARDIER	RET	 Metro Rotterdam	Series: 5500 & 5600	Norm: NF F 15-818	130 km/h	Netherlands	EUROPA	2007	Front windscreen with wire heating system	
SIEMENS	Bangkok MRTA	 Bangkok Mass Transit System	--	Norm: UIC 651	100 km/h	Thailand	ASIA	2003	Front windscreen without heating system	
CAF	Metro Centro Sevilla		--	Norm: ECE R43	--	Spain	EUROPA	2010	Front windscreen with wire heating system	

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STADLER	U-Bahn Berlin	 Berlin	Typ: IK	Norm: ECE R43	--	Germany	EUROPA	2014	Front windscreen with wire heating system	
SIEMENS	VAL	 Metro Toulouse	Several	Norm: NF 31-250	--	France	EUROPA	2005	Front windscreen without heating system	
SIEMENS	VAL	 Metro Rennes	Several	Norm: NF 31-250	--	France	EUROPA	2004	Front windscreen without heating system	
SIEMENS	VAL	 U Line Uijeongbu	--	Norm: NF 31-250	--	South Korea	ASIA	2009	Front windscreen without heating system	
HYUNDAI Rotem	Busan Metro	 Metro Busan	--	Norm: KSL 2004	--	South Korea	ASIA	2015	Front windscreen without heating system	
BOMBARDIER	Metro Riyadh	 Metro Riyadh	Line 3	Norm: 49CFR223 Type 1	--	Saudi Arabia	ASIA	2015	Front windscreen without heating system	