

## PRODUCT REFERENCE LIST

### Pandrol QTrack®

2020

Year	Network	Project	Product Type	Elec	Type Track	Load
2001	FR	RATP	Paris	QT-55G1-HP-S	Tramway	120 kN
2003	FR	RATP	Paris: Line T1 - Extension	QT-55G1-HP-S	Tramway	120 kN
2004	FR	RATP	Paris: Place de la Liberté	QT-55G1-HP-S	Tramway	120 kN
2004	GR	TRAMSA	Athens: Athens Tramway	QT-60R-HP-S	Tramway	100 kN
2005	BE	MIVB/STIB	Brussels: Quai des Usines	QT-62R-HP-S	Tramway	100 kN
2005	FR	RATP	Paris: Tramway des Maréchaux Sud	QT-55G1-HP-S	Tramway	120 kN
2006	BE	MIVB/STIB	Brussels: Marius Renard	QT-62R-HP-S	Tramway	100 kN
2006		De Lijn	Gent: Martelarenlaan - Spaelaan	QT-62R-HP-R	Tramway	120 kN
2006	ES	Metro de Madrid	Madrid: Depot Hortaleza 1	QT-54E1-SP-S-05	Metro	155 kN
2006		Tranvía Parla	Madrid: Tramway Parla	QT-60R-HP-S-08	Tramway	120 kN
2006	FR	RATP	Paris: Renovation T1	QT-55G1-HP-S	Tramway	120 kN
2006	PT	STCP	Porto: Praça da Liberdade	QT-62R-HP-S	Tramway	100 kN
2006	AR	Subterráneos	Buenos Aires: Crossings	QT-54E1-HP-S	Tramway	120 kN
2007	BE	MIVB/STIB	Brussels: Chaussée de Bruxelles	QT-62R-HP-S	Tramway	120 kN
2007		De Lijn	Gent: Industrieweg	QT-62R-HP-R	Tramway	120 kN
2007	ES	GTP-FGV	Alicante: Tram Section Benidorm - Villajoyosa	QT-67R-HP-S-02	Conventional Train	160 kN
2007		TMB	Barcelona: Depot Line 9 (Viaducte)	QT-54E1-SP-S-05	Metro	135 kN
2007		Tranvía Murcia	Murcia: Tram. Experimental Phase	QT-60R-HP-S-08	Tramway	120 kN
2007	FR	RATP	Paris: Renovation T1	QT-55G1-HP-S	Tramway	120 kN
2007	IT	GTT	Torino: Via Rossini - via Verdi & Particolari	QT-60R-HP-S	Tramway	130 kN
2007	PT	REFER	Lisbon: Tunel Do Rossio	QT-60E-1/20-HP-R-01*	Conventional Train	225 kN
2007				QT-60E-1/20-XP-R-02	Conventional Train	225 kN
2007	GR	TRAMSA	Athens: Voula Extension (Line S3)	QT-60R-HP-S	Tramway	130 kN
2007	DO	Metro Santo Domingo	Santo Domingo: Depot Line 1	QT-54E1-SP-S	Metro	160 kN

2007	IR	Irish Rail	Portlaoise: Depot	QT-54E1-1/20-HP-R-08*		Conventional Train	225 kN
2007	NL	HTM	The Hague: Zoetemeerse rijweg	QT-60R-HP-S		Tramway	130 kN
2007	PL	ZDiT Cracow	Kracow: Pcozta - Gertrudy	QT-60R-HP-S		Tramway	120 kN
2007		MPK Lodz	Lodz: Mickiewicza and Wolczanska str crossing	QT-60R-HP-S		Tramway	120 kN
2008	BE	MIVB/STIB	Brussels: Nicolas Doyen	QT-62R-HP-S		Tramway	120 kN
2008		De Lijn	Gent: overweg Lange Velden	QT-62R-HP-R		Tramway	120 kN
2008			Hasselt: Herinrichting station	QT-60E-1/20-HP-R-01*		Tramway	120 kN
2008	ES	GTP-FGV	Alicante: Tram Line 2	QT-67R-HP-S-02		Tramway	120 kN
2008		TMB	Barcelona: Depot Line 9 (Viaducte)	QT-54E1-SP-S-05		Metro	135 kN
2008	FR	RATP	Paris: Line T2 Issy-les-Moulineaux - Porte de Versailles	QT-55G2-HP-S		Tramway	120 kN
2008		LEA	Lyon: Line T4	QT-55G2-HP-S		Tramway	130 kN
2008	NO	Bybanen	Bergen: Bybanen Bergen LRT	QT-60R-HP-R		Tramway	120 kN
2008	PT	Metro do Porto	Porto: Extension Line Guifões	QT-50E6-HP-R		Tramway	130 kN
2008			Porto: Depot	QT-55G1-HP-S		Tramway	130 kN
2008	TR	Istanbul Ulasim	Istanbul: Istanbul Ulasim Cemberlitas & Haiga Sofia	QT-60R-HP-S		Tramway	130 kN
2008	PL	ZDiT Cracow	Kracow: Starowislna street	QT-60R-HP-S		Tramway	120 kN
2008		MPK Lodz	Lodz: Kilingskiego str.	QT-49E1-HP-R		Tramway	120 kN
2009	HU	BKV	Budapest: Mester utca, artificial grass track	QT-49E1-HP-R	-L	Tramway	130 kN
2009		SZKT	Szeged: Line 1	QT-60R-HP-S	-L	Tramway	150 kN
2009	BE	De Lijn	Hasselt: Herinrichting station	QT-60E-1/20-HP-R-01*		Tramway	120 kN
2009			Gent: Clarissenstraat	QT-62R-HP-R		Tramway	120 kN
2009	ES	Tranvía Murcia	Murcia: Tram Line 1	QT-60R-HP-S-35		Tramway	120 kN
2009		F. Andaluces	Málaga: Metro Line 1. Section Dr. Domínguez - Cocheras	QT-60R-HP-S-08		Tramway	120 kN
2009	NO	Bybanen	Bergen: Bybanen Bergen LRT	QT-60R-HP-R		Tramway	120 kN
2009	PT	STCP	Porto: Sta Catarina, Passo Manuel and Rua de Ceuta	QT-62R-HP-S		Tramway	100 kN
2009	PL	MPK Wroclaw	Wroclaw: Osobowicka Str.	QT-60R-HP-S		Tramway	120 kN

2009	DE	VBK	Karlsruhe: Kaiserstrasse Kronenplatz - Durlacher	QT-60R-HP-S		Tramway	130 kN
2009	UK	Blackpool	Blackpool: Tramway - Normal Line	QT-60R-SP-R-14		Tramway	130 kN
2010	ES	Metro de Madrid	Madrid: Renovation Line 2. Section Retiro - Banco de España	QT-54E1-1/20-XP-R	-L	Metro	135 kN
2010	HU	SZKT	Szeged: Line 1	QT-60R-HP-S	-L	Tramway	150 kN
2010	BE	De Lijn	Gent: stationsomgeving Gent Sint Pieters	QT-62R-HP-R		Tramway	120 kN
2010		GTP-FGV	Alicante: Tram Line 1. Section Finca - Adoc	QT-67R-HP-S-02		Tramway	120 kN
2010		F. Andaluces	Sevilla: Alcalá de Guadaira - Malasmañanas roundabout	QT-60R-XP-R-06		Tramway	120 kN
2010		Tranvía Zaragoza	Zaragoza: Tram Line 1	QT-60R-HP-S-36		Tramway	120 kN
2010	IT	ATM	Milano: Tramway Via Porpora	QT-62R-HP-S		Tramway	130 kN
2010		ANM	Napoli: 3rd rail Test Track with Tramwave	QT-60R-HP-S		Tramway	130 kN
2010	PT	Metro do Porto	Porto: Linha de Gondomar (crossings)	QT-55G1-HP-S		Tramway	130 kN
2010	PL	NG Foundatio n	Białystok: Czarna Białostocka	QT-60R-HP-S		Tramway	120 kN
2010	UK	Blackpool	Blackpool: Tramway - Normal Line	QT-60R-SP-R-14		Tramway	130 kN
2011		BKV	Budapest: Gellert rakpart - Line 18	QT-60R-SP-S-17	-L	Tramway	150 kN
2011		SZKT	Szeged: Line 1	QT-60R-SP-S-17	-L	Tramway	150 kN
2011	US	HRT	Houston: Southeast corridor	QT-115RE-XP-R-Strip- 16	-H	Tramway	130 kN
2011	BE	De Lijn	Gent: Botermarkt	QT-62R-HP-R-Strip-12		Tramway	120 kN
2011	ES	F. Andaluces	Málaga: Metro Line 1. Section Dr. Domínguez - Cocheras	QT-60R-HP-S-08		Tramway	120 kN
2011		Tranvía Zaragoza	Zaragoza: Tram Line 1	QT-60R-HP-S-36		Tramway	120 kN
2011	HU	MAV	Budapest: Csepeli Crossing	QT-57R1-HP-S-02		Conventio al Train	225 kN
2011	IT	GTT	Torino: Tramway Corso - Regina	QT-60R-HP-R-12		Tramway	130 kN
2011		ATM	Milano: Tramway Precotto	QT-60R-HP-R-21		Tramway	130 kN
2011	NO	Bybanen	Bergen: Bybanen Bergen LRT	QT-60R-XP-R-06		Tramway	120 kN
2011	PL	MPK Wrocław	Wrocław: Kozanow	QT-60R-XP-R-06		Tramway	120 kN

2011		Warsaw Trams	Warsaw: Modernisation of Zieleniecka and Tarwoga streets	QT-60R-HP-S		Tramway	120 kN
2011	UK	Blackpool	Blackpool: Tramway - Normal Line	QT-60R-SP-R-14		Tramway	130 kN
2012	ES	ADIF	Barcelona: High Speed Line. San Andrés tunnels	QT-60E1-1/20-HP-R-45mm-06	-M	Conventional Train	225 kN
2012		FGC	L'Hospitalet: Track renovation in Av. Carrilet station	QT-54E1-1/20-HP-R-08*	-L	Metro	160 kN
2012	TR	TCDD	Istanbul: Marmaray BC1	QT-60E-1/40-HP-R-15*	-L	Conventional Train	225 kN
2012	SE	SL	Stockholm: Ulvsunda	QT-60R-SP-R-14	-L	Tramway	130 kN
2012	BE	De Lijn	Gent: Neuseplein	QT-62R-XP-R-Strip-01		Tramway	120 kN
2012		Tranvía Zaragoza	Zaragoza: Tram Line 1	QT-60R-HP-S-36		Tramway	120 kN
2012	HU	MAV	Budapest: Csepeli Crossing	QT-57R1-HP-S-02		Conventional Train	225 kN
2012	IT	ATAC ROMA	Roma: Piazza Torre Argentina - Piazza Venezia	QT-62R-SP-R-14		Tramway	130 kN
2012	NO	Bybanen	Bergen: Bybanen Bergen LRT	QT-60R-XP-R-06		Tramway	120 kN
2012	PL	MPK Poznan	Poznan: Grunwaldzka street	QT-49E1-SP-R-Strip-15		Tramway	120 kN
2013	HU	BKV	Budapest: Fehérvári út - Line 18	QT-60R-SP-R-14	-L	Tramway	150 kN
2013	SE	SL	Stockholm: Ulvsunda	QT-60R-SP-R-14	-L	Tramway	130 kN
2013	BE	TEC	Charleroi - Anderlues	QT-60R-HP-R-21		Tramway	150 kN
2013		De Lijn	Oostende: Goedewindhelling	QT-62R-XP-R-Strip-01		Tramway	120 kN
2013	ES	FEVE	León: Integración de FEVE en el T.M. de León	QT-54E1-HP-R-24		Tramway	130 kN
2013	IT	ATM	Milano: Tramway Ingre - Garibaldi	QT-62R-HP-R-Strip-12		Tramway	130 kN
2013		ATAC ROMA	Roma: Prol. Piazza Torre Argentina - Piazza Venezia	QT-62R-SP-R-14		Tramway	130 kN
2013	TR	TCDD	Istanbul: Marmaray CR3. Depot Halkali & Gebze	QT-49E1-SP-R-Strip-15		Conventional Train	225 kN
2013	PL	Katowice	Katowice: Obroncow Westerplatte street	QT-60R-XP-S-09		Tramway	120 kN
2013		Grudziadz	Grudziadz: Toruńska str	QT-60R-XP-S-37		Tramway	120 kN
2013	DK	Metro Copenhagen	Copenhagen: Cityringen Project - Tunnel flood gates	QT-54E1-HP-R-1/20-08*		Metro	160 kN
2013	TW	KMRT	Kaohsiung: LRT Kaohsiung	QT-55G2-XP-R-Strip-33		Tramway	130 kN
2013	UA E	Etihad Rail	Etihad Rail stage 1: Shah-Habshan-Rawais project depot	QT-60E-1/40-HP-R-15*		Freight Heavy rail	325 kN

2014	BE	De Lijn	Gent: Verlenging tramlijn 21/22 tot Zwijnaarde	QT-62R-HP-R-Strip-12		Tramway	120 kN
2014	FR	TCL	Lyon: Line T3 - Grand Stade	QT-55G2-XP-R-Strip-33		Tramway	120 kN
2014	IT	ATM	Milano: Tranvia via Domodossola - Sovrappasso galleria Ferroviennord	QT-62R-SP-R-14		Tramway	130 kN
2014	TR	Konya Tram	Konya: Konya Tram Project	QT-60R-SP-S-17		Tramway	130 kN
2014	PL	ZDiT Cracow	Kracow: Rondo Mogilskie - Nowa Huta	QT-49E1-XP-R-Strip-16		Tramway	120 kN
2014		Katowice	Katowice: Obroncow Westerplatte street	QT-60R-XP-S-09		Tramway	120 kN
2014		Grudziadz	Grudziadz: Toruńska street	QT-60R-XP-S-37		Tramway	120 kN
2014	TW	KMRT	Kaohsiung: LRT Kaohsiung	QT-55G2-XP-R-Strip-33		Tramway	130 kN
2014	TH	MRT	Bangkok: Green Line	QT-60E-HP-R-22*		Metro	160 kN
2015	BE	De Lijn	Gent: Verlenging tramlijn 21/22 tot Zwijnaarde	QT-62R-HP-R-Strip-12		Tramway	120 kN
2015	TR	Konya Tram	Konya: Konya Tram Project	QT-60R-SP-S-17		Tramway	130 kN
2015	TW	KMRT	Kaohsiung: LRT Kaohsiung	QT-55G2-XP-R-Strip-33		Tramway	130 kN
2015	TH	MRT	Bangkok: Blue Line	QT-60E-HP-R-22*		Metro	160 kN
2015			Bangkok: Purple Line	QT-60E-HP-R-22*		Metro	160 kN
2015	CL	Metro de Santiago	Santiago de Chile: Depot Lines 3 and 6	QT-60E-HP-R-22*		Metro	160 kN
2016	IN	DMRC	Delhi: CT21 project	QT-60E-1/20-HP-R-50*	-L	Metro	160 kN
2016		Danhai LRT	Taipei: Tamhai LRT Phase 1	QT-55G2-HP-R-Strip-32	-L	Tramway	130 kN
2016	AU	Sydney Light Rail	Sydney: CBD and South East Light Rail	QT-55G2-XP-R-Strip-33	-M	Tramway	130 kN
2016	CN	Donghu Tram	Wuhan: Eastlake project. Test Track	QT-60R-HP-R-Strip-53	-M	Tramway	130 kN
2016	BE	De Lijn	Gent: Martelaarslaan	QT-62R-XP-R-Strip-01		Tramway	120 kN
2016		NMBS	Melle: Maintenance Yard and Depot	QT-60E-HP-R-22*		Conventional Train	225 kN
2016	DK	Aarhus Letbane	Aarhus: Aarhus LRT depot	QT-54E1-HP-R-Strip-13		Tramway	130 kN
2016	TW	KMRT	Kaohsiung: LRT Kaohsiung	QT-55G2-XP-R-Strip-33		Tramway	130 kN
2016	SA	Metro Riyadh	Riyadh: Metro line 3 depot	QT-60E-1/20-HP-R-28*		Metro	130 kN
2017	IT	Firenze	Firenze: Tramvia di Firenze L2 & L3	QT-60R-SP-R-59	-L	Tramway	130 kN
2017		Mestre	Treviso: Deposito Italo NTV - Mestre	QT-60E-HP-R-22*	-H	High Speed	180 kN

2017	TW	Danhai LRT	Taipei: Tamhai LRT Phase 1	QT-50E6-SP-R-Strip-08	-H	Tramway	130 kN
2017	SA	SRO	Haramain High Speed Rail Project: KAIA station	QT-60E-1/20-HP-R-45mm-05*	-M	High Speed	180 kN
2017	AU	Sydney Light Rail	Sydney: CBD and South East Light Rail	QT-55G2-HP-R-Strip-36	-M	Tramway	130 kN
2017	FI	Raitiotieallianssi	Tampere: Light Rail	QT-60R-SP-R-Strip-50	-L	Tramway	130 kN
2017	BE	De Lijn	Anderlues: Contournement depot	QT-62R-HP-R-Strip-12		Tramway	120 kN
2017	FR	RATP	Ile de France: T2 SMR La Marine	QT-55G2-HP-R-Strip-32		Tramway	120 kN
2017	MX	Metro Guadalajara	Guadalajara: Depot Light Train Line 3	QT-115RE-1/20-HP-R-20*		Tramway	130 kN
2017	BG	Sofia Trams	Sofia: Sofia Ovcha kupel blvd	QT-60R-HP-R-Strip-51		Tramway	130 kN
2017	TN	Tunis	Tunis: Transtu	QT-60R-XP-R-06		Tramway	120 kN
2018	AU	Sydney Light Rail	Sydney: CBD and South East Light Rail	QT-55G2-XP-R-Strip-33	-M	Tramway	130 kN
2018	CN	Shanghai Metro	Shanghai: Line 17 Xujing Depot	QT-CHn50-1/40-HP-R-05	-M	Metro	160 kN
2018	IN	DMRC	Delhi: CT21 project	QT-60E-1/20-HP-R-50*	-L	Metro	160 kN
2018	FI	Raitiotieallianssi	Tampere: Light Rail	QT-60R-SP-R-Strip-50	-L	Tramway	130 kN
2018	MU	Mauritius	Mauritius Islands: Mauritius Metro Express Project	QT-55G2-XP-R-Strip-33	-L	Tramway	115 kN
2018	BE	De Lijn	Anderlues: Contournement depot	QT-62R-HP-R-Strip-12		Tramway	120 kN
2018	HU	BKV	Budapest: Salgotarjani - Fiumei utc.	QT-60R-SP-R-10mm-46		Tramway	130 kN
2018	PL	Warsaw Trams	Warsaw: Marynarska street	QT-60R-HP-R-Strip-51		Tramway	120 kN
2018	UK	Blackpool	Blackpool Extension	QT-60R-SP-R-Strip-50		Tramway	130 kN
2018	TH	MRT	Bangkok: Green Line	QT-60E-HP-R-22*		Metro	160 kN
2018	BG	Sofia Trams	Sofia: Sofia Graf Ignatief street	QT-60R-SP-R-Strip-50		Tramway	130 kN
2018	BO	Cochabamba	Cochabamba: LRT Cochabamba	QT-54E1-SP-S-Strip-58		Tramway	130 kN
2019	TW	Danhai LRT	Taipei: Tamhai LRT Phase 1	QT-50E6-SP-R-Strip-08	-H	Tramway	130 kN
2019	FI	Raitiotieallianssi	Tampere: Light Rail	QT-60R-SP-R-Strip-50	-L	Tramway	130 kN
2019	MU	Mauritius	Mauritius Islands: Mauritius Metro Express Project	QT-55G2-XP-R-Strip-33	-L	Tramway	115 kN



2019	BE	De Lijn	Anderlues: Contournement depot	QT-62R-HP-R-Strip-12	Tramway	120 kN
2019	PL	Warsaw Trams	Warsaw: Grochowska str	QT-60R-HP-R-Strip-51	Tramway	130 kN
2019	TH	MRT	Bangkok: Orange Line	QT-60E-HP-R-22*	Metro	160 kN
2019	BO	Cochabamba	Cochabamba: LRT Cochabamba	QT-54E1-SP-S-Strip-58	Tramway	130 kN
<b>Total</b>						<b>815,555 Imst</b>

Note: Total quantities based on delivered quantities

\*System renamed as "SP" as from 01/04/2018