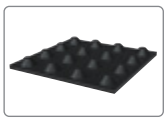
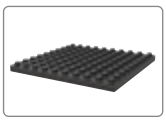
REFERENCE PROJECTS (EXTRACT)

PRODUCTS FOR RAILWAY

MASS-SPRING SYSTEMS

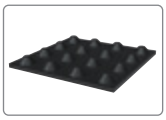
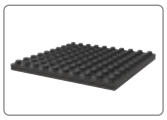



MASS-SPRING SYSTEMS				
Project | City | Country	Mode of operation	Axle load [t]	USM Type(s)	Year
High-speed line Halkalı-Ispartakule (TR)	Railway	22,5	1000 W, 2020, 2025, 3000	2026
Mainz, Binger Straße, LMFS (DE)	Light Rail	10,0	2020	2025
Mainz, Binger Straße, LMFS (DE)	Light Rail	10,0	2020, 2030	2025
Werris Creek Ballast Matting ARTC (AU)	Railway	25,0	4010, 4015	2025
Karlsruhe Daxlanden (DE)	Light Rail	12,0	2020, 3000	2024
Wierden (NL)	Railway	22,5	2020	2024
S21 city train , Stuttgart (DE)	Light Rail	16,0	1000 W	2024
AVA Aarau station (CH)	Railway	22,5	2020, 2030, 3000	2024
Brackeler-/Asselner Hellweg, double-track expansion, Dortmund (DE)	Light Rail	10,0	1000 W	2024
Gera, Wiesestraße, 2. BA (DE)	Light Rail	10,0	1000 W	2022
Utrecht, Nieuwegein City (NL)	Light Rail	10,0	4010	2022
Utrecht, Nieuwegein City (NL)	Light Rail	10,0	1000 W	2022
Mobility hub, track works at the main station, Augsburg (DE)	Light Rail	10,0	1000 W	2022
Brackeler-/Asselner Hellweg, double-track expansion, Dortmund (DE)	Light Rail	10,0	1000 W	2022
BV Kriegstraße, Karlsruhe (DE)	Light Rail	10,0	1000 W	2021
Gera: Wiesestraße, 2. construction phase (DE)	Light Rail	10,0	1000 W	2021
Breeza, Aberdeen, Muswellbrook (AUS)	Railway	22,5	4015	2021
Magdeburg, track junction Warschauer Str. (DE)	Light Rail	10,0	1000 W	2020
Cologne-Weidenpesch, „Gleisdreieck" Neusser Str. (DE)	Light Rail	10,0	2020	2020
Cologne, Underground station Appellhofplatz (DE)	Light Rail	10,0	1000 W	2019
EÜ BAB Eppelheim (DE)	Railway	22,5	2030, 2025	2018
Cologne, Underground station Kölner Dom/Hauptbahnhof (DE)	Light Rail	10,0	1000 W	2018
Karlsruhe Light Rail Tunnel, Durlacher Tor stop (DE)	Light Rail	11,0	2020	2018
Extension of the Schönbuchbahn in Böblingen (DE)	Railway	22,5	4010	2018
Refurbishment of the Pforzheim Tunnel, VE 03 (DE)	Railway	22,5	2020, 3000	2018
EÜ Derneburg (DE)	Railway	22,5	4010	2017
Karlsruhe light rail tunnel, Durlacher Tor stop (DE)	Light Rail	11,0	2020	2017
Düsseldorf, tram line U 71, Heinrichstraße (DE)	Light Rail	10,0	2020	2015
Extension of tram line 310, Bochum-Langendreer (DE)	Light Rail	10,0	2020	2015
Bremen Central Station (DE)	Railway	22,5	2020	2014
São Paulo Metro, Line 5 (BR)	Light Rail	17,0	1000 W	2014
Shenzhen Express Rail Link (HK)	Light Rail	17,0	2025, 4010	2013

REFERENCE PROJECTS (EXTRACT)

PRODUCTS FOR RAILWAY

MASS-SPRING SYSTEMS

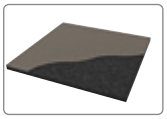
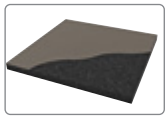



MASS-SPRING SYSTEMS				
Project | City | Country	Mode of operation	Axle load [t]	USM Type(s)	Year
Düsseldorf, Medienhafen tram (DE)	Light Rail	10.0	2020	2013
Munich tram, Lothstraße turning loop (DE)	Light Rail	10.0	1000 W. 3000. 4010	2012
New light rail system in Heilbronn	Light Rail	10.0	1000 W	2012
Cologne, Heumarkt, Los D2. 06 (DE)	Light Rail	10.0	1000 W	2012
Taipei (TW)	Light Rail	-	1000 W	2012
Gävle, Skanska (SE)	Railway	22.5	2030	2012
BAM Tunnel Project, Korshunika Tunnel 2. Siberia (RU)	Railway	25.0	2020	2012
Katzenberg Tunnel, extension and new section of the Karlsruhe–Basel line (DE)	Railway	max. 22.5	1000 W	2011
Taipei (TW)	Light Rail	-	2025	2011
Düsseldorf, Kö-Bogen light rail line (DE)	Light Rail	-	1000 W	2010
Concrete Bridge, Chengdu (CN)	Light Rail	16.0	2020	2009
BLT. Vogesenplatz, Basel (CH)	Light Rail	-	1000 W	2008
South Station (HK)	Light Rail	16.0	1000 W	2007
Kaohsiung MRT (TW)	Light Rail	17.0	1000 W	2006
Bujeon Line (KR)	Railway	22.5	2030	2004
Los Angeles (USA)	Light Rail	12.5	1000 W	2002
Waldenberg-Tunnel (CH)	Light Rail	12.5	2020. 4010	2002
ABS/NBS Karlsruhe-Basel (DE. CH)	Railway	22.5	4015. 4010	2001
São Paulo (BR)	Light Rail	12.5	1000 W. 2020. 3000	2001
Dortmund (DE)	Underground	12.5	2025	2000
Amtrack (US)	Railway	25.0	3000. 4010	2000
San Francisco (US)	Underground	12.5	1000 W	1999
Bielefeld, University Line (DE)	Light Rail	12.5	1000 W	1998
Perth, WA (AU)	Railway	18.0	2000	1998
Boston (US), Commuter Trains, Heavy-haul	Railway	22.5	4000	1997
Boston (US), Commuter Trains	Railway	22.5	3000	1996
Berlin Senate, U1 refurbishment, Stralauer Bridge (DE)	Light Rail	10.0	2000	1995
Toronto (CA)	Light Rail	11.0	1000 W	1994
San Francisco (US)	Light Rail	12.5	1000 W	1993
Bochum (DE)	Underground	12.5	1000 W	1991
Baltimore (US)	Light Rail	22.5	2000	1990
SBB Zurich (CH)	Railway	22.5	1000 W + 2000	1990
Frankfurt (DE)	Underground	12.5	1000 W	1989
Amtrack (US)	Railway	30.0	3000	1988
Australia (AU)	Light Rail	12.5	1000 W	1987
Canada (CA)	Railway	30.0	3000	1987
Bielefeld (DE)	Underground	12.5	1000 W	1986
Singapore (SG)	Light Rail	12.5	1000 W	1986

REFERENCE PROJECTS (EXTRACT)

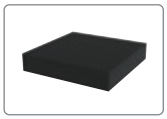
PRODUCTS FOR RAILWAY

UNDER BALLAST MATS | CIPROTEC RANGE

UNDER BALLAST MAT CIPROTEC				
Project | City | Country	Mode of operation	Axle load [t]	Ciprotec Type	Year
Gare Martigny - Pont du Tournafou à Glion (CH)	Railway	22.5	6018	2026
Wuppertal (DE)	Railway	22.5	6018	2026
New track construction (NL)	Railway	22.5	6018	2026
Ankara–Izmir high-speed railway line (TR)	Railway	22.5	6018	2025/26
Queensland (AU)	Railway	22.5	1013	2025
Kieler Straße and BV BÜ Rehersweg (DE)	Railway	22.5	1013	2025
Kirchhain station (DE)	Railway	22.5	1013	2025
Pully et Lutry and Lugano-Melide (CH)	Railway	22.5	6018, 1013	2025
Langendreerstraße railway overpass, Bochum (DE)	Railway	22.5	1013	2025
Line upgrading (NL)	Railway	22.5	6018	2025
Ilseflutgraben railway viaduct (DE)	Railway	22.5	1013	2025
Bodekanal Bridge, Neugattersleben (DE)	Railway	22.5	1013	2025
Deidesheim railway viaduct (DE)	Railway	22.5	1013	2025
Line upgrading (NL)	Railway	22.5	2022	2025
Line upgrading (NL)	Railway	22.5	6018	2024
Judenthor and Oberthor railway viaducts (DE)	Railway	22.5	1013	2024
Kuhbach railway viaduct (DE)	Railway	22.5	1013	2024
Holländergraben railway viaduct, Lampertheim (DE)	Railway	22.5	1013	2024
Riedbahn Line 4010, southern section (DE)	Railway	22.5	1013	2024
Wesseling Waterworks railway viaduct (DE)	Railway	22.5	1013	2024
Line upgrading (NL)	Railway	22.5	1013	2024
2 Railway overpass on the A42 at AK Herne (DE)	Railway	22.5	1013	2024
Line upgrading (AU)	Railway	22.5	1013	2024
Line upgrading (NL)	Railway	22.5	6018	2023
Basel, SBB (CH)	Railway	22.5	1013	2023
Linha da Beira Alta – Estação da Pampilhosa (PT)	Railway	22.5	1013	2023
New Kassel–Fulda line (DE)	Railway	22.5	1013	2023
Basel, SBB (CH)	Railway	22.5	1013	2023
Meppel (NL)	Railway	22.5	6018	2023
Stukton - Farmsum (NL)	Railway	22.5	6018	2023
Apeldoom (NL)	Railway	22.5	6018	2022
Line upgrading (NL)	Railway	22.5	6018	2022
Line upgrading (NL)	Railway	22.5	6018	2022
JangHang Line (KR)	Railway	22.5	1013	2021

DIRECTIONAL CONTROL BEARING, EPDM SHEAR CAM PAD

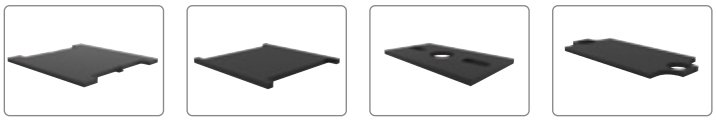


SPECIAL PRODUCTS				
Project | City | Country	Mode of operation	Type	System	Year
Rastatt tunnel (DE)	Railway	Directional Control Bearing	Slab track	2025
Fildern (DE)	Railway	Directional Control Bearing	Slab track	2022
New Wendlingen–Ulm line, bridge (DE)	Railway	Directional Control Bearing	Slab track	2021 - 2022
PoHang - SamCheok (KR)	Railway	EPDM Shear Cam Pad	Slab track	2020
New Wendlingen–Ulm line, bridges, Swabian Alb (DE)	Railway	Directional Control Bearing	Slab track	2020 - 2019
Refurbishment of the Bayer railway viaduct, Eisenstein (DE)	Railway	Directional Control Bearing	Slab track	2019
Dodam-Yeongcheon double track (KR)	Railway	EPDM Shear Cam Pad	Slab track	2017 - 2019
Hohenthum near Halle-Peißen (DE)	Railway	Directional Control Bearing	Slab track	2017
Hanau-Nantenbach (DE)	Railway	Directional Control Bearing	Slab track	2016
Wonju-Gangneung all Sections (KR)	Railway	EPDM Shear Cam Pad	Slab track	2016
A1 High Speed Railway to Jerusalem, Sha'ar HarGay (IL)	Railway	Directional Control Bearing	Slab track	2015
New Ilmenau–Erfurt line	Railway	Directional Control Bearing	Slab track	2013
New Kaiser-Wilhelm Tunnel, Ediger-Eller (DE)	Railway	Directional Control Bearing	Slab track	2013
Honam HSR Line (KR)	Railway	EPDM Shear Cam Pad	Slab track	2013
Jeolla Line BTL (KR)	Railway	EPDM Shear Cam Pad	Slab track	2010
KTX Phase 5 (KR)	Railway	EPDM Shear Cam Pad	Slab track	2009
KTX Phase 5 (KR)	Railway	EPDM Shear Cam Pad	Slab track	2008
KTX Phase 4 (KR)	Railway	EPDM Shear Cam Pad	Slab track	2007
High Speed Railway Line Taipei - Kaohsiung (TW)	Railway	EPDM Shear Cam Pad	Slab track	2004 - 2005
Cologne–Frankfurt section, Lahntal Bridge, Limburg (DE)	Railway	EPDM Shear Cam Pad	Slab track	2000 - 2001

REFERENCE PROJECTS (EXTRACT)

PRODUCTS FOR RAILWAY

RAIL PADS AND BASE PLATE PADS



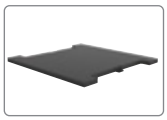
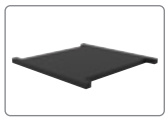
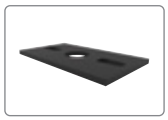
RAIL PADS AND BASE PLATE PADS

Project | City | Country	Type	Product
Rishikesh–Karnaprayag railway line (IN)	Railway / High-speed line	Zwp 104 NT
Modernisation and upgrading of the Hanover–Berlin line via Stendal (DE)	Railway / High-speed line	Zwp 104 NT
Ankara–Izmir high-speed line (TR)	Railway	Zw 1000 EPDM microcell
Supply of points systems for DB AG (DE)		Zwp various versions
Supply of points systems for SBB (CH)		ZW EPDM microcell
High-speed lines: Honam Line | Youngnam Line (KR)	Railway	Zw various versions
Renewal of track curves and points in Freiburg (DE)	Light Rail	Zw various versions
Modernisation of railway infrastructure for a tram line (DE)	Light Rail	Zw various versions
Renewal of track systems in Leipzig (DE)	Light Rail	Zw various versions
Construction of a light rail route, Freiburg im Breisgau, Zähringer Straße (DE)	Light Rail	Zw various versions
New Tram-Westtangente line in Munich (DE)	Light Rail	Zw various versions
Modernisation of Stötteritzer Straße in Leipzig (DE)	Light Rail	Zw various versions
Korea (KR)	Railway / High-speed line	Zw 700 ECO ClipPad
Germany (DE)	Railway	Zw 900b / Zw700a/b
Dresden (DE)	Metro / local transport	Zw 1000
Berlin (DE)	Light Rail	Zwp 104 NT/125
Spain (ES)	Railway	Zw 700a
Germany (DE)	Railway / High-speed line	various switch bearings
Cottbus (DE)	Metro / local transport	Zw 205x178x12mm
Switzerland SBB (CH)	Railway	various switch bearings
Bonn (DE)	Metro / local transport	Zw 205x175x12mm
Germany (DE)	Railway / High-speed line	Zwp 104 NT-15mm
Cologne (DE)	Metro / local transport	Zwp Points system
Germany (DE)	Railway / Slab track	Zw BSP 700
Rhaetian Railway (CH)	Alpine railway	Zw 700 AT
RNV (DE)	Metro / Nahverkehr	Zw 205x175x12mm
Canada (CA)	Light Rail	Zw 700/140 special
Germany (DE)	Railway / High-speed line	Zw 1000
ÖBB (AT)	Railway	Zw 700a/b
Munich (DE)	Metro / local transport	Zw 195x175x12mm
The Hague (NL)	Metro / local transport	Zw 9 ABC 7
Parramatta (AU)	Metro / local transport	Zw 180x145x10mm
Germany (DE)	Railway / High-speed line	Zwp 104 NT-12mm
Berlin (DE)	Metro / local transport	Zw 160x125x12mm
Karlsruhe (DE)	Metro / local transport	Zw 235x177x12mm
Germany (DE)	Railway	Zwp 194a/b ECF
Turkey (TR)	Railway / High-speed line	Zwp switch bearings
Ukraine (UA)	Railway	Zw 900 SL
Germany (DE)	Railway / High-speed line	Zw 1000
Thriasion Metro, Athens (GR)	Metro / local transport	Zw 205x120x16mm
Karlshorst (DE)	Metro / local transport	Zw 160x125x12mm
BSP-FF high-speed lines, (DE)	Railway / Slab Track	Zw 700 special
Ukrainian Railways (UA)	Railway	Zw 900 SL 2-60 /180 Zw 900 SL 2-60 / 167
Wendenschlossstraße (DE)	Metro / local transport	Zw 205x178x7mm
Azerbaijan Railways (AZ)	Railway	Zw 700-SF 150 NT

REFERENCE PROJECTS (EXTRACT)

PRODUCTS FOR RAILWAY

RAIL PADS AND BASE PLATE PADS

RAIL PADS AND BASE PLATE PADS			
Project | City | Country	Mode of Operation	Type	Year
Karlsruhe, Knielingen (DE)	Metro / local traffic	Zw 205/178/10, Anti-tip protection	2019
Estonian State Railways (EE)	Railway	Zw 900NT	2019
HTM Personenvervoer NV, Den Haag (NL)	Metro / local traffic	Zw 9 ABC-7	2019
Karlsruhe Kriegstraße (DE)	Metro / local traffic	Zw 235x177x12mm	2019
TCDD high-speed lines (TR)	Railway / High Speed Line	Zw1000 210x150x10 System W21	2019
DVB, Dresden Transport Authority (DE)	Metro / local traffic	Zw 148x180x10 | Zw 178x180x10	2019
Chemnitz CVAG (DE)	Metro / local traffic	Elastic Turnout layers / switch systems	2019
Deutzer Brücke, Cologne (DE)	Metro / local traffic	Elastic Turnout layers / switch systems	2019
Busan (KR)	Metro / local traffic	Zwp 300 UTS/E14 SF 125	2019
Project W14, (CH)	Railway	Zw 700b EPDM	2019
Azerbaijan Railways (AZ)	Railway	Zw 700NT	2018
DB, Stuttgart 21 (DE)	Railway	Elastic turnout layers system	2018
The Hague (NL)	Metro / local traffic	Zw 140x125x9mm	2018
Ulsan - Pohang (KR)	Railway	Zwp 104 NT 60 E1	2018
Moscow Metro (RU)	Metro / local traffic	Zw 1000/210/150/10	2018
Doha Metro (QA)	Metro / local traffic	Zw178x150x12	2018
Marienzellerbahn, St. Pölten (AU)	Narrow-gauge railway	Zw 700a/270/110/7	2018
Kassel-Würzburg (DE)	Railway / High Speed Line	Zw 1000/210/150/10 System W21	2018
Berlin BVG Seestraße (DE)	Metro / local traffic	Zw 1200/160/125	2018
SSL Austria/Linz (AU)	Narrow-gauge railway	Zw 700/160/110	2018
Ulsan - Singyeongju (KR)	Railway / High Speed Line	Zwp 318/138/12	2018
Kassel-Würzburg (DE)	Railway / High Speed Line	Zw 1000/210/150/10 System W21	2017
ÖPNV Gotha (DE)	Metro / local traffic	Zwp TO 800x178x9	2017
Tampere (FI)	Metro / local traffic	Zw205x178x12mm	2017
Dodam-Yeongcheon (KR)	Railway/ High Speed Line	Zwp 104NT SF 150	2017
Heidelberg RNV (DE)	Metro / local traffic	Zw 205x178x10	2017
Ankara Metro (TR)	Metro / local traffic	Zw 1000/160/140	2017
Schkeuditz-Radefeld (DE)	Railway	Zwp URG 45b	2017
Marienzellerbahn bridge, St. Pölten (AU)	Narrow-gauge railway	Zw 700a SF 110	2017
St. Petersburg Metro (RU)	Metro / local traffic	Zw 700b/160/168/7	2017
Leipzig Public Transport Authority (DE)	Metro / local traffic	Zw 205x178x10	2017
Dresden Public Transport Authority (DE)	Metro / local traffic	Zw 178x110x10	2017
Darmstadt (DE)	Metro / local traffic	Zw 218x178x7	2017
System 336 Butzbach (DE)	Metro / local traffic	Zwp 345x160x10	2017
Wonju, Jecheon (KR)	Railway/High Speed Line	Zwp 318x138x12	2017
Ratingen (DE)	Metro / local traffic	Zw 205x178x10	2017
Dodam – Yeongcheon (KR)	Railway/High Speed Line	Zwp 104 NT SF150	2017
KVB Severinsbrücke, Cologne (DE)	Metro / local traffic	Zwp ECF 345x160x12	2016
Gyeonggi-do (KR)	Railway/High Speed Line	Zwp 104/145 NT	2016
Hannover (DE)	Metro / local traffic	Zw 205x178x12	2016
Rethebrücke, Hamburg (DE)	Railway	Zwp 580x540x12	2016
Doncaster (GB)	Metro / local traffic	Zwp 685x250x10 | Zwp 336x140x12x4 AS	2016
Waldviertelbahn (AU)	Narrow-gauge railway	Zw 700 Y, 35E1	2016
Potsdam (DE)	Metro / local traffic	Zw 205x178x9	2016
Marienzellerbahn, St. Pölten (AU)	Narrow-gauge railway	Zw 700a SF 110 Y-40	2015