



TRAIN CONNECTION SYSTEMS



**A WORLD WHERE
TRAINS ARE PERFECTLY
CONNECTED**

DELLNER COUPLERS AB
VIKAVÄGEN 144
FALUN 79195
SWEDEN



CONNECTING TODAY WITH TOMORROW

A FEW WORDS FROM OUR CEO

Welcome to Dellner!

I hope this brochure will give you an insight into the qualities that make Dellner an exceptional provider of Train Connection Systems and a fantastic place to advance your career. Our commitment to engineering excellence ensures that our products and services are not only reliable and innovative but also carefully designed and expertly crafted.

We deliver Train Connection Systems with a personal touch.

The trust and respect of our valued customers stem from one key factor—our outstanding team. Our people are experts in their fields, bringing a strong service spirit to all they do. They take pride and ownership in their work, combining passion, pride, and experience.

We positively impact people's lives.

At Dellner, we've built a reputation for revolutionising the way people experience train travel. Our systems are vital for ensuring safe, efficient, and comfortable journeys. By enhancing the reliability and performance of rail networks worldwide, we make transportation more accessible and effective.

We have a customer-first philosophy.

Our sole aim is to help our customers achieve their mission objectives capably and confidently, while minimising costs. Our approach ensures that critical transportation projects are completed on time and within budget. Customers trust Dellner to elevate service delivery to new heights.

We have a truly global presence.

Having operated in some of the most challenging environments around the world, our international reach enables us to support customers wherever they need us. We leverage the collective knowledge of our organisation, which

has set new benchmarks for excellence in Train Connection Systems, to keep our customers at the forefront of the industry.

We live our values.

At Dellner, our corporate culture is shaped by a straightforward set of values – Respect, Action, Joy and Team. These values influence our interactions with customers, colleagues, and communities. We hold each other accountable to maintain a company we are all proud to be a part of.

We care about the environment.

Our vision is to support the most environmentally friendly way of traveling. As the leading supplier of Train Connection Systems in the key industry for sustainable transport, we are well-positioned to make a meaningful contribution to protecting our environment. At Dellner, sustainability is considered holistically and involves the entire company. Our progress in this area is measured by EcoVadis, the world's largest and most trusted provider of business sustainability ratings. Additionally, we have committed to the Science Based Targets initiative and strive to reduce greenhouse gas emissions.

I hope this gives you a few reasons to learn more about Dellner. Whether you're a prospective customer, a potential business partner, or a future employee, we look forward to discovering how we can collaborate to bring exceptional service to life.

CEO & President
FREDRIC HÅKANSSON

TABLE OF CONTENTS

3 **CONNECTING TODAY WITH TOMORROW** A few words from our CEO

4 **TABLE OF CONTENTS**

6 **MEET DELLNER**

9 **DELLNER** Sites Overview

10 **OUR HISTORY**

12 **MISSION VISION AND VALUES**

PASSANGER TRAINS

14 **FRONT-END SYSTEMS**

- 16 Automatic Couplers and Modular Concept
- 20 Foldable Couplers
- 22 Adapters
- 23 Data Transmission Products
- 24 Coupler Protection Products
- 26 Crash Energy Management

38 **INTERMEDIATE SYSTEMS**

- 40 Semi-permanent Couplers and Modular Concept
- 42 Gangways
- 44 Articulation Joints

FREIGHT TRAINS

46 **DIGITAL AUTOMATIC COUPLERS (DAC)**

49 **HYBRID COUPLERS**

50 **SERVICES**

- 52 Overhauls
- 53 Spare Parts
- 54 Upgrades & Modernisations
- 56 Repairs
- 58 Technical Support & Training
- 60 Mobile Service Container
- 62 Dellner Service Centers

64 **REFERENCE PROJECTS**

- 64 New Sales
- 84 Dellner Service

96 **CORPORATE SOCIAL RESPONSIBILITY**

98 **GREAT SUCCESS** with Great People

100 **CONTACTS**

6



38



49



98



10



14



53



50



80



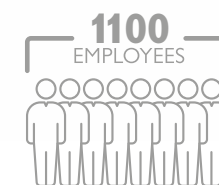
MEET DELLNER



Dellner is one of the world's leading suppliers of Train Connection Systems, with extensive experience in the rail industry. Based in Falun, Sweden, with 18 subsidiaries around the world and more than 1100 employees globally, Dellner continues with its steady, robust growth in couplers, gangways, front hatches, dampers and crash energy management, as well as the service segment of the rail industry.

Founded in 1941, we have years of tested, proven experience in producing safe and reliable train connections, and providing innovative, state-of-the-art and cutting-edge products for our customers.

Quality and prompt delivery will remain our number one focus along with our relationship with the car builders and operators in all regions. Strategic investments in the expansion of our existing product portfolio and new product areas like freight and digitalization will also get our full attention during the coming years, insuring our place as market leader.





All our activities, objectives, values and our success are defined by our customers and are driven by our motivation to offer them the highest level of support and innovation.

TRAIN CONNECTION SYSTEMS

COUPLERS



GANGWAYS



DAMPERS



SERVICES



DELLNER SITES OVERVIEW



OUR HISTORY

Dellner's story began in 1941 when Jan Dellner established a small production company in Northern Sweden, called Ingenieur-Buro Dellner, and began manufacturing couplers for the domestic market. His first customer was SJ (Swedish State Railway), which asked him to produce its first automatic couplers.

Seven years later, Ingenieur-Buro Dellner won an order for 360 couplers for the Warsaw Metro – Poland's only rapid transit system.

After 1952, Ingenieur-Buro Dellner was renamed several times:

- RUNNVIKAMECHANISCHEWERKSTATT
- JAN DELLNER U. CO.
- AB DELLNER MALMCO
- DELLNER COUPLERS AB

Until 1960, Dellner supplied automatic couplers to numerous customers in Europe, such as Paris Metro, SNCF, Rome Metro, and FS (Italian State Railway).

The company has now grown to become a major global player in Train Connection Systems and serves customers all over the world.

Dellner's focus has always been on innovative research and design. By doing so, we've been responsible for several global breakthroughs in the rail industry.

In 1984, Dellner was the first manufacturer to launch the gas hydraulic damper in couplers. This was followed in the 1990s by the production of snow gaiters and front hatch mechanisms.

More recently, the company's focus has been on new products from front to intermediate train systems.

One of our biggest milestones was the acquisition of the Woodville factory, which enabled us to produce gangways in-house. This acquisition meant Dellner became the world's leading system integrator for the interface between rail cars and train front ends.

In 2019, Dellner has reached another milestone in its railway journey as together with Dellner Components and Dellner Dampers was acquired by the Private Equity company - EQT. Supported by the famous Wallenberg family, EQT was founded in 1994 in Sweden and now operates from 15 countries across Europe, Asia and North America. It invests in companies with a mission to develop their strengths and support them in sustainable growth. For Dellner, it is a new chapter which will even enhance its technical, operational, commercial and legal structures.

The year 2020 was marked by being selected as one of four officially approved partners of the European DAC Delivery Program enabled by Shift2Rail. The goal of the program was ambitious: to upgrade all freight trains in Europe equipped with old screw manual couplers to newly developed Digital Automatic Coupler (DAC) by 2032. Together with other coupler suppliers, Dellner continues to develop the new coupler. The DAC will enable the rail freight industry to become more competitive by shortening turnaround times and increasing rail freight reliability. The DAC will make it possible to implement train integrity systems and improved braking performance, which will simplify traffic planning and rail accessibility.

In 2021 Dellner acquired Miira, the coupler production of CAF. With that take over Dellner gained market share with new customers and markets, access to new suppliers and a large installed base of couplers and gangways. As the industry leader in supplying full Train Connection Systems, Dellner will continue delivering cutting edge and high-quality products as well as the best service to its customers worldwide.

That same year, Dellner launched the completely redesigned articulation joint for bogies and trains. One of the design objectives was to reduce the weight compared to alternative solutions. As a result, Dellner's articulated joints are the smallest and lightest coupling modules currently available on the market. They are supplied as a customised solution for new and existing train and bogie interfaces and is easy to install.



We were the first manufacturer to launch the gas hydraulic damper in couplers



MISSION

VISION AND VALUES



MISSION

Dellner provides Train Connection Systems with innovative and sustainable concept and excellent global services, which makes travel safer and more reliable.

VISION

To be the number one global supplier of safe and high quality Train Connection Systems and Services, supporting the most environmentally friendly way of travelling.

”

"It is a pleasure to observe how Dellner extends and explores markets. At each trade fair there are more and more customers at our booths who appreciate our work and the quality of our products. Our external communication is always focused on our customers, who are at the centre of our all activities."

Izabela Drozd, Global Marketing and Social Media Manager, **DELLNER POLAND**

“



OUR CORE VALUES
KEEP TOGETHER

RESPECT | JOY | ACTION | TEAM

RESPECT

We do business with integrity and in an ethical manner. We respect future generations and work continuously to minimize impacts on the environment.

ACTION

We are energetic, we get things done efficiently while achieving high quality. We have a constant drive to improve our performance and learn from our experiences.

JOY

We celebrate success, we are proud to contribute to our society and support our customers.

TEAM

We are stronger as a team and we benefit from our differences. We create a working environment free from discrimination and support each other to develop as individuals and as a group.

*"Designing the systems which connect trains is a huge responsibility for the designers.
I am very proud of the fact that the couplers that I have helped design are in service all over the world.
I never know when, on holiday, I will travel on a train with "my" products..."*

Bente Rost, Team Manager Center Section, DELLNER SWEDEN

FRONT-END SYSTEMS

AUTOMATIC COUPLERS AND MODULAR CONCEPT

FOLDABLE COUPLERS

ADAPTERS

COUPLER PROTECTION PRODUCTS

DATA TRANSMISSION PRODUCTS

CRASH ENERGY MANAGEMENT

FRONT-END SYSTEMS

Applications:

- Commuters
- Metro
- HST
- LRV
- People Movers

AUTOMATIC COUPLERS

Automatic couplers enable railway vehicles to connect instantly, without human intervention. Our multi-function couplers can provide safe and reliable mechanical, pneumatic connections as well as electrical connections between vehicles. They also optimise energy absorption, giving the maximum protection for the vehicle and its passengers.

We offer many different coupler types, to suit the required forces and technical demands of each application. Thanks to a comprehensive range of coupler heads – including latch type, SA3, Tightlock and

Georg-Fischer – Dellner couplers are compatible with almost every other brand of coupler used in the world today.

**COUPLER HEAD
TYPE 10**



**COUPLER HEAD
TYPE 30**



**COUPLER HEAD
TYPE 35**



**COUPLER HEAD
TYPE SA3**



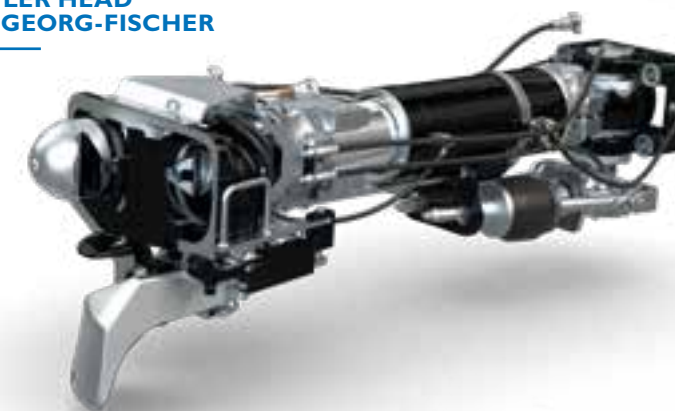
**COUPLER HEAD
TYPE I2**



**COUPLER HEAD
TIGHTLOCK TYPE**



**COUPLER HEAD
TYPE GEORG-FISCHER**



**COUPLER HEAD
TYPE 330**



MODULAR CONCEPT OF AUTOMATIC COUPLERS

Applications:

- Commuters
- Metro
- HST
- LRV
- People Movers

Dellner's modular couplers add flexibility and functionality – and give operators better spare part availability, and lower maintenance costs. The modular approach also means we can offer shorter lead-times, arranging delivery as soon as the order is placed, and accelerating our customers' own production. Importantly, the products are a proven, solid solution – demonstrating their worth daily on hundreds of trains worldwide.

ELECTRICAL COUPLER:

choice of mounting positions, sizes, and contact types

REMOTE UNCOUPLING

HEATERS

COUPLER HEAD:
compatible with all existing coupler heads worldwide

BP VALVE

MRP VALVE

UC VALVE

COUPLER CONTROL

ELECTRICAL COUPLER ACTUATOR

CABLE SUPPORT

PIVOT ANCHOR:
highly efficient energy absorption

SOCKET JOINT:
unique solution

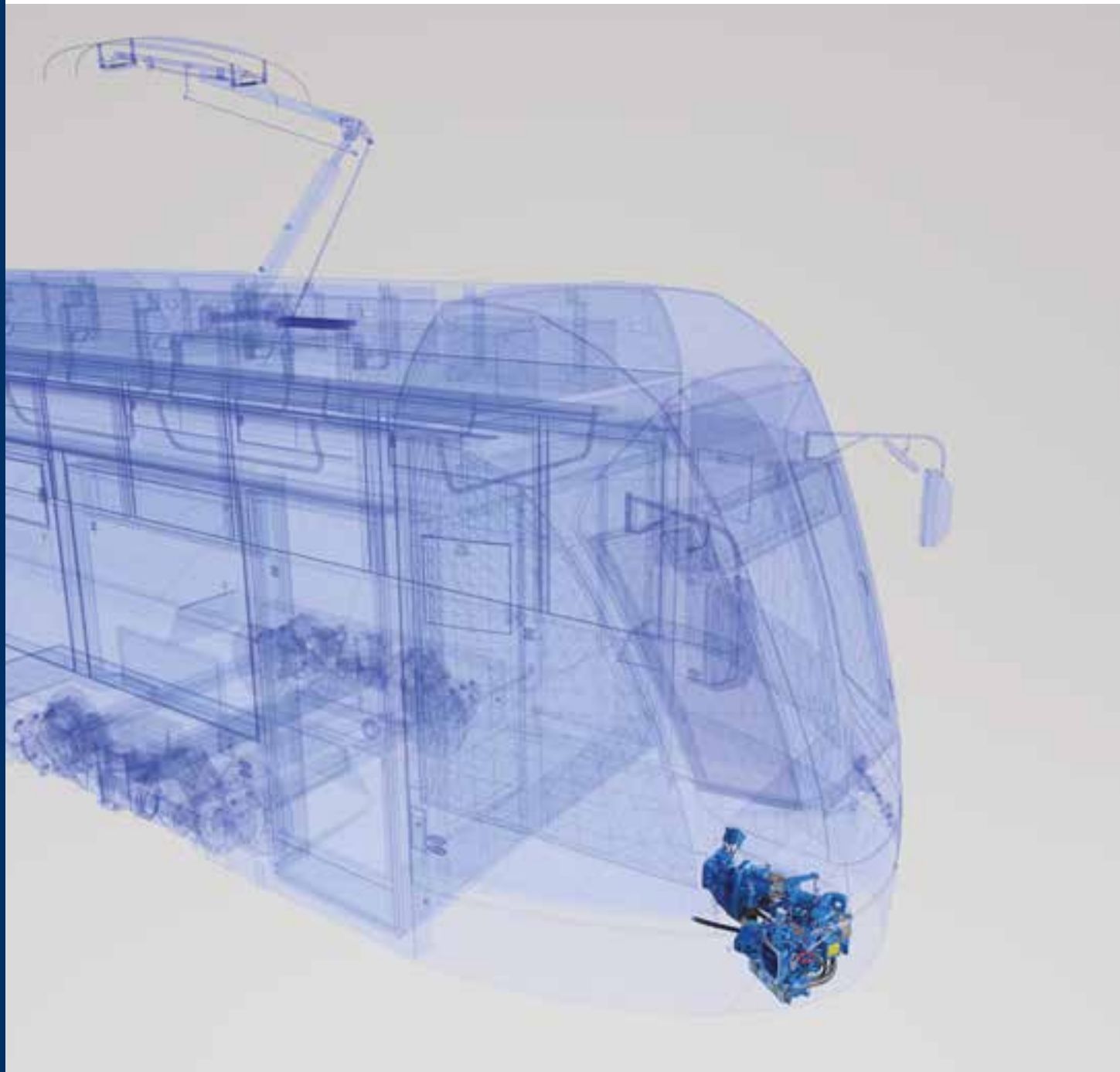
CENTER SECTION:
reversible energy absorption

SUPPORT & CENTERING:
keeps the coupler in the center position

FOLDABLE COUPLERS

Low weight and minimal space demand at the vehicle interface are two general requirements for Train Connection Systems. To meet these requirements, Dellner offers foldable couplers that can be used as service or emergency couplers on light rail vehicles and trams.

They enable a simple, cost-effective and safe connection in daily vehicle operation and offer the possibility of towing faulty trains. Dellner offers fully automatic foldable couplers with incorporated crash energy elements to ensure the increased safety of passengers and vehicles.



ADAPTERS

Applications:

- Commuters
- Metro
- HST
- LRV
- People Movers

Adapters provide safe and reliable connections in unforeseen and emergency situations. At Dellner, we offer adapters compatible with every coupler in the world – making it easy for our customers to satisfy weight and force level requirements. We also offer a choice of both MRP and BP pneumatic connections.

TYPE 10



TYPE 10
WITH AIR HOSES



TYPE 330



TYPE 12



BSI TYPE



BUCKEYE TYPE



DRAWNHOOK



DATA TRANSMISSION PRODUCTS

Applications:

- Commuters
- Metro
- HST
- LRV
- People Movers

Dellner supports the transmission of every kind of digital signal throughout the train: from onboard internet, video, infotainment and passenger counting to communication links for train safety.



CHOICE OF CONTACTS

Our electrical couplers provide different types of contacts for transferring analogue signals, power, and Ethernet up to 1 Gb/s. It's excellent if you need to in-

roduce high-speed data transmission in new vehicles or upgrades of existing rolling stock.

COUPLER PROTECTION PRODUCTS

We offer a wide range of solutions which protect couplers from snow, ice, dust, and sand. They not only safeguard coupler functionality – even in severe weather conditions – but also increase component lifespan.

Each train line faces different environmental conditions. We can create bespoke solutions to ensure a safe, cost effective and reliable service for every train in your fleet.



CRASH ENERGY MANAGEMENT

Applications:

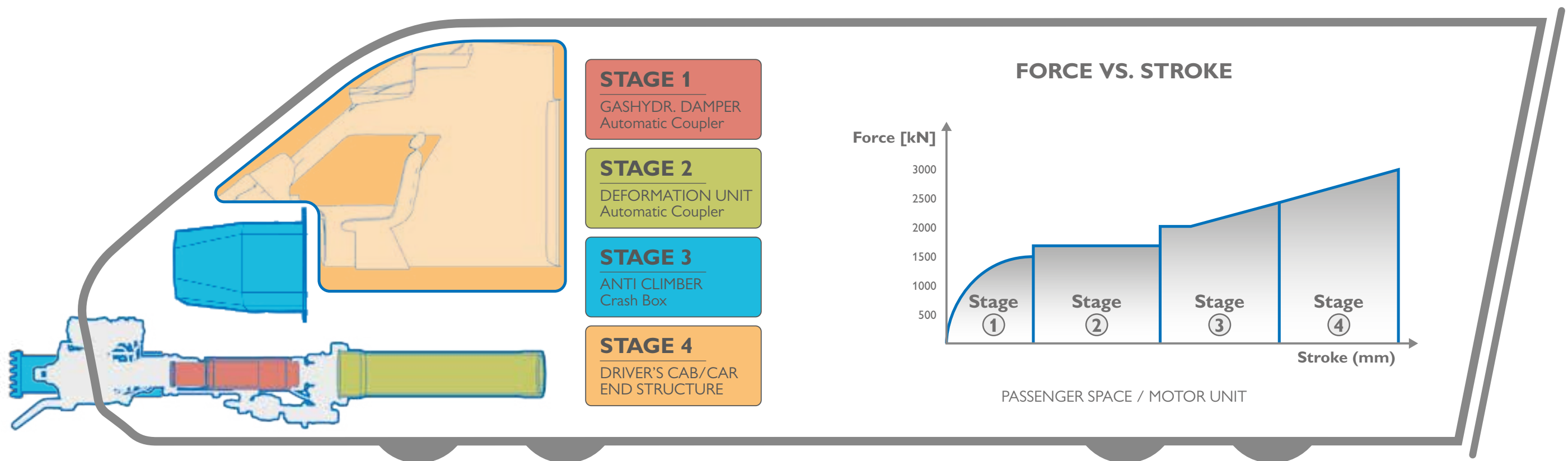
- Commuters
- Metro
- HST
- LRV
- People Movers

Crash Energy Management is a vital part of Dellner's Train Connection Systems. We design our products to ensure passenger safety and train availability at all times.

Our Crash Energy Management components are located in the front of a train and between the cars. They help to handle the impacts of everyday train operations. In serious collisions they absorb energy from impact forces and stop carriages from twisting and climbing – potentially saving passengers' lives. Dellner Train Connection Systems are therefore a key part of any comprehensive train safety management system.

We have developed our own software where we can simulate coupling, towing, snatch and crash scenarios according to standards or general requirements. This enables us to find the most cost-effective solutions to keep forces and accelerations at acceptable levels – saving lives and preventing damage to the structure of the train.

FOUR STAGE PERFORMANCE OF CEM'S ELEMENTS



DAMPERS

Dampers guarantee the most effective regenerative energy absorption during coupling and other daily operations like breaking.

In Dellner's portfolio we offer: gas-hydraulic & friction spring dampers, friction spring dampers, , single and double acting dampers.

Among them, the first mentioned have the best regenerative energy absorption capacity. The damper's characteristics can be adjusted so deceleration is always kept to a minimum.

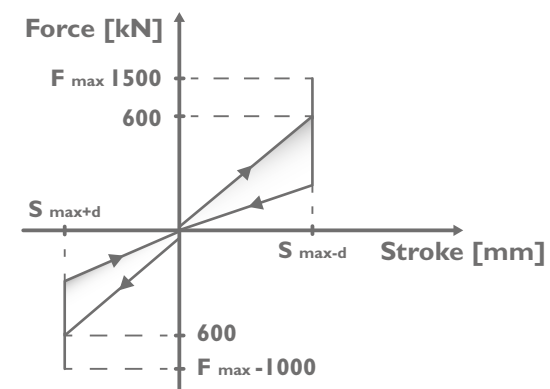
Capacity

- STROKE: 50-370 mm
- FORCE: 400/900/1500 kN

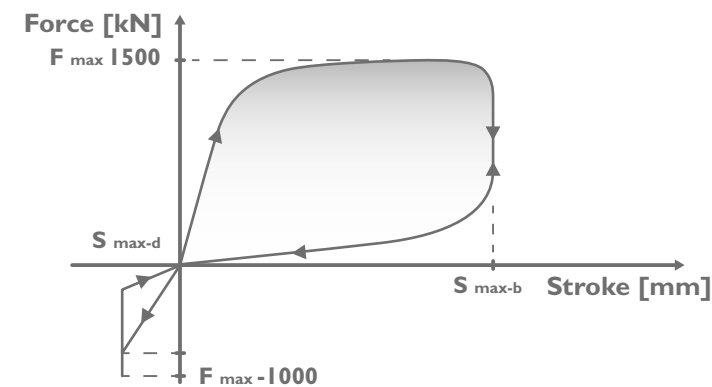
Features

- FULLY REVERSIBLE ENERGY ABSORPTION UP TO INTERMEDIATE SPEEDS
- VELOCITY SENSITIVE
- KEEPS DECELERATION TO A MINIMUM
- UP TO 90% EFFICIENCY

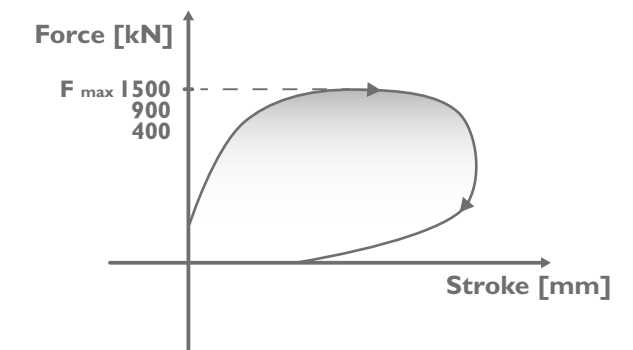
FRICTION SPRING DAMPER



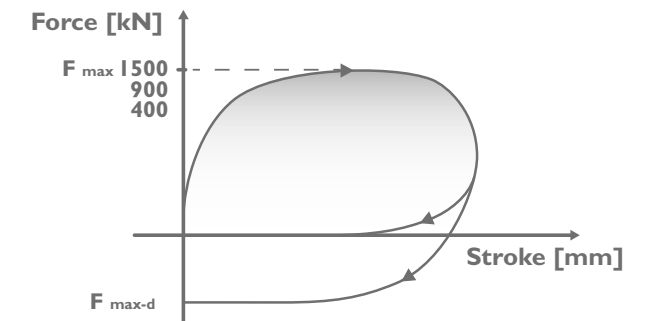
GAS-HYDRAULIC & FRICTION SPRING DAMPER



SINGLE ACTING DAMPER



DOUBLE ACTING DAMPER



POLYMER SPRING BEARINGS

Polymer Spring Bearings are a reliable and easy-to-maintain way to absorb energy reversibly.

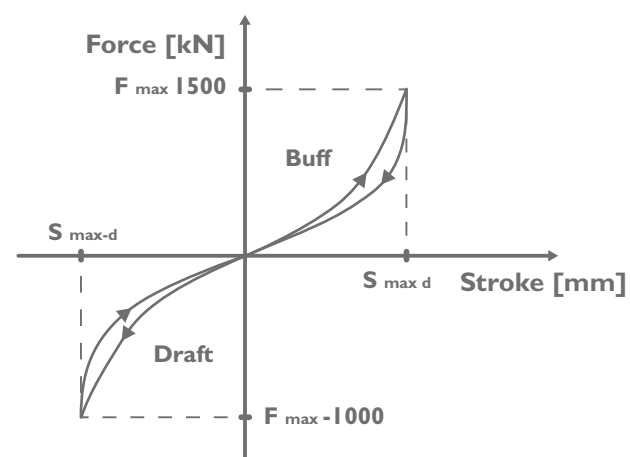
Capacity

- STROKE: 7-55 mm
- FORCE: UP TO 1500 kN

Features

- FULLY-REVERSIBLE ENERGY ABSORPTION UP TO MODERATE SPEEDS
- VELOCITY SENSITIVE
- KEEPS DECELERATION TO A MINIMUM
- UP TO 70% EFFICIENCY

SPHERICAL RUBBER BEARING



FRONT-MOUNTED



BACK-MOUNTED



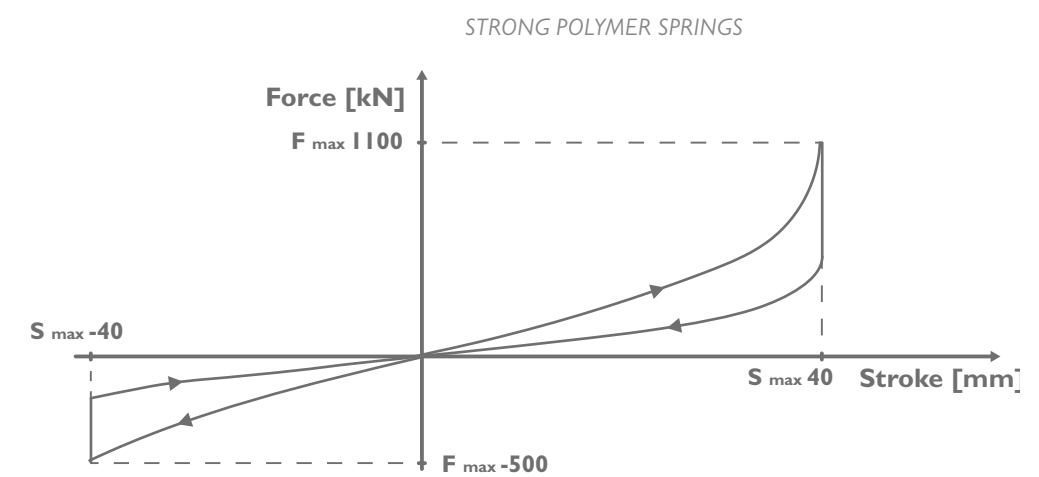
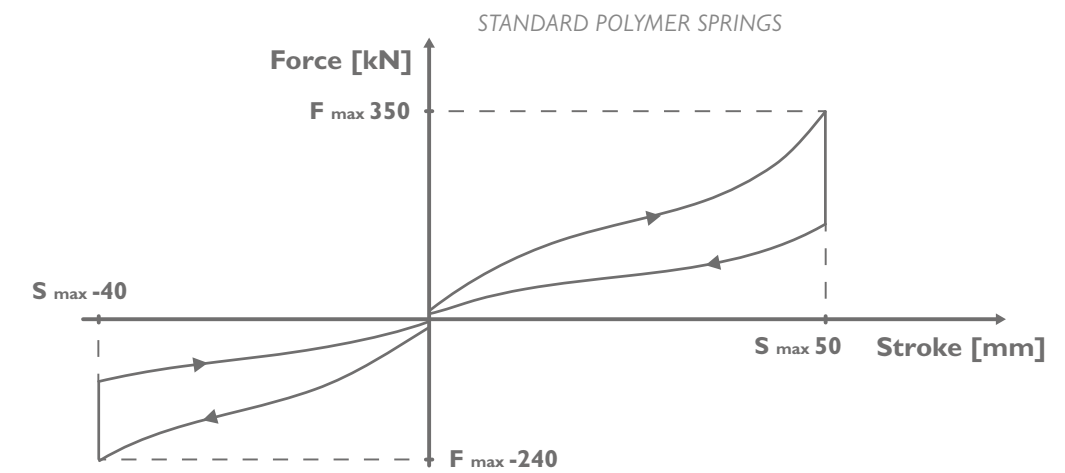
WITH INTERNAL RELEASE



WITH DEFORMATION TUBE BEHIND



EFG 2



FRONT-MOUNTED

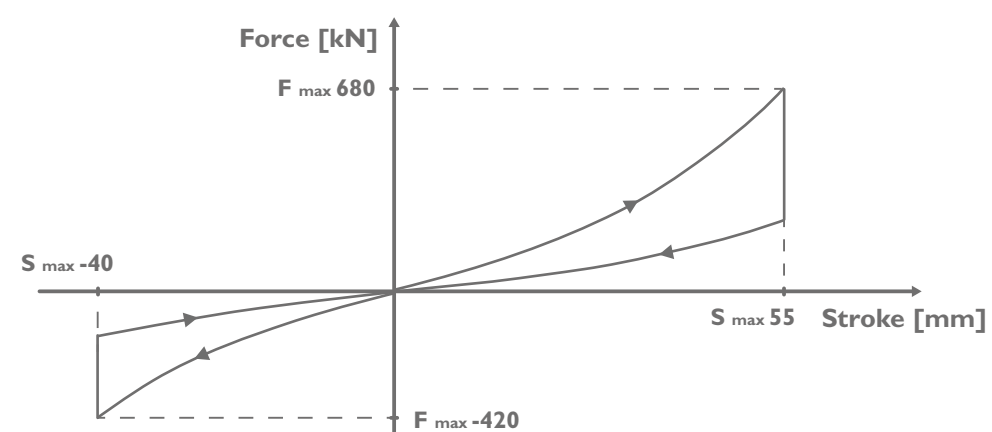


BACK-MOUNTED

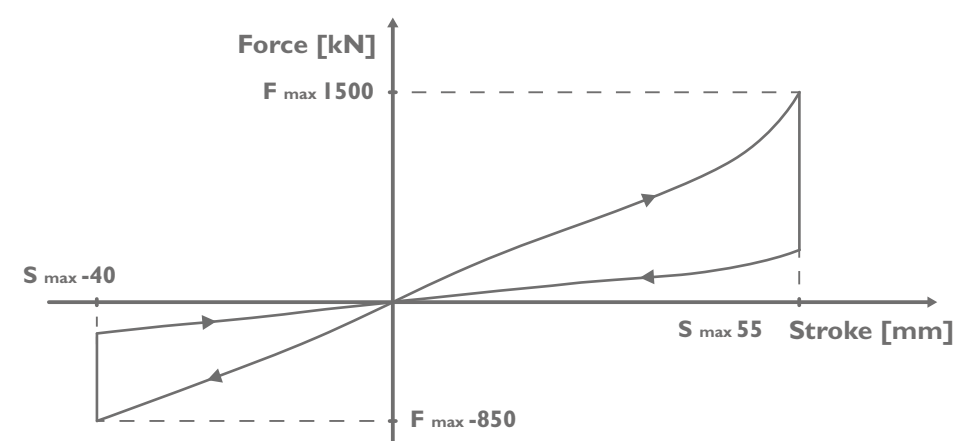


EFG 3

STANDARD POLYMER SPRINGS



STRONG POLYMER SPRINGS



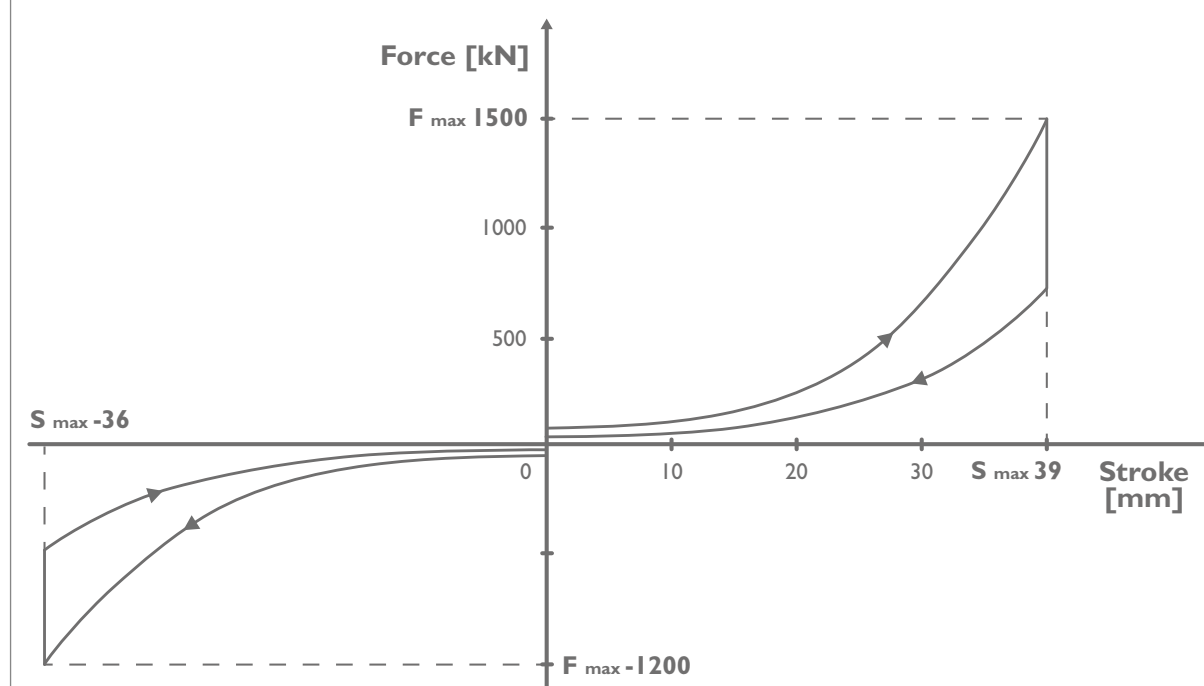
FRONT-MOUNTED

WITH INTERNAL RELEASE

BACK-MOUNTED



POLYMER RING BEARING



FRONT-MOUNTED

BACK-MOUNTED



DEFORMATION ELEMENTS

Deformation Elements are a highly robust and efficient energy absorption component. The energy is absorbed by expanding (or collapsing) a tube over a mandrel, creating a very repeatable structural plastic deformation that, together with the friction, determines the deformation force. The correlation between static and dynamic tests concludes that deformation tubes are non-velocity dependent.

Capacity

- STROKE: 50-1200 mm
- FORCE: 200-2500 kN

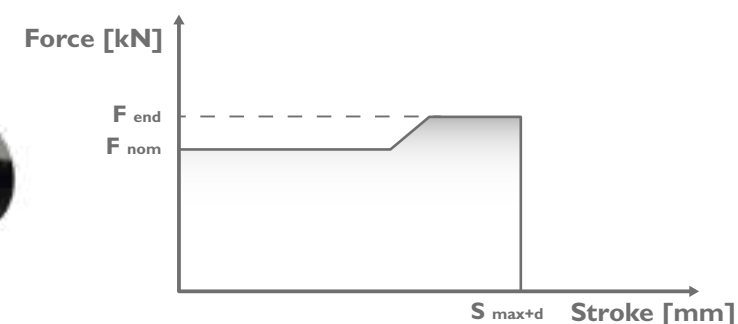
Features

- NON-REVERSIBLE ENERGY ABSORPTION (MUST BE REPLACED AFTER USE)
- NON-VELOCITY SENSITIVE
- 100% EFFICIENCY

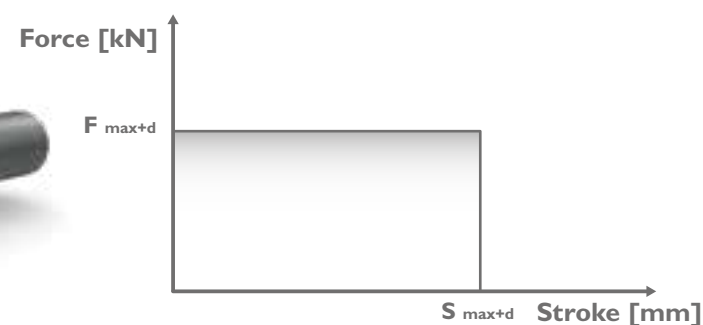
DEFORMATION TUBE
IN CENTER SECTION



DEFORMATION TUBE
BEHIND PIVOT ANCHOR



EXTRUSION BOLT



CRASH BOXES

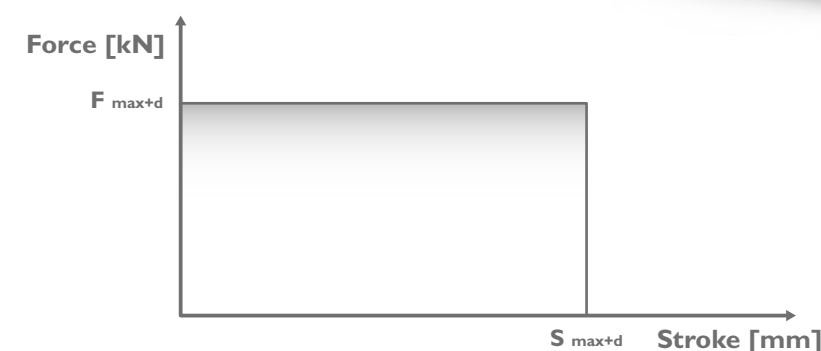
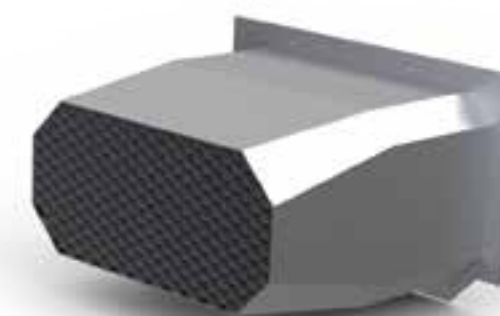
Crash boxes offer a very high energy absorption capacity. They work parallel to the coupler and are typically combined with anti-climbers for optimal structural collapse, because they are not designed to transfer high vertical and lateral loads.

Capacity

- STROKE: 50-1000 mm
- FORCE: 200-3000 kN

Features

- NON-REVERSIBLE ENERGY ABSORPTION (MUST BE REPLACED AFTER USE)
- NON-VELOCITY SENSITIVE
- CLOSE TO 100% EFFICIENCY
- ABSORBS RESIDUAL IMPACT AFTER INITIAL COLLISION
- SHAPE CAN VARY TO FIT THE SPACE AVAILABLE
- RELEASE/SHEAR BOLTS ENSURE THE COUPLER RELEASES IN A CONTROLLED MANNER AND PUSHES THROUGH THE TRAIN POCKET WITHOUT INTERFERING WITH CRASH BOXES OR THE STRUCTURE OF THE CAB



VERRIDE PROTECTION

Override protection components must be able to withstand high bending moments created by vertical offset loading, to keep the train on the track. They can work parallel to the coupler, and will typically engage only after its deformation tube stroke and coupler release have been fully used. A stabilising function can also be built into the draft gear.

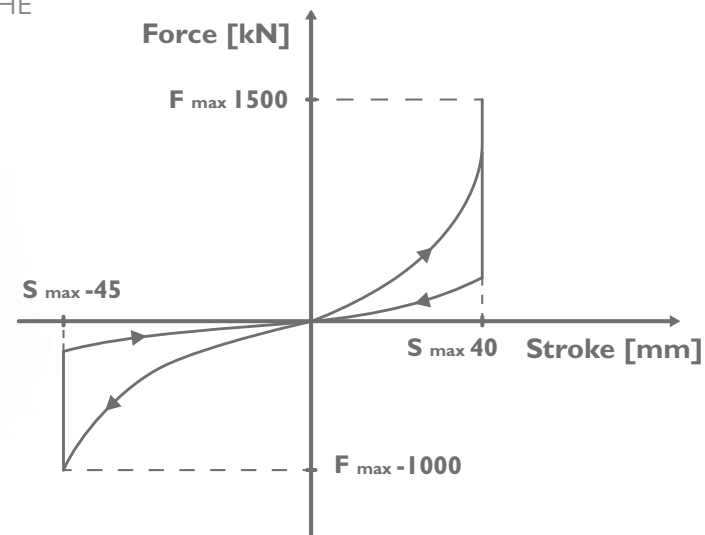
Capacity

- STROKE: 50-750 mm
- FORCE: 200-2500 kN

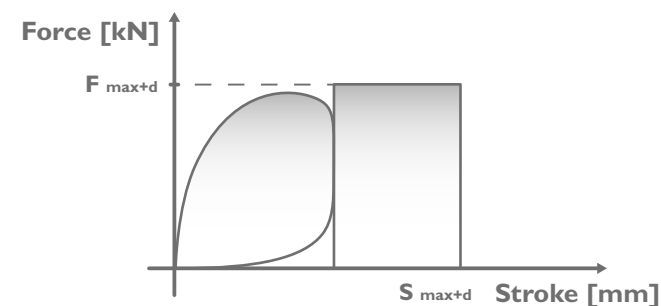
Features

- CHOICE OF REVERSIBLE, NON-REVERSIBLE, AND COMBINED ENERGY ABSORPTION
- NON-VELOCITY SENSITIVE (NON-REVERSIBLE ABSORBERS) OR VELOCITY SENSITIVE (REVERSIBLE ABSORBERS/ COMBINED)
- 70-100% EFFICIENCY

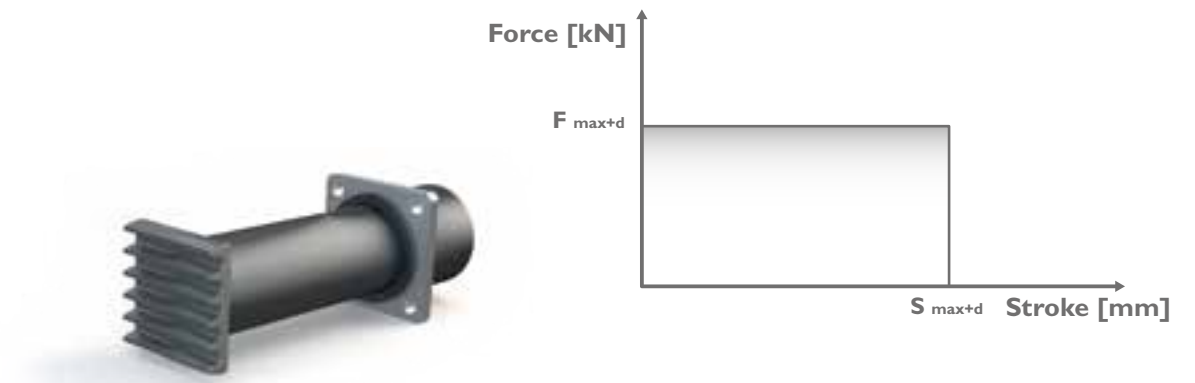
STG – STABILISING FUNCTION IN THE DRAFT GEAR: REVERSIBLE ENERGY ABSORPTION



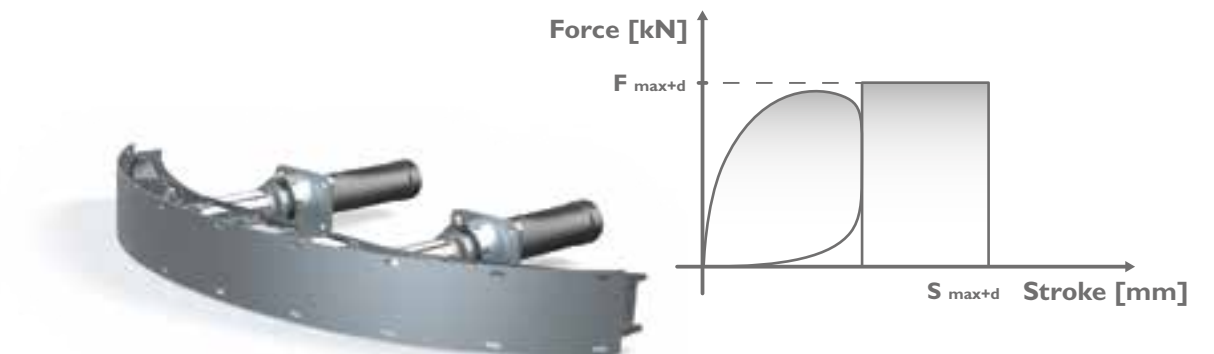
COMBINED ABSORBER: A REVERSIBLE GAS-HYDRAULIC BUFFER IN SERIES WITH A DEFORMATION TUBE



NON-REVERSIBLE ABSORBERS



COMBINED ABSORBERS ASSEMBLED WITH FRONT BUMPER (FOR LRV 250 kN – 400 kN)



"Every product at Dellner is produced or serviced with maximum attention to detail. We are all travellers and we know that the quality of Train Connection Systems is important in order to make travelling safe and reliable for everybody, everywhere."

Martin Thompson, Plant Manager, DELLNER POLAND

INTERMEDIATE SYSTEMS

SEMI-PERMANENT COUPLERS AND MODULAR CONCEPT

GANGWAYS

ARTICULATION JOINTS

INTERMEDIATE SYSTEMS

SEMI-PERMANENT AND INTERMEDIATE AUTOMATIC COUPLERS

Intermediate coupling systems are divided into semi-permanent and intermediate automatic couplers. Semi-permanent couplers provide manual coupling/uncoupling between individual wagons that are rarely separated, whereas intermediate automatic couplers can quickly and automatically couple/uncouple segments of the vehicles. Both ensure safe and rigid connections and offer a cost-effective option for rolling stock. Our intermediate couplers can include electrical and pneumatic connections. They are available with gangway support and impact absorbing elements to maximise safety during daily operations and in the event of a collision.

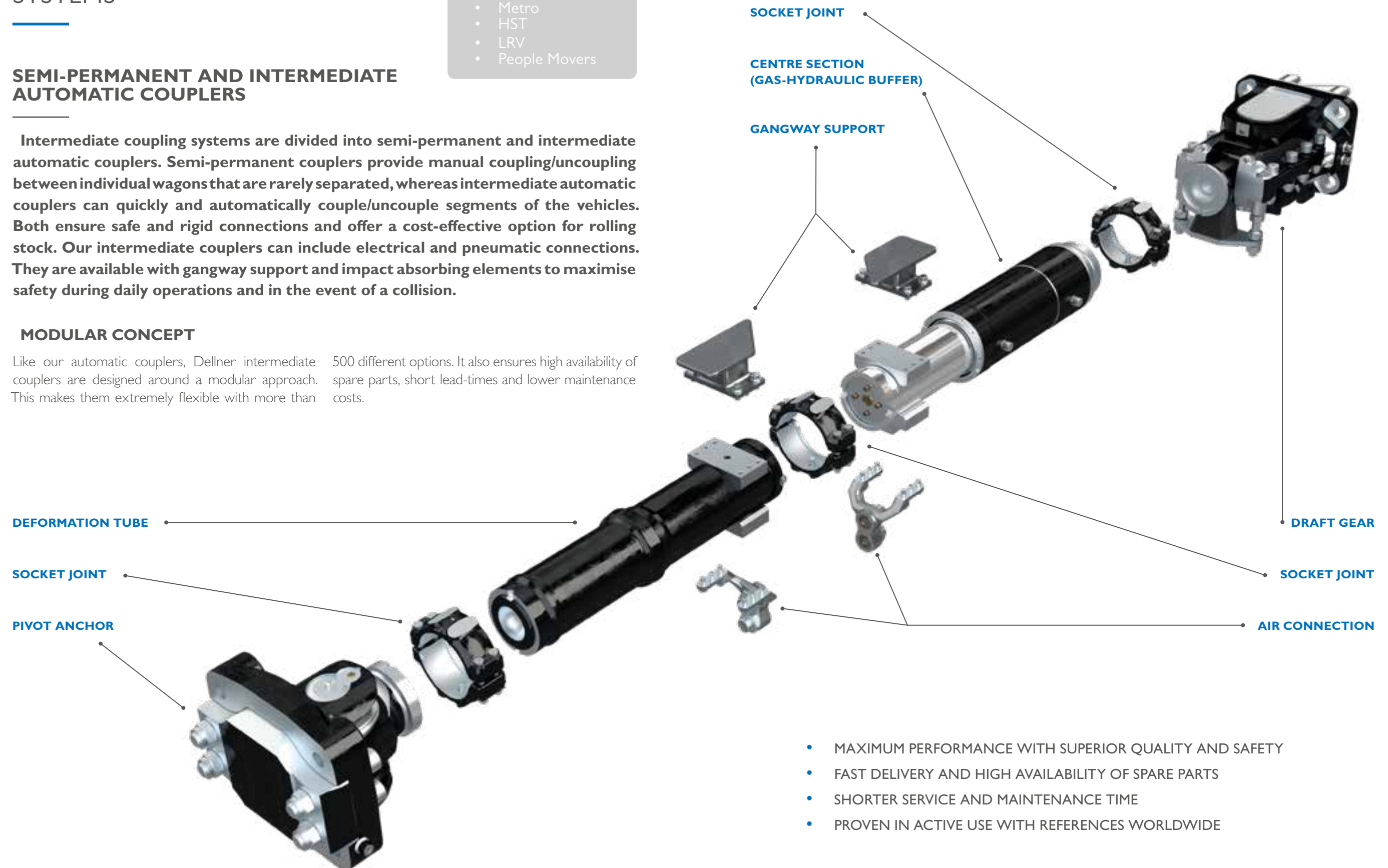
MODULAR CONCEPT

Like our automatic couplers, Dellner intermediate couplers are designed around a modular approach. This makes them extremely flexible with more than

500 different options. It also ensures high availability of spare parts, short lead-times and lower maintenance costs.

Applications:

- Commuters
- Metro
- HST
- LRV
- People Movers



- MAXIMUM PERFORMANCE WITH SUPERIOR QUALITY AND SAFETY
- FAST DELIVERY AND HIGH AVAILABILITY OF SPARE PARTS
- SHORTER SERVICE AND MAINTENANCE TIME
- PROVEN IN ACTIVE USE WITH REFERENCES WORLDWIDE

GANGWAYS

Applications:

- Commuters
- Metro
- HST
- LRV
- People Movers

Our fully-synchronised intermediate systems can include a large variety of gangways, suitable for all applications. These are made from an exclusive, in-house silicone material which delivers enhanced durability, better fire resistance, and high noise attenuation.

We customise our gangways to suit your needs – meeting even the most demanding requirements, such as bespoke shapes and sizes, special colours and materials, unusual applications and operating environments, high tensile strength, and vandal-resistant implants.

Naturally, Dellner gangways are compliant with all significant international standards, and guarantee low maintenance costs for a low total cost of ownership.



COMPLIANT WITH FIRE
AND SMOKE PERFORMANCE
STANDARD EN 45545-2



MAXIMUM NOISE
ATTENUATION
>40 DB ACC. ISO15186-2



MAINTENANCE
CYCLE 15 YEARS



Applications:

- Commuters
- HST

ARTICULATION JOINTS

In articulated trains, the cars of a trainset share bogies with the adjoining cars. Two common configurations are a Jacobs's bogie, in which a common bogie is shared between both cars in an interface, or a semi-trailer joint where the common bogie is placed under only one of the cars.



FIGURE 1. JACOB'S BOGIE AND SEMI-TRAILER JOINT.

The use of the articulation joint offers several benefits:

- THE TRAINSET CAN PASS FASTER THROUGH CURVES SINCE SHARED BOGIES REDUCE THE LATERAL STRESS ON THE ROADBED
- THE OVERALL WEIGHT OF THE TRAINSET IS REDUCED AS THE NUMBER OF BOGIES IS CUT, IMPROVING THE PERFORMANCE OF THE TRAIN WHILE MINIMIZING WEAR ON THE TRACK
- SINCE THE CARS SHARE THE BOGIE, THE TRAIN MOVES TOGETHER AS A UNIT, EFFECTIVELY IMPROVING PASSENGER COMFORT
- IT CAN ALSO BE WIDER THAN CONVENTIONAL TRAINS AND STILL USE THE SAME TRACK AND TUNNEL PROFILE ALLOWING FOR WIDER AISLES AND SEATS AND IMPROVING PASSENGER COMFORT

Our newly developed articulation joint uses a Dellner patented Crash Energy Management product called Cold Drawn Bars (CDB). The CDB system improves a conventional energy absorbing articulating joint by:

- BEING MORE COMPACT - SINCE A CIRCULAR INTERFACE IS NOT NEEDED (TO ACCOMMODATE A DEFORMATION TUBE) THE ARTICULATING JOINT CAN BE MADE SMALLER
- BEING LIGHTER AND SAFER - UNLIKE THE DEFORMATION TUBE DESIGNS, THE CDB SOLUTION CAN BE SUBJECT TO DRAFT LOADING AFTER A COLLISION WITHOUT NEEDING ADDITIONAL LOCKING MECHANISMS
- BEING MORE RELIABLE THROUGH SIMPLIFIED DESIGN – WITHOUT THE NEED OF A CIRCULAR INTERFACE, THE COUPLER SHANKS CAN BE SQUARE MAKING IT POSSIBLE TO EFFECTIVELY STEER THE SHANKS DURING THE STROKE OF THE CDB SYSTEM. THANKS TO THIS, NO EXTRA DESIGN FEATURES (E.G., ROTATIONAL STOP OR GUIDE RAIL) ARE NEEDED



The articulation joint is also available as a stiff joint with no energy absorption.

DIGITAL AUTOMATIC COUPLERS (DAC)

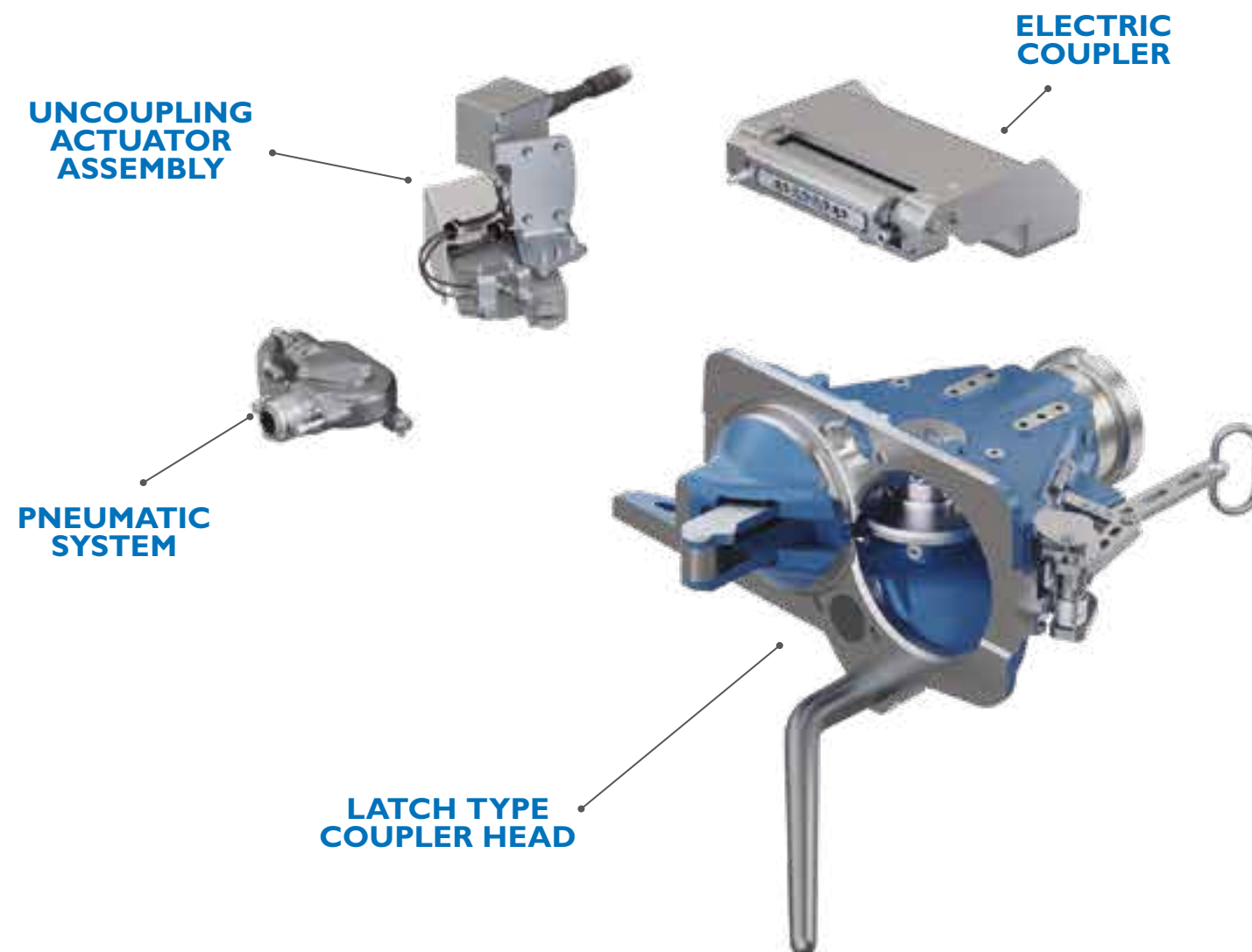
Dellner is one of a select group of suppliers providing Digital Automatic Couplers (DAC) for further integration into the freight rail industry.

The new Digital Automatic Couplers are not a stand-alone technology but the backbone for "full digital freight train operations" to achieve an ambitious transformation in European rail freight. Use cases show that DAC couplers will enable the rail freight industry to become more competitive by shortening turnaround times and increasing rail freight reliability. The DAC will make it possible to implement train integrity systems and improved braking performance, which will simplify traffic planning and rail accessibility.

Moreover, the DAC will remove the necessity of conducting repetitive manual operations during shunting and assembly operations, thus improving the occupational health and safety of rail workers.

The Shift2Rail program predicts that approximately one million Digital Automatic Couplers will replace the old screw type couplers on new and existing freight wagons and locomotives between 2028–2032. This will be a major contributor to the Green Deal with an estimated reduction of the equivalent of 25 million metric tons of CO₂ emissions by 2050.

As part of the Shift2Rail program, Dellner couplers are extensively tested and validated in accordance with the requirements defined in the European DAC Delivery Program. Dellner has also made a commitment to participate in the next phase of the DAC implementation program.

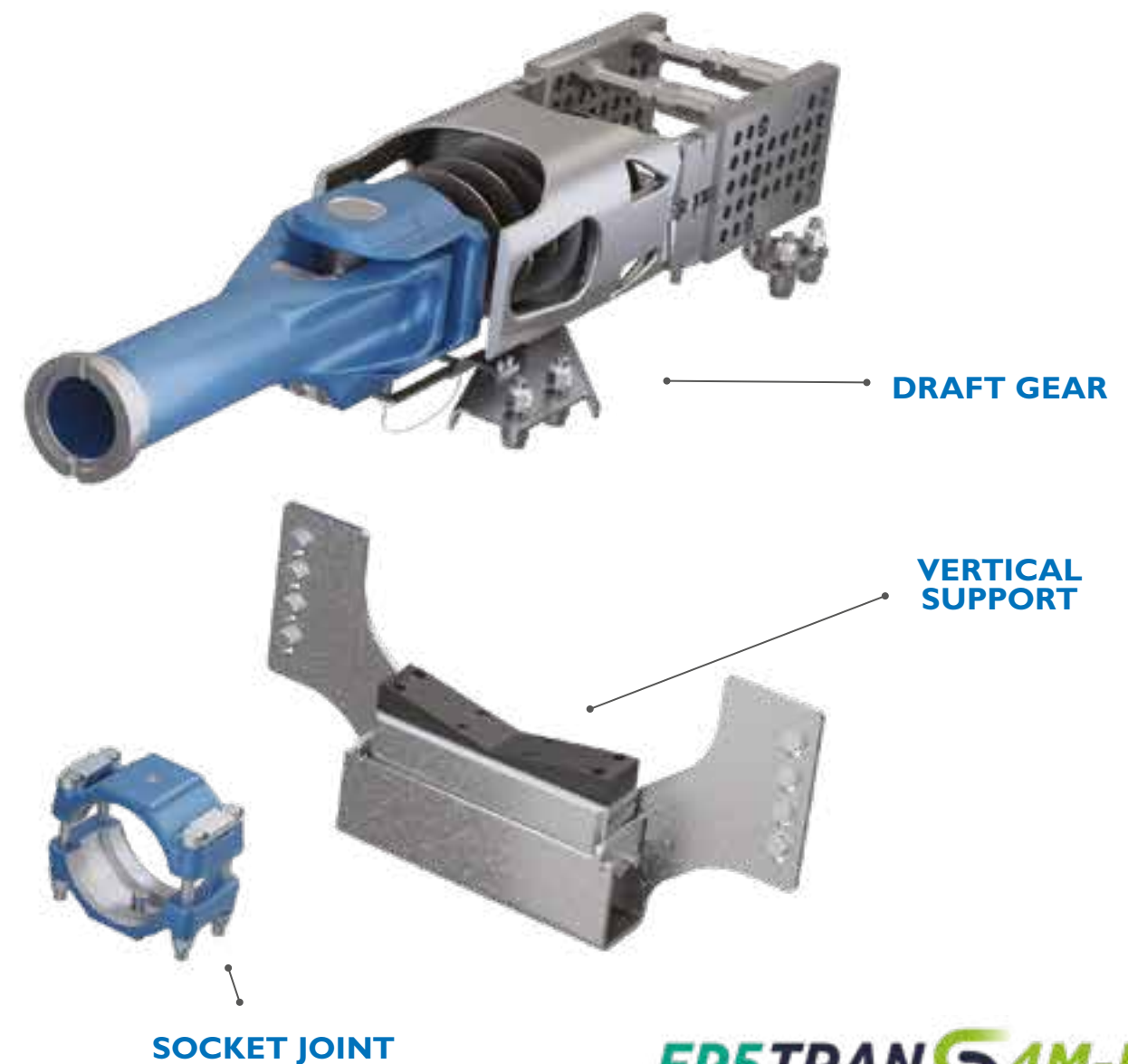


Features of the draft gear:

- BALANCED DRAFT GEAR
- ELASTOMER SPRINGS
- MECHANICAL STROKE INDICATORS
- LUBRIFICATION "FREE"
- FITS STANDARD UIC 530-I COUPLER POCKET
- ANGULAR MOVEMENTS
 - HORIZONTAL $\pm 15^\circ$
 - VERTICAL $\pm 11^\circ$

Features of the coupler head:

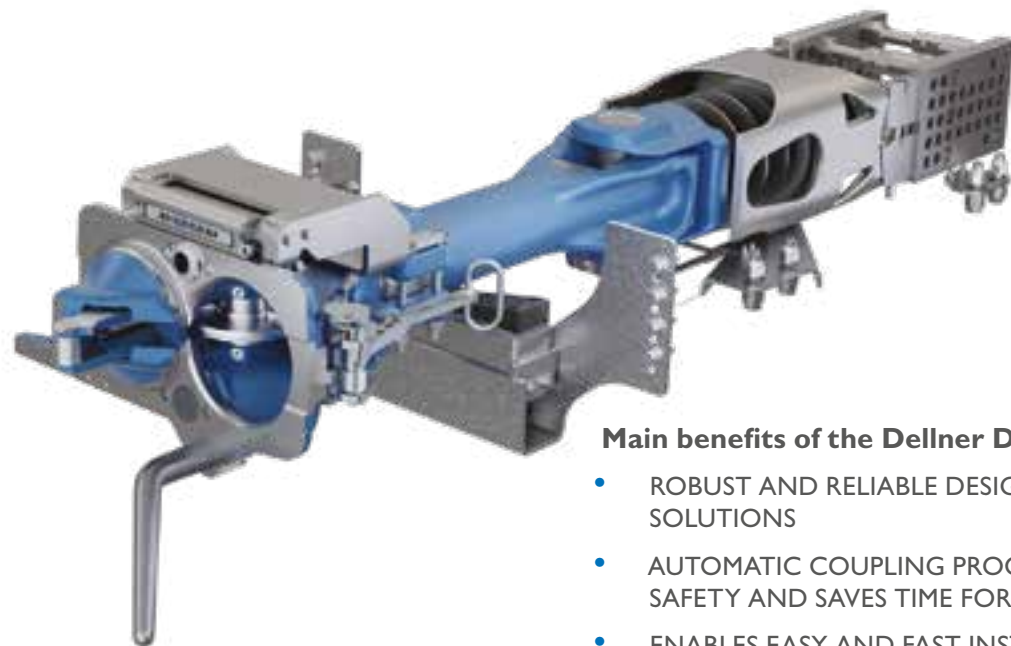
- LATCH TYPE COUPLER – TYPE DELLNER DAC
- DRAFT/BUFF 1000/2000 KN
- ROBUST & PROVEN SERVICE
- LARGE GATHERING RANGE
 - VERTICAL ± 140 MM
 - HORIZONTAL $-275 / +370$ MM
- GREASING WITHOUT UNCOUPLING
- SOCKET JOINT INTERFACE





Features of the add-ons for customization:

- FRONT FACE PNEUMATIC VALVE FOR ADDITIONAL AIRLINE CONNECTION BETWEEN WAGONS
- REMOTE UNCOUPLING CAPABILITY
- CONFIGURABLE ELECTRIC COUPLERS
- WAGON MOUNTED MANUAL UNCOUPLING DEVICE



Main benefits of the Dellner DAC:

- ROBUST AND RELIABLE DESIGN ENABLING CUSTOMISED SOLUTIONS
- AUTOMATIC COUPLING PROCESS WHICH INCREASES SAFETY AND SAVES TIME FOR MANUAL OPERATIONS
- ENABLES EASY AND FAST INSTALLATION, RETROFITTING– PLUG AND PLAY READY
- PROVIDES EASY MAINTENANCE (LUBRICATION FREE DRAFT GEAR AND GREASING COUPLER HEAD WITHOUT UNCOUPLING)
- SECURE LOW LCC (OPERATIONAL, PERSONNEL, AND MAINTENANCE)

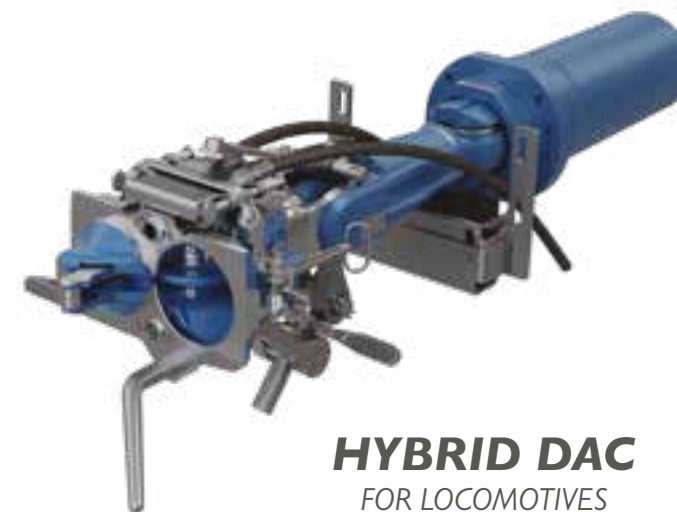
HYBRID COUPLERS

During the migration from screw couplers to the new Digital Automatic Couplers (DAC), operators will face the challenge of transitioning between technologies. To support this, Dellner has developed hybrid couplers for locomotives that enable easy switching between DAC coupler and screw coupler. This helps the operator to equip the locomotive with a coupler that meets the needs of the specific train configuration. The hybrid couplers will provide all of the features and advantages of the DAC coupler when in DAC coupler mode.

The Hybrid DAC is built on a modular concept which simplifies customised integration with locomotives were necessary while also being cost efficient.

Main benefits of the hybrid couplers:

- FULLY COMPATIBLE WITH SCREW COUPLER INTERFACES
- FULLY COMPATIBLE WITH DAC INTERFACES
- SIMPLIFYING CONNECTING THE OLD AND NEW FLEETS
- MANUAL OR AUTOMATIC LIFTING DEVICE
- DESIGNED TO FIT EXISTING LOCOMOTIVE INTERFACES



HYBRID DAC
FOR LOCOMOTIVES
DAC MODE



HYBRID DAC
FOR LOCOMOTIVES
SCREW COUPLER MODE



TRAIN CONNECTION SYSTEMS

SERVICES

OVERHAULS

SPARE PARTS

UPGRADES & MODERNISATIONS

REPAIRS

TECHNICAL SUPPORT & TRAINING

MOBILE SERVICE CONTAINER

DELLNER SERVICE CENTERS

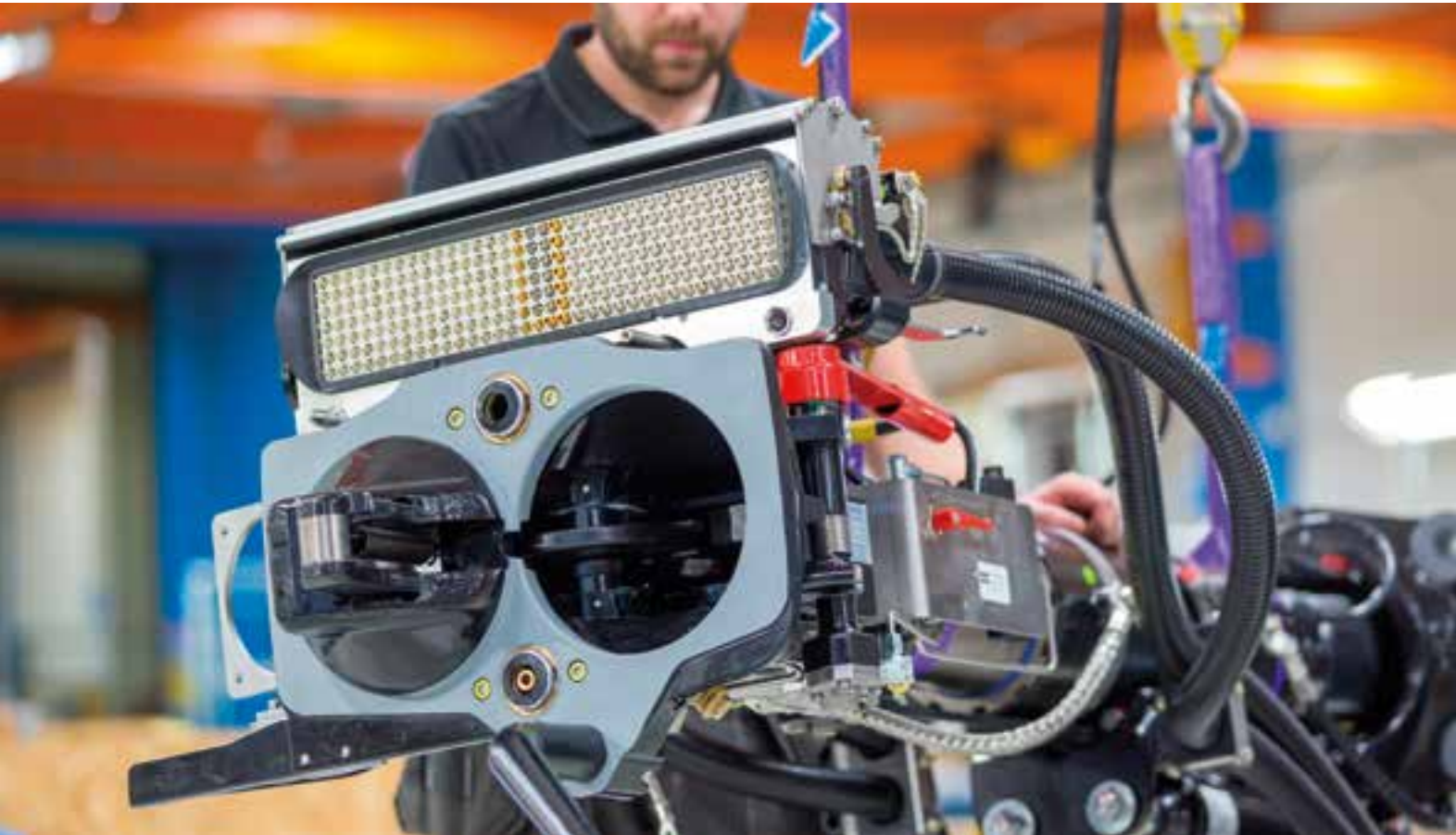


*"I travel to our customers whenever they need field service support.
I treat every case individually and fix the issue in the shortest possible time.
I'm happy to be part of maintaining the quality of products
which are so crucial to the functioning and reliability of the whole train."*

Arkadiusz Bialas Service Technician DELLNER POLAND

SERVICES

OVERHAULS



To ensure the quality and integrity of our products throughout their life cycles, we recommend regular and comprehensive overhauls (every eight years for couplers, and every ten years for gangways).

During an overhaul, we carry out stringent checks on critical components, including repairs or replacements for worn or damaged components. Every critical component is taken apart, carefully repaired, and reassembled ready for service.

No matter the issue, we take each job on a case-by-case basis, ensuring we always maintain the highest standards, either on-site or at one of our subsidiaries.

Benefits to you:

- REGULAR OVERHAULS AND COMPREHENSIVE REPAIRS
- MINIMAL ROLLING-STOCK DOWNTIME
- LOCALLY SERVICED TO THE HIGHEST STANDARDS

SPARE PARTS



When unexpected repairs and replacements are needed, we understand that time is money, and downtime should be kept to a minimum. That's why we keep a large number of spare parts for all types of product (both OEM and non-OEM) at each of our locations worldwide.

Benefits to you:

- HIGH AVAILABILITY AND RELIABILITY
- FAST SUPPORT ANYWHERE IN THE WORLD
- QUALITY SPARE PARTS HELD LOCALLY
- SPARE PARTS AVAILABLE FOR ALL TYPES OF PRODUCT (BOTH OEM AND NON-OEM)

UPGRADES AND MODERNISATIONS

We understand the need to modernise fleets to keep up with changing demands, and reduce the high costs involved with fleet replacements. That's why we offer upgrades to existing products, including function and technology upgrades which help modernise older rolling stock and keep trains safely in service for longer.

We provide:

- COMPETITIVELY-PRICED NEW PRODUCT FUNCTIONS
- LOWER MAINTENANCE COSTS
- LIFETIME PRODUCT FUNCTIONALITY
- SAFETY AND AVAILABILITY IMPROVEMENTS



REPAIRS

The application and usage of different train parts, as well as their exposure to environmental damage and accidents, can greatly affect their operational life.

We take each job on a case-by-case basis, maintaining the highest standards both on site and at our subsidiaries.

We provide:

- COMPETITIVELY-PRICED NEW PRODUCT FUNCTIONS
- LOWER MAINTENANCE COSTS
- LIFETIME PRODUCT FUNCTIONALITY
- SAFETY AND AVAILABILITY IMPROVEMENTS

TECHNICAL SUPPORT AND TRAINING

The right training and support means products can be better maintained, which greatly reduces the risk of downtime. That's why our experienced local staff are ready to support you with technical advice and training programs for your employees, tailored to your needs.

Benefits to you:

- LOCAL TECHNICAL ADVICE AND TRAINING
- COMPREHENSIVE PRODUCT MAINTENANCE KNOWLEDGE
- EXPERIENCED SERVICE STAFF AND ENGINEERS
- 24/7/365 SERVICE STAFF AVAILABILITY



MOBILE SERVICE CONTAINER

High rolling stock availability is one of your most important requirements. That's why we offer Mobile Service Container – a combined mobile workshop and warehouse for both complete overhauls and general coupler repair work, all at your own location.

Our mobile workshop enables us to carry out works on-site for a quick turnaround, so your rolling stock can be back in service with minimum disruption.

On-site service also means customers save on unnecessary logistical and operational costs.

Mobile Service Container is based on a standard shipping truck which makes it highly mobile and available anywhere in the world.

The workshop is equipped with all the tools and equipment necessary for a complete overhaul, as well as most general and specific repair work.

Together with our mobile workshop, we also offer a mobile warehouse which contains all necessary spare parts for a quick overhaul or repair and is individually equipped for each job.





DELLNER SERVICE CENTERS

Our fully equipped workshops in Sweden, Poland, the UK, France, Italy, Germany, China, Australia, India, Brazil, and the US offer customers the highest quality services to ensure expectations are always met.

Our Service Centers carry out modernisations, renovations, overhauls, and upgrades on existing couplers and gangways.

We produce the majority of the components we use in our products in-house, which makes us highly flexible and able to meet short lead-times. And thanks to fast delivery and high part availability, our Service Centers guarantee shorter rolling-stock downtime for our customers.

Our competitive prices and close customer cooperation ensure we carry out renovations efficiently and get them right first time. What's more, our focus on quality at every stage of the manufacturing process – as well as thorough product testing – helps provide our customers with complete passenger safety assurance.

All Dellner customers benefit from:

- **High-availability service center** – open seven days a week, all year round
- **Modern facilities** – focused on flexibility and turnaround speed
- **Experienced teams** – who focus on customers' needs
- **Competence center** – for both OEM and non-OEM products



REFERENCE PROJECTS

NEW SALES

KRÖSATÅG, p.66



QUEENSLAND NG, p.68



SINGAPORE R151, p.70



C30, p.72



PORTLAND LRV, p.74



TWIST, p.75



**RENFE HIGH
CAPACITY**, p.76



**VANDE BHARAT
SLEEPER
TRAINSETS**, p.78



REGIO160, p.80



CITADIS, p.82

KRÖSATÅG

Customer: **CAF**
 Platform: **Civity**
 Operator: **SJ**
 Country: **Sweden**
 Duration: **2022-ongoing**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLER: TYPE 10
- TOP MOUNTED ELECTRICAL COUPLER
- CENTRE SECTION: DOUBLE ACTING DAMPER
- PIVOT ANCHOR: SPHERICAL RUBBER BEARING ANCHOR WITH DEFORMATION TUBE
- MRP, BP AND UC VALVES
- FRONT COVER



Gaiters

- SINGLE PIECE
- SINGLE CONVOLUTE
- WEIGHT: 30 kg



Articulation joints

- TENSILE YIELD STRENGTH: 1000 kN
- COMPRESSIVE YIELD STRENGTH: 1500 kN
- JACOBS BOGIE INTERFACE, CONICAL
- CRASH ENERGY MANAGEMENT: COLD DRAWN BARS (EXTRUSION BOLTS)



QUEENSLAND NG

Customer: **Alstom**
 Operator: **Queensland Rail**
 Country: **Australia**
 Duration: **2015-2017**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLER: TYPE 10
- CENTRE SECTION: GAS HYDRAULIC BUFFER
- PIVOT ANCHOR: SPHERICAL RUBBER BEARING ANCHOR WITH DEFORMATION TUBE
- MRP, BP AND UC VALVES



Adapters

- ADAPTER TYPE 10 TO TIGHTLOCK



Semi-permanent couplers

- MECHANICAL COUPLER: SOCKET JOINT TYPE
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR: EFG 3
- GANGWAY SUPPORT



Gangways

- MOULDED TREADPLATE INCLUDES HIGH-VISIBILITY STRIPS FOR SAFETY
- CONSTRUCTION TYPE: DOUBLE BELLOW, ONE PIECE, COUPLER SUPPORTED GANGWAY
- SIDEWALL: SILICONE BELLOWS
- ATTACHMENT TYPE: BOLTED
- ACOUSTIC ATTENUATION RW (DB): 35 DB (ISO 15186-2)
- FIRE AND SMOKE STANDARD: BS 6853:1999
- DESIGN LIFE: (UP TO 15 YEARS OF SERVICE BEFORE OVERHAUL)
- WATER INGRESS: IPX5
- THERMAL INSULATION: 3.56 W/m²K
- WEIGHT: 273 kg



SINGAPORE R151

Customer: **CARC**
 Operator: **SMRT**
 Country: **Singapore**
 Duration: **2021-ongoing**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLER: TYPE 35
- SIDE-MOUNTED ELECTRICAL COUPLERS
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR: EFG 3 WITH INTERNAL RELEASE
- MRP, UC VALVES



Semi-permanent couplers

- MECHANICAL COUPLER: SOCKET JOINT TYPE
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR : RUBBER DOUGHNUT ANCHOR
- PNEUMATIC CONNECTION
- GANGWAY SUPPORT



Automatic intermediate couplers

- MECHANICAL COUPLER: TYPE 35
- SIDE-MOUNTED ELECTRICAL COUPLERS
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR: RUBBER DOUGHNUT ANCHOR
- MRP VALVES
- GANGWAY SUPPORT



C30

Customer: **Alstom**
 Operator: **SJ Stockholm**
 Country: **Sweden**
 Duration: **2015-ongoing**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLERS: TYPE 330
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR: EFG 3
- BOTTOM-MOUNTED ELECTRICAL COUPLER
- HIGH-SPEED DATA TRANSMISSION
- MECHANICAL COUPLER COMPATIBLE WITH DELLNER COUPLERS ON EXISTING C20 SERIES TRAINS
- MODULAR DESIGN
- BP, UC VALVES



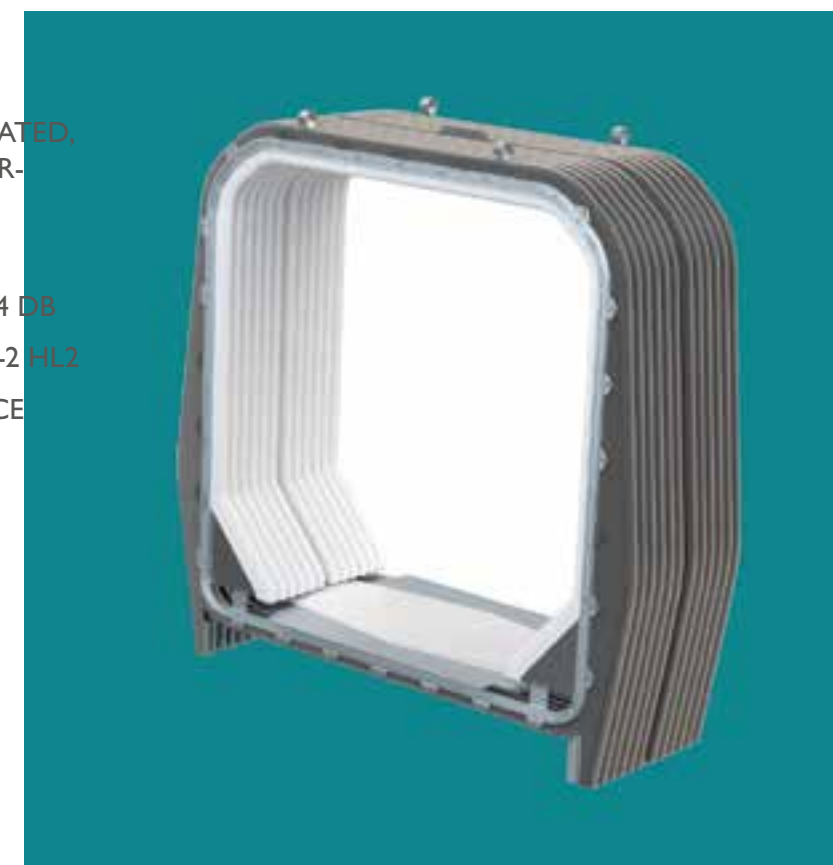
Semi-permanent couplers

- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR: EFG 2
- GANGWAY SUPPORT
- MODULAR DESIGN



Gangways

- CONSTRUCTION TYPE: NON-ARTICULATED, DOUBLE BELLOW, ONE PIECE, COUPLER-SUPPORTED GANGWAY
- ATTACHMENT TYPE: BOLTED
- ACOUSTIC ATTENUATION RW (DB): ≥ 34 DB
- FIRE AND SMOKE STANDARD: EN45545-2 HL2
- DESIGN LIFE: (UP TO 15 YEARS OF SERVICE BEFORE OVERHAUL)
- SIDEWALL: SILICONE BELLOWS
- WATER INGRESS: IPX5
- THERMAL INSULATION: $2.63 \text{ W/m}^2\text{K}$
- MASS: 505 kg



Portland LRV

Customer: **Siemens**
 Platform: **S70**
 Operator: **TriMet**
 Country: **USA**
 Duration: **2021-ongoing**



PRODUCTS:

Foldable automatic couplers

- MECHANICAL COUPLER: TYPE 330
- SIDE-MOUNTED ELECTRICAL COUPLERS
- CENTRE SECTION: FOLDING DEVICE, GAS HYDRAULIC DOUBLE ACTING DAMPER, DEFORMATION TUBE
- PIVOT ANCHOR: SPHERICAL RUBBER BEARING ANCHOR



TWIST

Customer: **PESA**
 Platform: **Twist**
 Operator: **Tallinna Linnatranspordi AS**
 Country: **Estonia**
 Duration: **2023-ongoing**



PRODUCTS:

Foldable automatic couplers

- MECHANICAL COUPLER: TYPE 30
- CENTRE SECTION: FOLDING DEVICE & STIFF TUBE
- PIVOT ANCHOR: EFG 2 LIGHT
- COUPLER LOCKING DEVICE (IN FOLDED POSITION)



RENFE High Capacity

Customer: **Stadler**
 Platform: **Flirt/Kiss**
 Operator: **RENFE**
 Country: **Spain**
 Duration: **2023-ongoing**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLER: TYPE 10
- TOP-MOUNTED ELECTRICAL COUPLER
- CENTRE SECTION: GAS HYDRAULIC DOUBLE ACTING DAMPER & DEFORMATION TUBE
- PIVOT ANCHOR: SPHERICAL RUBBER BEARING ANCHOR WITH DEFORMATION TUBE
- MRP, BP AND UC VALVES



Semi-permanent couplers

- MECHANICAL COUPLER: SPECIAL (FLANGE TYPE)
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR: SPHERICAL RUBBER BEARING ANCHOR
- PNEUMATIC CONNECTION



Adapters

- ADAPTER TYPE 10 TO UIC HOOK
- THE LATCH ADAPTER IS PROVIDED WITH AIR CONNECTIONS FOR COUPLING BP (BRAKE PIPE) AIR FROM THE TOWING VEHICLE AND MRP (MAIN RESERVOIR PIPE) AIR



Vande Bharat sleeper trainsets

Customer: **BEML**

Operator: **Indian Railways**

Country: **India**

Duration: **2024-ongoing**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLER: KNUCKLE TYPE COUPLER, TIGHTLOCK TYPE-H
- CENTRE SECTION: STIFF UNIT
- PIVOT ANCHOR : POLYMER RING BEARING



Semi-permanent couplers

- MECHANICAL COUPLER: SOCKET JOINT TYPE
- CENTRE SECTION: DEFORMATION TUBE
- PIVOT ANCHOR : POLYMER RING BEARING



REGIO160

Customer: **PESA**
 Platform: **Regio160**
 Operator: **České dráhy as**
 Country: **Czech Republic**
 Duration: **2023-ongoing**



PRODUCTS:

Automatic couplers

- MECHANICAL COUPLER: TYPE 10
- TOP MOUNTED ELECTRICAL COUPLER
- CENTRE SECTION: STIFF TUBE
- PIVOT ANCHOR: EFG 3 WITH INTERNAL RELEASE
- MRP, BP, AND UC VALVES



Articulation joints without energy absorptions

- TENSILE YIELD STRENGTH: 1000 kN
- COMPRESSIVE YIELD STRENGTH: 1500 kN



Gangways

- SINGLE SKINNED GANGWAY
- HIGH LEVEL RESISTANCE TO ENVIRONMENTAL FACTORS, INCLUDING EXCELLENT NATURAL WEATHERING RESISTANCE
- NOISE ATTENUATION: MIN. 27 DB
- HEAT CONDUCTION: $< 5W/m^2K$
- COMPLIANCE WITH THE EN 45545-2 FIRE & SMOKE REQUIREMENTS



Side buffers

- CRASH ENERGY MANAGEMENT: DEFORMATION TUBE
- ANTICLIMBING FUNCTION



Adapters

- ADAPTER TYPE 10 TO UIC HOOK
- THE LATCH ADAPTER IS PROVIDED WITH AIR CONNECTIONS FOR COUPLING BP (BRAKE PIPE) AIR FROM THE TOWING VEHICLE AND MRP (MAIN RESERVOIR PIPE) AIR.



CITADIS

Customer: **Alstom**
 Platform: **Citadis**
 Operator: **Kölner
Verkehrs-Betriebe
AG, KVB**
 Country: **Germany**
 Duration: **2023-ongoing**



PRODUCTS:

Foldable automatic couplers

- MECHANICAL HEAD: TYPE 330
- TOP-MOUNTED ELECTRICAL COUPLER
- REMOTE FOLDING AND UNFOLDING FUNCTION
- CENTRE SECTION: GAS HYDRAULIC SINGLE ACTING DAMPER
- PIVOT ANCHOR: EFG 3 WITH INTERNAL RELEASE AND INTEGRATED COUPLER ANTI-ROTATION FEATURES TO PREVENT THE COUPLER FROM TWISTING IN THE FOLDED POSITION
- MECHANICAL CENTERING DEVICE
- ENERGY ABSORPTION FUNCTION DURING A CRASH WHEN A COUPLER IS IN THE FOLDED POSITION- ACTIVATED BY IMPACT/ANTI-CLIMBER PLATE
- CRASH ENERGY MANAGEMENT: COLD DRAWN BARS ON PIVOT ANCHOR
- ADDED LIMITERS FOR COUPLER MOVEMENT DURING A CRASH – THE COUPLER MOVES A CERTAIN DISTANCE UNDER THE VEHICLE



Semi- automatic couplers

- MECHANICAL HEAD: TYPE 30
- CENTRE SECTION: GAS HYDRAULIC SINGLE ACTING DAMPER
- PIVOT ANCHOR: SPHERICAL RUBBER BEARING ANCHOR
- INTEGRATED GANGWAY SUPPORT
- COMPACT RUBBER VERTICAL SUPPORT



Adapters

- TYPE 330 TO ALBERT COUPLER
- WEIGHT: 18 kg (LIGHT RESCUE ADAPTER)
- COMPACT SOLUTION
- DESIGN FORCE LEVELS:
BUFF 200 kN / DRAFT 200 kN



Front hatch mechanisms

- LRV SOLUTION
- DESIGN ADAPTED TO BUMPING AND CRASH SCENARIOS

REFERENCE PROJECTS

DELLNER SERVICE

EMU TYPE EN57, p.86



ELF PLATFORM, p.87



**DELHI METRO
RS 1, p.88**



P2550 LRVS, p.89



RED LINE NO. 3, p.90



X10P, p.91



**OSCAR (OUTER
SUBURBAN CAR), p.92**



LINT, p.93



CLASS 377, p.94



CRH5, p.95

EMU TYPE EN57

Customer/
Operator: **PESA MM, Newag, PTS, SPS /
different local operators**

Country: **Poland**

Service: **Deep overhaul with modernisation on
Non-OEM automatic couplers with type 10 head**

Duration: **2008-ongoing**

Quantity: **Automatic couplers: > 1150**



ELF PLATFORM

Customer/
Operator: **PESA, PESA MM /
different local operators**

Country: **Poland**

Service: **Non-OEM overhaul and repair on front automatic couplers
with type 10 head and intermediate articulation joints**

Duration: **2017-ongoing**

Quantity: **Automatic couplers: 200
Articulation joints: 238**



Delhi Metro RS 1

Customer/
Operator: **DELHI METRO RAIL CORPORATION**

Country: **India**

Service: **Overhaul on gangways and Non-OEM couplers**

Duration: **2018-2021 (gangways)
2013-2015 & 2023-2025 (couplers)**

Quantity: **Gangways: 420
Automatic couplers: 560**



P2550 LRVs

Customer/
Operator: **Kinkisharyo /
LA Metro**

Country: **United States**

Service: **Replacement coupler control junction boxes
for new communications system
Automatic coupler overhaul**

Duration: **2023-ongoing**

Quantity: **Couplers: 100
Coupler control junction box: 100**



Red Line No. 3

Customer/
Operator: **MBTA**
Country: **United States**
Service: **Overhaul of draft gears, mechanical coupler kits
and mechanical coupler heads**
Duration: **2023-ongoing**
Quantity: **Draft gears: 120
Mechanical coupler kits: 40
Mechanical coupler heads: 40**



X10P

Customer/
Operator: **VR Sverige AB (former Arriva)**
Country: **Sweden**
Service: **Overhaul of automatic couplers**
Duration: **2017-2022**
Quantity: **Automatic couplers: 208**



OSCAR (OUTER SUBURBAN CAR)

Customer/
Operator: **Transport Sydney Trains**

Country: **Australia**

Service: **Overhaul on automatic couplers and semi-permanent couplers**

Duration: **2014-ongoing**

Quantity: **Automatic couplers: 90**
Semi-permanent couplers: 270



LINT

Customer/
Operator: **Vlexx GmbH, Die Länderbahn GmbH DLB (Netinera)**

Country: **Germany**

Service: **Overhaul on Non-OEM automatic couplers and semi-permanent couplers**

Duration: **2020-ongoing**

Quantity: **Automatic couplers: 150**
Semi-permanent couplers: 186



CLASS 377

Customer/
Operator: **Alstom /
Southern and Southeastern**
Country: **United Kingdom**
Service: **Overhaul on automatic couplers**
Duration: **2022-ongoing**
Quantity: **Automatic couplers: 422**



CRH5

Customer/
Operator: **CRRC /
China Railway**
Country: **China**
Service: **Overhaul on automatic couplers and semi-permanent couplers**
Duration: **Ongoing**
Quantity: **Automatic couplers: 120
Semi-permanent couplers: 420**



CORPORATE SOCIAL RESPONSIBILITY

FOR DELLNER, SUSTAINABILITY IS A KEY FACTOR FOR SUCCESS.

We view sustainability as a holistic responsibility that extends across our entire company and its operations. Our commitment is spearheaded by our owner, board and management and extends throughout the entire value chain, including customers, business partners, investors and society as a whole. As the leading supplier of Train Connection Systems in the most important industry for sustainable transport, we recognise our significant role in safeguarding the environment and aim to make a substantial impact in this regard.

Dellner has been affiliated with Ecovadis, a renowned provider of business sustainability ratings worldwide since 2015. This company assesses various non-financial management systems such as environmental practices, labour and human rights, ethics, and sustainable procurement impact. From 2019 to 2023, our rating increased from 49/100 to 67/100, placing Dellner in the top 15% of companies assessed by Ecovadis within the railway sector.



Since 2023 Dellner has been involved in the world's extensive corporate sustainability initiative: UN Global Compact. Our commitment entails operating responsibly, in alignment with universal sustainability principles (the ten principles on human rights, labour, the environment and anti-corruption), commitment from our organisation's top management to integrate sustainability deep into our DNA as well as annual reporting on our ongoing sustainability. Aligned with the UN Global Compact's long-term strategy, we are dedicated to raising awareness in business and actively supporting the achievement of the Sustainable Development Goals (SDGs) by 2030. Dellner has already taken steps in line with 9 out of the 17 SDGs and ensures that our products support the 11th goal: "Sustainable Cities and Communities".



**United Nations
Global Compact**

RESPONSIBILITY AND ETHICS

Dellner aims for top-notch practices and ethics in all operations, with fair and independent employees. We honour freedoms and rights, following laws everywhere. We oppose corruption and value diverse religions, cultures, working conditions and traditions globally.

QUALITY AND ENVIRONMENT

Dellner aims for customer satisfaction and economic success with our products. Our quality and product safety policy sets rules for making safe, top-quality products. To cut pollution and shrink our environmental impact, Dellner pinpoints some key environmental concerns and sets guidelines to minimise potential harm.

WORKING ENVIRONMENT

Dellner aims to foster a workplace where employees can develop themselves in an atmosphere of physical and emotional well-being. Managers at every level are accountable for prioritising action that enhances the work environment. Our occupational health and safety policy outlines guidelines to foster a positive work atmosphere company-wide.

EQUALITY

We do not discriminate between genders with regard to salary, career advancement or promotions. All employees are given equal opportunities for professional development, both within their existing fields and in new areas.

DIVERSITY

We take active measures to promote the equal rights and opportunities of our employees in the workplace. We believe in equality regardless of race, nationality, ethnicity or religious beliefs, as this creates better conditions for an innovative and inspiring work environment.



GREAT SUCCESS WITH GREAT PEOPLE

Dellner has been a part of the rail business for more than 83 years. Throughout this time, we have focused on innovative research and advanced design, resulting in several significant breakthroughs for the rail industry as a whole.

We have opened 18 subsidiaries and branches around the world which are dedicated to serving our customers with new products and services. This success is based on our most valuable resource – our people.

OUR PEOPLE, YOUR BENEFIT

We have more than 1100 employees around the world and we know that people only give their best if they are comfortable in their job and feel understood. That's why Dellner focuses on mutual appreciation and dialogue beyond cultural boundaries.

Dellner's headquarters are located in Sweden and the way we run our company is based entirely on the Swedish style

of management, where the employee is the most important asset and has freedom of action at work. We trust our people and they trust Dellner.

We know that only satisfied employees can be creative, innovative, and dedicated to their work, which directly influences all areas of our business – and means we can serve you better.



OPPORTUNITY = DEVELOPMENT

There are many different ways of motivating employees to work efficiently. At Dellner, we achieve this by challenging our people and giving them opportunities for further development.

Fulfillment at work is one of the best drivers in life. That is why we like to surround ourselves with contented people who are motivated to give great service, create outstanding products, and help us accomplish our business goals.

NO BOUNDARIES, ONLY STRONG CONNECTIONS

Dellner benefits from having subsidiaries around the world – and our customers do too.

Whenever we are working on special projects, we create international groups from different departments which can look at each topic from varied points of view. It helps us to in-

vestigate more ideas and to reach a solution in a shorter time. This approach also gives our people the opportunity to create bonds with coworkers from other countries, and gain a better understanding of other cultures and ways of working.

CONSTANT IMPROVEMENTS

In order to keep improving our products and services, and make breakthroughs, we need to keep learning. We invest in our people, and encourage them to think about new concepts, and challenge the knowledge they gain.

Work-related training and professional courses are an

important part of our continuous improvement, and we also arrange regular knowledge-sharing meetings which strengthen our skills in areas like sales, procurement, marketing, and logistics – and prepare us for our next challenges.

THINKING OUTSIDE OF THE BOX

Dellner is an intelligent and professional organisation, with a passion for producing innovative solutions and high-quality Train Connection Systems. That's why we remain so dedi-

cated to research and development, and to recruiting highly creative and innovative people.

CONTACTS

ARGENTINA

Dellner Couplers S.R.L
Maipú, 1300 Piso 11
Buenos Aires C1001 CABA
Phone: +55 11 9 8216 6351
arinfo@dellner.com

Workshop
Avenida Quintana s/n
Código Postal 6648 Mechita

CHINA

Dellner Train Connection Systems (Shanghai) Co., Ltd Wuhan Branch
No.1-2 Building in Zhonghuan Industry Park
South of Bishui Road at Jiangjun Street
(Jin Tan Street) Dongxihu District
Wuhan 430040
Phone: +86 27 8390 0961
cninfo@dellner.com

GERMANY

Dellner GmbH
Industriestraße 52
76698 Ubstadt-Weiher
Phone: +49 (0) 7253 209 47 700
deinfo@dellner.com

ITALY

Dellner Italy S.R.L
Zona Industriale Pescarito
Via Pescarito 101B
San Mauro Torinese 10099
Phone: +39 011 27 38 911
itinfo@dellner.com

SWEDEN

Dellner Couplers AB
Vikavägen 144
Falun 79195
Phone: +46 23 - 76 54 00
info@dellner.com

USA

Dellner, Inc
4016 Shutterfly Road
Charlotte, NC 28217
Phone: +1 704 527 21 21
usinfo@dellner.com

AUSTRALIA

Dellner Couplers Australia Pty Ltd
Factory 2/8 Newry Drive
New Gisborne Victoria 3438
Phone: +61 3 542 077 32
auinfo@dellner.com

CHINA

Dellner Train Connection Systems (Shanghai) Co. Ltd
1st floor, Building 3, Li'an Industrial Park,;
No. 1366, Qixin Road, Minhang District
Shanghai 201199
Phone: +86 21-6442 2182
cninfo@dellner.com

INDIA

Dellner India Pvt Ltd
Survey No: 59/1, Padur Road
Mevalurkuppam, Spriperumbudur Taluk, Tamil
Nadu
Kanchipuram Disctrict, 602105
Phone: +91 44 3012 5901
ininfo@dellner.com

POLAND

Dellner Sp. z o.o.
Gryfa Pomorskiego 55, Str.
Miszewko 80-297
Phone: +48 58 77 22 200
plinfo@dellner.com

SWEDEN

Dellner Dampers AB
Industrivägen 5
642 34 Flen
Phone: +46-(0)157-45 43 40
info@dellnerdampers.se

USA

Dellner, Inc West Coast Service Center
8413 Washington Blvd. Suite 155
CA 95678 Roseville
Phone: +1 916 780 2600
usinfo@dellner.com

BRAZIL

Dellner do Brasil Sistemas de Conexão Ltda
G8 Business Park Galpão E
Rua Osasco 949 Cajamar
São Paulo 05075-000
Phone: +55 11 9 8216 6351
brinfo@dellner.com

FRANCE

Dellner France
50 rue Jean Zay
Saint Priest 69800
Phone: +33 478 207 858
frinfo@dellner.com

INDIA

Dellner India Pvt Ltd
Spring Meadows Business Park
A-61, B/4 & 4A, Sector 63
Uttar Pradesh
Noida – 201301
Phone: +91 98 1109 4454
ininfo@dellner.com

SINGAPORE

Dellner South East Asia
57 Mohd Sultan Road #03-05 Sultan Link
City Hall Suite
Singapore 238997
Phone: +65 6933 9556
sginfo@dellner.com

UNITED KINGDOM

Dellner Limited
Hearthcote Road Swadlincote
DE11 9DX, Derbyshire
Phone: +44 1283 221122
ukinfo@dellner.com



