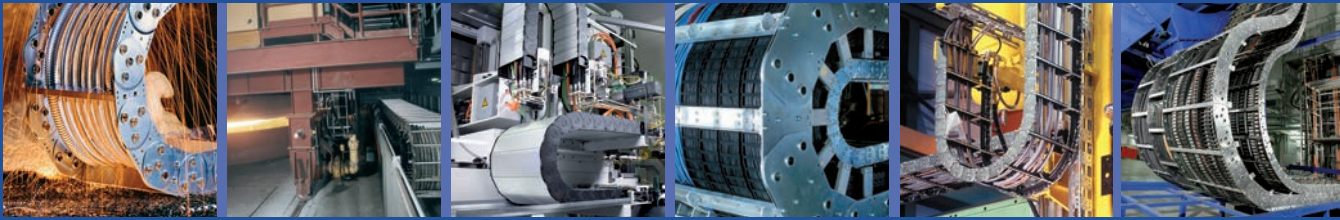


KABELSCHLEPP



SOLUTIONS FOR STEEL MILLS

HEAVY-DUTY
HEAT RESISTANT
LUBRICATION-FREE



Only with energy can you get things moving.

TSUBAKI KABELSCHLEPP is a long standing global player in the field of cable and hose carrier systems. The story of our success began in 1954 with the invention of the steel cable carrier.

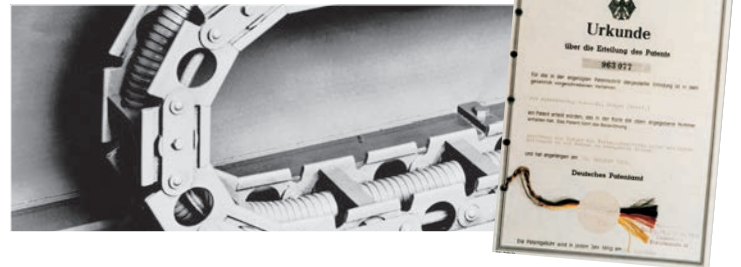
A world market has since grown out of our idea and we have continued to set the standard in the market with our innovative solutions.

Our cable carrier systems can be found in use worldwide, ranging from standard applications like machine tools, cranes, car-wash systems and medical and laboratory technologies, to more complex applications such as industrial robots, offshore oil rigs and even aerospace.

Alongside a comprehensive selection of standard solutions, which are immediately available ex-stock from our warehouse, we can also offer customized solutions developed specifically to meet your individual needs.

Always the right cable carrier – made of steel or plastic – available in standard widths or customized to the exact mm to fit any application. As a total solution provider, TSUBAKI KABELSCHLEPP can also supply fully harnessed systems with cables and connectors pre-installed.

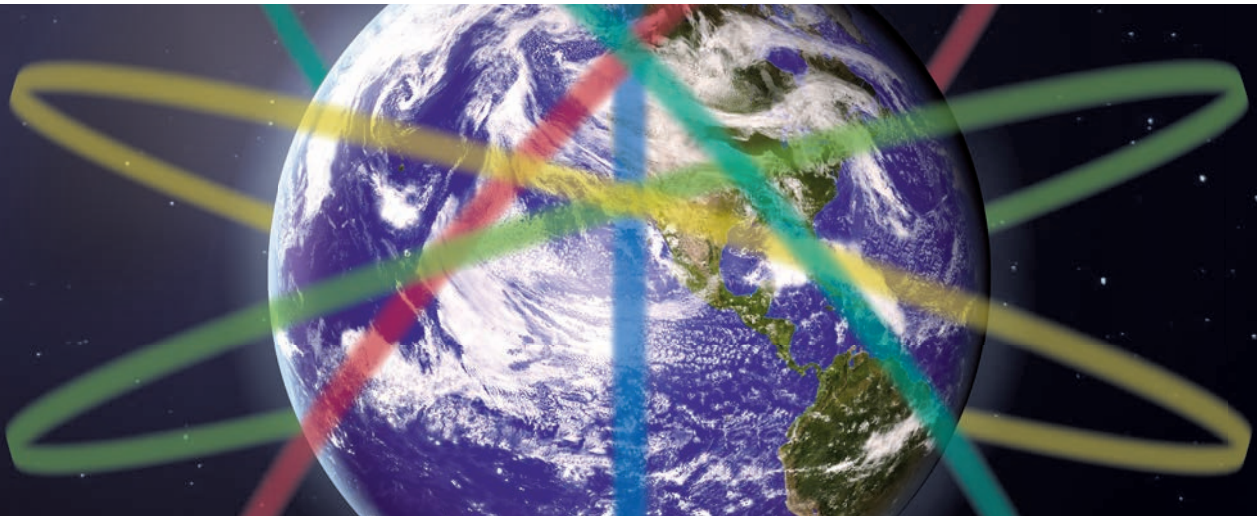
The original from the inventor of the cable carrier



KABELSCHLEPP + TSUBAKI = MORE

KABELSCHLEPP is now integrated into the Tsubaki Group and made responsible for managing the worldwide cable carrier systems business. For more than 40 years, both companies have been close cooperative partners.

With this integration, we will leverage our successful business relationship in one strategic enterprise.



MORE Product Solutions

An expanded product portfolio of TSUBAKI products and KABELSCHLEPP cable carrier systems.

MORE Innovations

A combined global R&D with even more resources ensures a quicker response to our customer's needs.

MORE Regional Service

A combined TSUBAKI and KABELSCHLEPP sales force provides added local support. KABELSCHLEPP products are also now available through the TSUBAKI network of distributors.

MORE Global Support

A unified global sales and support network that extends to over 70 countries around the world, providing service and support when and where you need it most.

MORE Value

Together we will continue to prove our reputation as one of the industry's "Best Value" supplier in the industry.

Quality Management

TSUBAKI KABELSCHLEPP has implemented a Quality Management System in accordance with several standards like EN ISO 9001. Selected products are tested and certified by renowned third-party institutions.

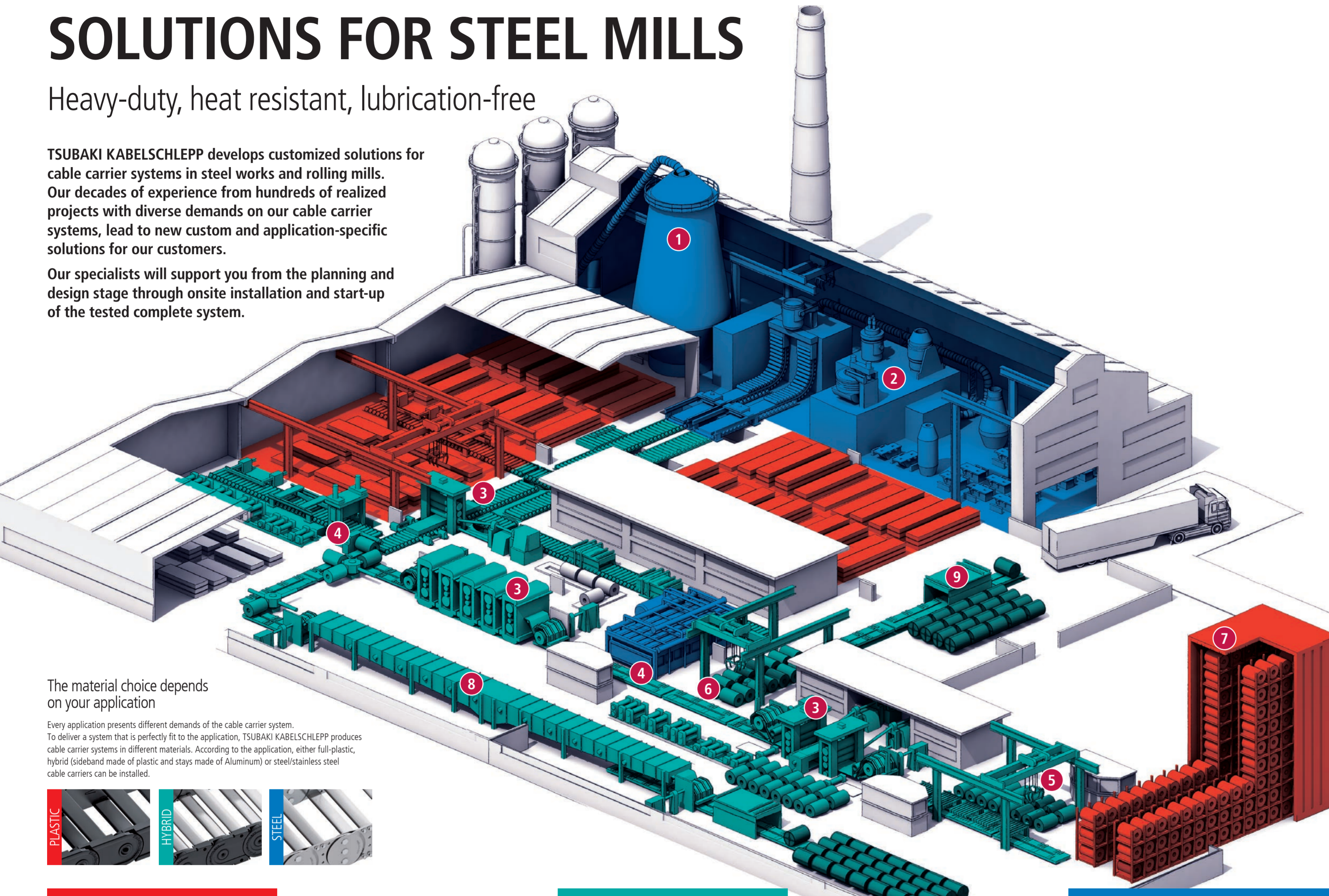


SOLUTIONS FOR STEEL MILLS

Heavy-duty, heat resistant, lubrication-free

TSUBAKI KABELSCHLEPP develops customized solutions for cable carrier systems in steel works and rolling mills. Our decades of experience from hundreds of realized projects with diverse demands on our cable carrier systems, lead to new custom and application-specific solutions for our customers.

Our specialists will support you from the planning and design stage through onsite installation and start-up of the tested complete system.



Typical application areas of cable carrier systems:

- 1 Blast furnaces**
 - Crane systems
 - Feeding devices
 - Taphole plugging and drilling machines
 - 2 Steel mills**
 - Electric furnaces
 - Charging machines
 - Factory trucks
 - Crane systems
 - Converters
 - Forging manipulators
 - 3 Rolling mills**
 - Blooming mill
 - Slabbing mill
 - Section mill
 - Wire rolling mill
 - Hot rolling mill, plates
 - Cold reduction mill, plates
 - Aluminium rolling mill plates/bloom
 - Copper rolling mill plates/bloom
 - Brass rolling mill plates/bloom
 - Foil rolling mill
 - 4 Coil transport**
 - Reels
 - Scrap feed
 - Magnetic conveyors
 - Squaring shears
 - Coil pusher
 - Coil trucks
 - Coil lift trucks
 - Walking beams
 - Turntables/turntable equipment
 - Tilting devices
 - Scissor-type lifting tables
 - 5 Coil stores**
 - Turntables
 - Turning devices
 - Transport systems
 - Lift frames
 - 6 Coil preparation**
 - Squaring shears
 - Splitting systems
 - Side trimming systems
 - Strapping systems
 - Transport systems
 - Coil feed and discharge systems
 - 7 High rise storage facilities**
 - Feed systems
 - Transport systems
 - Aisle stackers
 - 8 Strip refinement (pickling plants)**
 - Cranes
 - Reels
 - Turntables
 - Turntable equipment
 - Tilting devices
 - 9 Packaging lines**
 - Transport systems
 - Cutting systems
 - Winding systems
 - Strapping systems
- Rolling mill systems**
- Slab processing plants
 - Mill trains
 - Rolling-mill stands
 - Reversing mills
 - Driver units
 - Strip width detection units
 - Hold-down rollers
 - Height centering systems
 - Height and width measuring systems
 - Roller change facilities/trucks
 - Squeegee rolls
 - Scrap discharge
 - Pinch and leveling rolls
 - Strip deflector
 - Reels
 - Blow-off systems
 - Turntables
 - Turning devices
 - Tilting devices
 - Lift frames
 - Reversing mechanisms

The material choice depends on your application

Every application presents different demands of the cable carrier system. To deliver a system that is perfectly fit to the application, TSUBAKI KABELSCHLEPP produces cable carrier systems in different materials. According to the application, either full-plastic, hybrid (sideband made of plastic and stays made of Aluminum) or steel/stainless steel cable carriers can be installed.



STANDARD applications
Solid plastic cable carriers with fixed chain widths

- Economically priced solutions for standard applications
- Types with fixed or openable crossbars
- Many types available immediately ex-stock worldwide
- Fast and easy cable installation
- Ideal for short travel paths and high travel speeds

Sub-division	Height	Width	Load
simple	4.6 – 44 mm	6 – 250 mm	up to 10 kg/m
Travel path	Travel speed	Acceleration	
up to 150 m	up to 10 m/s	up to 50 m/s ²	

ADVANCED applications
Cable carriers with variable chain widths

- Aluminum frame stays available in custom widths to the exact millimeter
- Plastic frame stays available in 4, 8, 16 mm width increments
- Quick and easy opening to the inside or outside radius
- Available in light, heavy-duty or linkless series
- An ideal solution for demanding applications

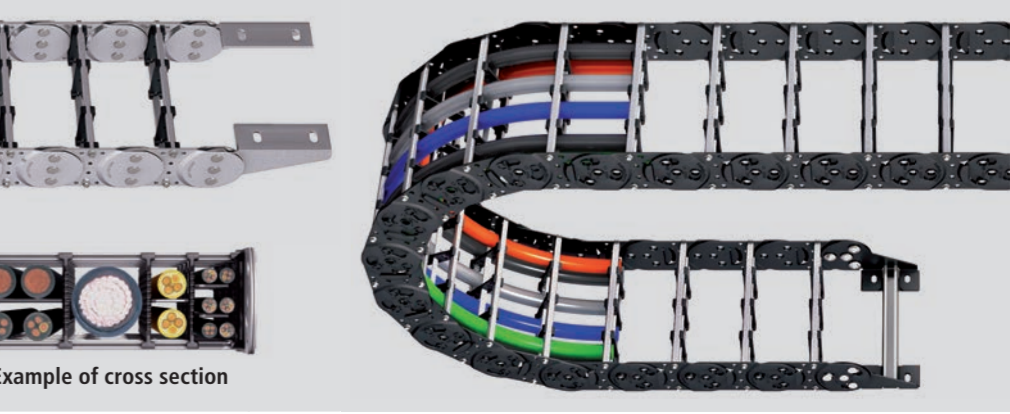
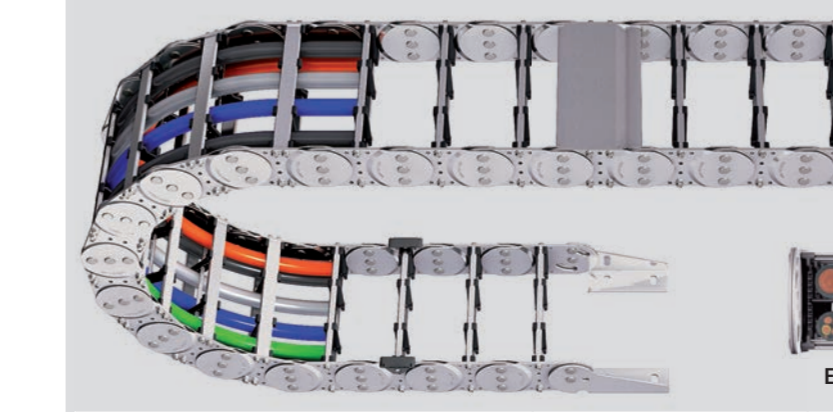
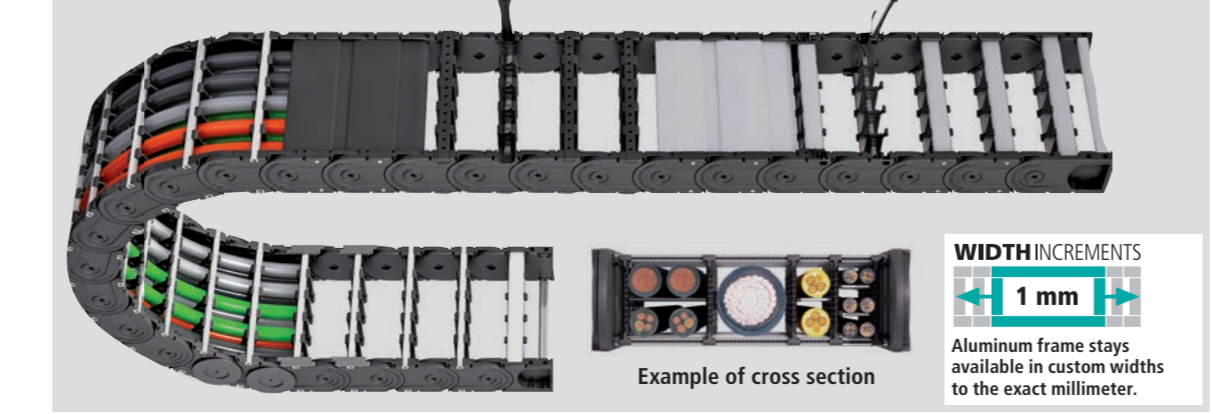
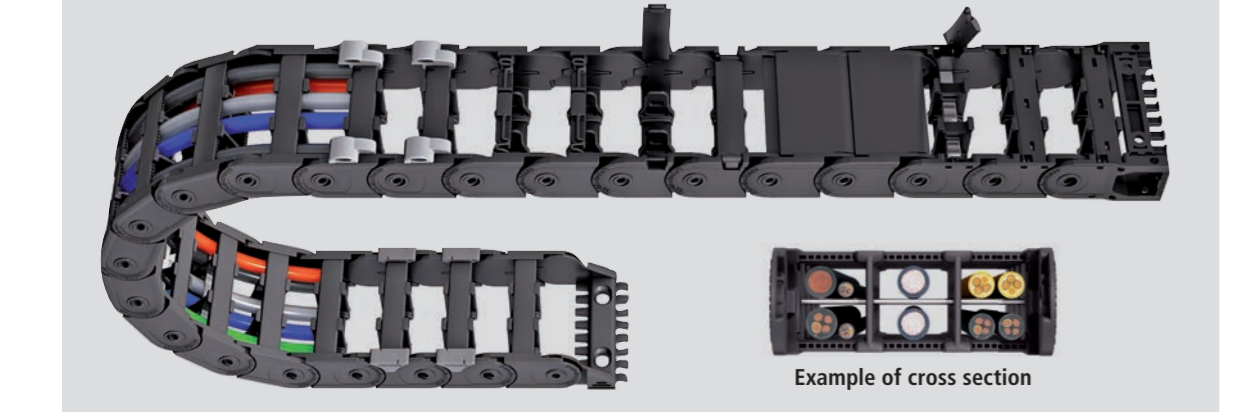
Sub-division	Height	Width	Load
complex	19 – 108 mm	25 – 1000 mm	up to 65 kg/m
Travel path	Travel speed	Acceleration	
up to 350 m	up to 40 m/s	up to 300 m/s ²	

EXTREME applications
Steel cable carriers – a solution for extreme applications

- S/SX Series: Extremely robust and stable steel chains
- LS/LSX Series: Cost-effective steel chains with light design
- Robust design for heavy mechanical loads
- All-steel cable carriers are lubricant-free
- Allow for large additional loads and long unsupported travel lengths
- Ideal for applications in extreme and harshest environments
- Heat-resistant

Sub-division	Height	Width	Load
complex	24 – 370 mm	26 – 1500 mm	up to 600 kg/m
Travel path	Travel speed	Acceleration	
up to 25 m	up to 10 m/s	up to 20 m/s ²	

WIDTH INCREMENTS
1 mm
Aluminum frame stays available in custom widths to the exact millimeter.



The assigned values are average values. Depending on the specific application, the maximum values may differ significantly. For detailed information please contact our specialists. We are happy to assist you!

TRAXLINE cables – perfect for use in cable carriers

Durable, reliable, cost-effective

The TRAXLINE cable family of continuous-flex cables has been specially developed for optimal use in dynamic cable and hose carriers. TRAXLINE cables are distinguished by their high reliability and performance

at low costs, as well as their long service life, even in outdoor use such as port crane applications that require long travel lengths and high travel speeds placing high demands on power and control cables.



- PVC/PUR control cables
- PUR BUS / coax/ LWL cables
- PVC/PUR motor cables
- PUR data cables
- PUR system cables

Online configuration tool for cable carrier systems

Using our **OnlineEngineer**, in just a few clicks of the mouse you can **quickly select and configure** the optimal KABELSCHLEPP cable carrier system for your application. Just input the parameters of your application and the OnlineEngineer will **automatically calculate** the KABELSCHLEPP cable carrier system with the **optimal price/performance** ratio! Alternatively, you can follow easy step-by-step menus and individually design your desired cable carrier system.

Finally, if you already know which KABELSCHLEPP cable carrier systems you would like to use, just enter the order specifications and you will receive all applicable information by mouse click. Since any and all functions can be combined, the specification data needs to be entered only once. A corresponding **2D drawing or 3D model** of your carrier can be immediately downloaded.



Save time with our 2D & 3D drawing library available online

Our 2D and 3D CAD drawings simplify the job for your design engineers. You can find the data for our cable carriers in the **CADENAS** component libraries. KABELSCHLEPP provides free drawing libraries. Once selected, CAD data can be saved or exported in a wide range of formats for import into your CAD system. Can't find what you are looking for, please contact us.



TOTALTRAX Complete Systems

Cut costs with TOTALTRAX complete cable carrier systems

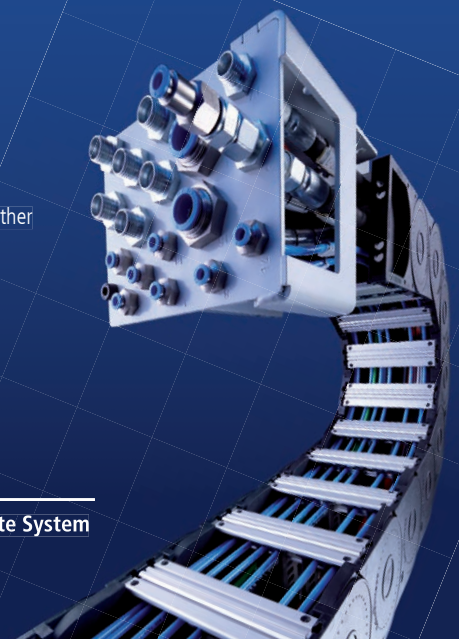
Our experienced system specialists provide pre-sale support, including planning and design services through to post sales service and support. Only one contact person for the complete system. All components match each other perfectly, including your cable carriers, electrical cables, hydraulic and pneumatic hoses as well as connectors. We supply all components Just-In-Time to your production facility or directly to the installation site.

Everything from a single source:

- Consulting
- Planning
- Design
- Cable carriers
- Power & control cables
- Complete guarantee
- Hydraulic hoses
- Pneumatic hoses
- Plug-and-socket connectors
- Assembly plates
- Complete assembly of all components

- One contact person
- + One order
- + One delivery
- + Guaranteed quality

= **TOTALTRAX Complete System**



KABELSCHLEPP

CABLE CARRIER SYSTEMS

Cable carriers made of steel and plastic
QUANTUM cable and hose carrier system
PROTUM cable and hose carrier system
ROBOTRAX cable and hose carrier system

TRAXLINE CABLES FOR MOTION

Continuous bending hi-flex cables for cable carriers
TOTALTRAX complete turn-key carrier systems
Pre-assembled cables

GUIDEWAY PROTECTION SYSTEMS

Telescopic covers
Link apron covers
Way wipers
Conical spring covers
Bellows
Protective devices

CONVEYOR SYSTEMS

Hinged belt conveyors
Scraper conveyors
Belt conveyors



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