

PLASTIC CABLE CARRIER SOLUTIONS

e-chain® solutions

Orange Field Services

Low Cost, Small Chains >

< readychain®

Tubes for Dirt & Debris >

< Engineering

Long Travels >

< Installation

Low noise & vibration >

< Inspection

Multi-axis & Robots >

< Training

Special Solutions >

< Tech Support



One-piece strip design for simple applications.

E1 Modular

- Typical industries and applications
- Automotive and technology
- Office Solutions and technology
- Automation
- Electric equipment
- Machine-building

Reinforcement for existing corrugated tube systems.

- Typical industries and applications
- Fast, short and unsupported applications
- Standing or hanging applications
- Automotive industry
- Machine and plant construction
- Pick & Place applications
- Plotter Handling systems
- Medical Technology SCARA robots

Energy supply for offices and furniture.

- Typical industries and applications
- Electrically adjustable furniture
- Miscellaneous applications without highly dynamic movements

Fast and easy access to cables and hoses

- Typical industries and applications
- Pick & place robots
- Semi-conductor machines
- Linear motors, actuators
- Measuring equipment
- Machine tools (Zipper e-tube)

Small & Medium sized e-chains®

- Typical industries and applications
- Construction machinery
- Furniture
- Packaging machines
- Textile machines
- Vehicle construction
- Woodworking machines
- Glass machines
- Automation
- General machinery

Chip protection at higher speeds & smooth running

- Typical industries and applications
- Tooling machines
- Woodworking machines
- All kind of industries and machines with chip, dirt and dust

Cost-effective and stable chip protection with operable lid

- Typical industries and applications
- Tooling machines
- Woodworking machines
- All kind of industries and machines with chip, dirt and dust

For almost all applications

- Typical industries and applications
- Crane
- Indoor crane
- Composting plants
- Sewage plants
- Machine tools
- General mechanical engineering
- Refrigeration engineering
- Construction machinery
- Wood working
- Robotics and handling systems

Light, strong cost effective

- Typical industries and applications
- Machine tools
- Material handling
- Stone-cutting machines
- Woodworking machines
- Machinery, in general
- Vehicles
- Construction equipment
- Limited long travel applications

Very high fill weights for long travels

- Advantages
- For heavy-duty applications
- The undercut design provides extremely high torsional rigidity
- Extended service life is facilitated by particularly large glide surfaces
- Recommended for heavy-duty applications

- Applications
- Cranes
- Compost plants
- Heavy machinery
- Steel plants
- Shipyards
- Farm machinery
- General machinery

Self-guiding e-chain®

- Advantages
- Cost-effective solution
- Guide troughs not required
- Very quick installation times for long travels
- Small installation width, quiet operation

- Applications
- Industrial vehicles
- Long travels with easier filling
- Simple outdoor applications

Reduce energy consumption by up to 57%

- Applications
- Crane technology (in/outdoor)
- Automated storage
- Materials-Handling
- Mining
- Steel works

Highly flexible, low vibration band chain

- Typical industries and applications
- Printer and plotter
- Cleanroom applications
- Production and processing of semiconductors
- Optics
- Automatic insertion machines
- Measuring technology

More dynamics, smoother running, easier to open, 2nd generation

The E6-1 series is an advancement of the E6 series. While having all its advantages, like the stability and cleanroom suitability, it is even lighter, faster and quieter. In addition, its accessibility to the interior and the assembly and handling have been improved.

triflex® R - 3D-robotic e-chains® The first choice for multi-axis-robots

- TRC - closed design with smooth and robust exterior
- TRCF - closed design with snap-open mechanism
- TRE - "easy" weight, easy-to-fill from outside
- TRL - light weight, cost-efficient, easy to fill
- TRLF - light weight, snap-open mechanism

triflex® - enclosed version non robotic applications

- 3-axis motions in machinery of all kinds (combined circle- and stroke-movements)
- Completely enclosed
- Protection against dirt and chips
- For simple 3D-applications
- High tensile strength, Modular, robust
- Where rectangular shapes fit better

Rotary movement in confined spaces, now even stronger!

- Advantages:
- Strong pin/hook connection between the chain links instead of strips.
- Longer service life and higher filling are possible.

Novel energy supply system for cleanrooms

- Typical industries and applications
- Cleanroom
- Pick & Place Printers
- Any machine that uses corrugated hoses

Easy filling, can be opened and closed like a zipper

The cable reel without a slip ring

- Compact space-saving, spring driven
- Manual reliable and space-saving
- Standard & HD flexible use
- Power motor driven for extension lengths

e-spool® flex 2.0

- Space-saving
- Constant tensile strain on the cable
- Locking mechanism of the cable
- 4 types of extension are planned
- Versatile installation

Upper run guide for long, self-supporting travels in chip areas

- guidelitte GLV lighter, lower noise, simpler and less cost
- guidelok horizontal upper run guide for long travels
- guidelock slimline PS lightweight plastic construction, cost-effective
- guidelock slimline P safe vertical guidance

smart plastics for predictive maintenance

- Advantages
- Reduce maintenance costs
- Eliminate unplanned downtime
- Increase service life
- Increase equipment efficiency
- Save time - faster detection of faults
- Reduce energy consumption

- Applications
- Harbor installations
- Cranes
- Car plants
- Gantry

Hybrid YE e-chain® cable carrier made of plastic and steel

- Advantages
- 50% lighter than a steel cable carrier
- Corrosion resistant plastic metal joints prevent seizure of the e-chain® links
- Plastic crossbars and interior separation do not permanently deform and can be replaced individually
- Smooth plastic surfaces provide an abrasion free surface with the cables and hoses
- Disassembly and service of the e-chain® is done with just an igus screwdriver
- No screws, rivets, bolts, or c-clips connecting the e-chain®

Snap Chain

Fit cable assemblies quickly in bunches.

- Typical industries and applications
- Control cabinets
- Electrical equipment
- Computer cubicles
- Office furniture
- Wherever cables are moved infrequently

Tidy loose cables quickly and easily.

- OCR
- Shift when collapsed
- Pull to extend
- Flexible when extended

Easy to fill and very cost-effective.

- Typical industries and applications
- General machinery
- Cleanroom applications
- Electronic apparatus
- Office equipment
- Vending machines
- Packaging machines

Smallest e-chain® cable carrier

- Typical industries and applications
- Models (Micro e-chains®)
- Automatic doors
- Vehicles
- Textile machines
- Measuring machines
- Electric equipment
- Pick and place robots
- General machinery

2-piece link-design for a wide range of applications

- Typical industries and applications
- Construction machinery
- Furniture
- Packaging machines
- Textile machines
- Vehicle construction
- Woodworking machines
- Glass machines
- Automation
- General machinery

Cost effective alternative, for low and medium speeds

- Typical industries and applications
- Tooling machines
- Woodworking machines
- All kind of industries and machines with chip, dirt and dust

Extremely chip-resistant for the use directly in chip areas

- Typical industries and applications
- Machine tools
- Applications exposed to chips, dirt and dust
- General mechanical engineering

E4-1 light High dynamics light and cost-effective

- Typical industries and applications
- Machine tools
- General mechanical engineering

The Latest Generation of Long-Distance e-chains®

- Advantages:
- Tool-free opening and closing.
- Four stop-dogs for maximum strength
- Optional noise dampeners for even quieter operation.
- Interior separation product range, also for complex division.
- Notches in the crossbar for secure grip of the separators.

Extremely long travels up to 2,625 ft.

- Applications
- Cranes
- Warehousing
- Equipment manufacturing
- Gantry robots
- Material handling
- Mining
- Construction machinery

Rolling instead of gliding

- Applications
- Long travels at high speeds
- Photo finish cameras
- Materials handling

Friction kept to a minimum, twice the service life

- Advantages
- Long travels at high speeds
- Longer service life due to tribo-polymer plain bearings.
- Smart wear monitoring possible

Highly dynamic & cleanroom compatible

- Typical industries and applications
- Semi-conductor manufacturing
- Pick and place robots
- Optics
- Materials handling technology
- Measuring technology
- Printers and plotters
- Cleanroom environments
- General mechanical engineering

Extremely low-noise, minimum vibrations

- Typical industries and applications
- Cleanroom
- Printing machines
- Handling & robot
- Machine tools
- Measuring machines
- Semiconductor industries
- Medical industries
- Electronic industries
- General machinery

For 2D and 3D movements, fillable from both sides

- Easy filling from two sides of complex movements
- For reparations or supplements of existing triflex®
- For simple robotic- and 3D-applications
- Fast cable assembly with "easy" design
- Where rectangular shapes fit better
- Combination of different bending radii and movement directions possible
- Shortening and lengthening anywhere

Strong, quiet and up to 360° circular and spiral movement with twisterchain

- Tough, quiet and high dynamics.
- Suitable for high fill weights
- Rotary speeds up to 3.28 ft/s (1 m/s)
- Modular interior separation
- Smooth cable-friendly interior

Compact, modular and cost-effective. up to 7000° rotary movement in small spaces

- Typical industries and applications
- Cable reels Robots (robot arms, axis1/B, SCARA robots)
- Machine tools Leisure rides
- Medical equipment
- Radar and telescope equipment
- Aerospace, test measurement
- Wind turbines (e.g. blade adjustment)

The first e-chain® designed according to hygienic principles

- Typical industries and applications
- Packaging machines Food and Beverage
- Wherever hygiene requirements are very high and cables and hoses have to be guided safely and securely

Cable guidance up to 13m height with limited installation space

- Advantages:
- Modular, silent, space-saving
- Alternative to zig-zag solutions
- Lighter and requires less installation space
- Available in 2 sizes

Typical industries and applications

- For high vertical applications that need a compact solution
- Theatre and stage technology
- Indoor cranes
- Mobile telescopic antennas

Enclosed solution for long travels

micro flizz® Safe guidance of energy, data and air.

- Applications
- Rack feeder
- Indoor cranes
- Industrial gates
- Working stations
- Sewage treatment
- Camera systems

basic flizz® Cost-effective for long travels.

- Applications
- Rack feeder
- Indoor cranes
- Industrial gates
- Working stations
- Sewage treatment plants

Push Pull Force Detection System

- Applications
- Malfunction-sensitive plants, such as conveyor systems in power plants
- Waste incineration systems
- Chemical plants
- Crane building
- Generally with long travel distances that have high fail-safe requirements
- For long travel applications, if tensile and compressive force monitoring is needed

Avoid Static Discharges with Tested and Certified Drag Chains

- Advantages
- ESD material tested with over 10 million cycles for the highest requirements
- Snap-open e-chains® with mounting brackets and interior separation in ESD version available from stock.
- Standardized product - igumid ESD with PTB certificate
- Proven over years of use in explosion-proof areas
- Short delivery times: 7.00 - 20.00 hours - ordering and delivery service

Low Cost
Easy to fill
Small Size

Closed Tubes for Dirt, Chips & Debris

Long Travels for Gliding Applications

Low Noise
Abrasion & Vibration Free

Multi-axis Carriers for Robots

Special Solutions

Engineering
Installation
Inspection
Training

Orange Services