

# ALL ABOUT CABLE DRAG CHAINS



**T**TSUBAKI®

LEADING THE MOVEMENT

**KABELSCHLEPP**®



# ALL ABOUT CABLE DRAG CHAINS

Cable drag chains—also referred to as cable chains, cable carriers, cable track, and energy chains—are flexible hollow structures used to guide, support, and protect cables, hoses, and hydraulic lines when in motion. Industry professionals use them to prevent cables & hoses from tangling up or incurring damage during machine motion, both of which can cause accidents and contribute to downtime.

# Materials Used in Cable Drag Chains

Depending on the requirements and restrictions of the application, manufacturers use steel or plastic to make cable drag chains. Both materials offer different advantageous characteristics that make them suitable for different applications.

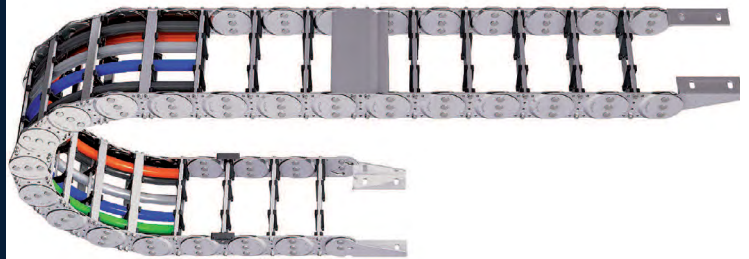
## STEEL & METALLIC COMPONENTS

Since their introduction by KabelSchlepp® in the 1950s, cable drag chains have employed steel as a primary construction material. To this day, it continues to be the material of choice for industrial applications due to its high tensile strength and temperature resistance.

TYPES OF STEEL COMMONLY USED IN CABLE DRAG CHAINS INCLUDE:

### STAINLESS STEEL

Stainless steel for increased environmental resistance along with heavy load carrying capacity.

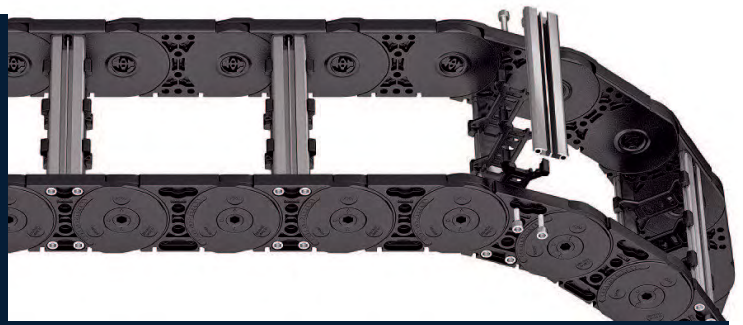


### ZINC PLATED STEEL

Zinc-plated steel for traditional applications requiring heavy load carrying capacity.

### HYBRID (METALLIC & NYLON)

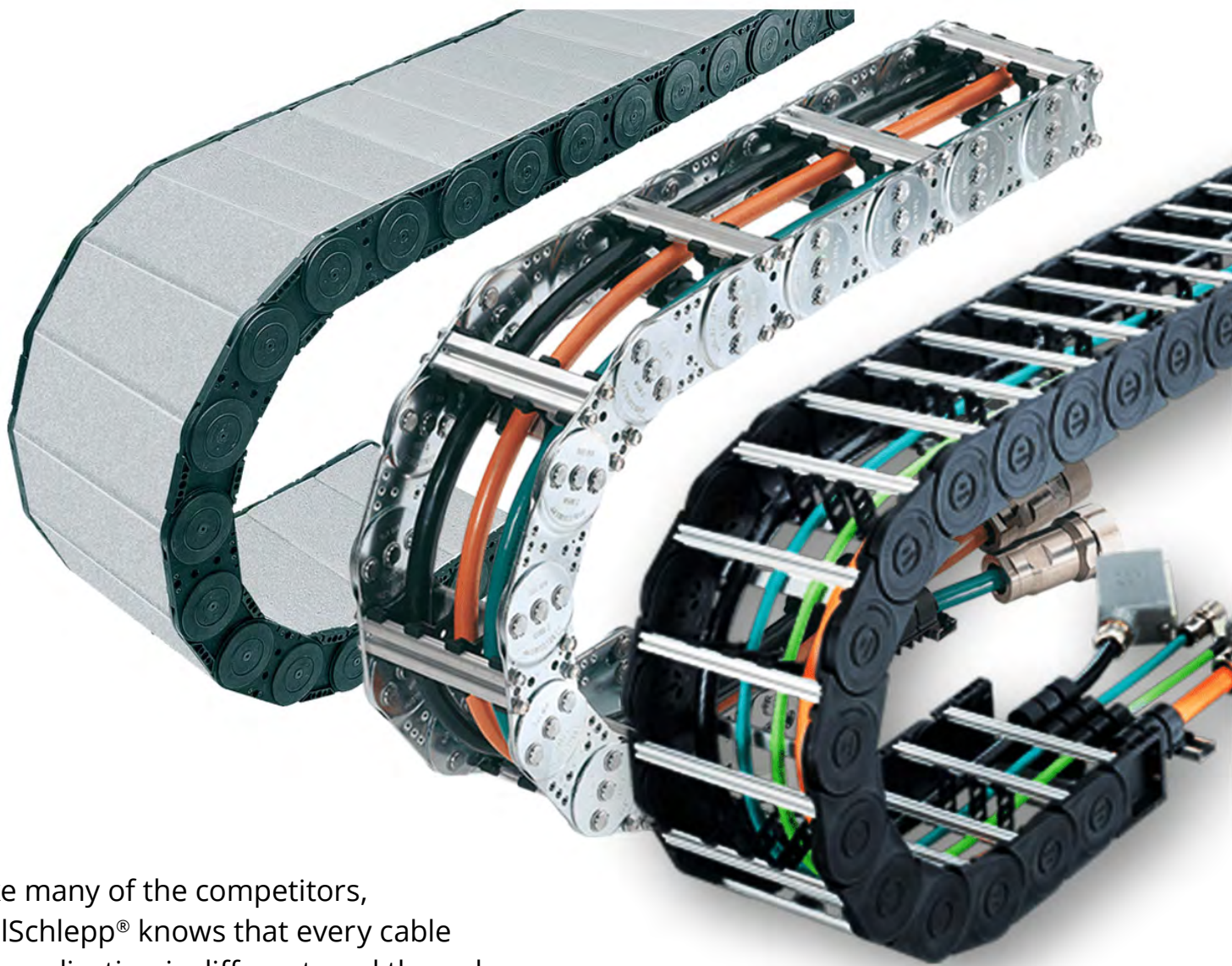
Hybrid (metallic & nylon) for applications requiring design flexibility along with higher speeds and acceleration.





# High-Performance Plastics

During the early 1970s, manufacturers began using plastic—specifically polypropylene (PP)—for cable drag chains. Nowadays, plastic drag chains are as prevalent as steel ones and offer unique advantages for certain applications.



Unlike many of the competitors, KabelSchlepp® knows that every cable track application is different, and the only way to properly provide the best possible protection for the cables and hose that the KabelSchlepp® drag chain is carrying is to offer a full selection of materials—no one material is perfect for every application. In addition to offering the widest selection of drag chain materials, KabelSchlepp® is also capable of manufacturing custom tracks when the application dictates this to be the best course of action.

## SOME OF THE SPECIALIZED PLASTICS EMPLOYED IN CABLE DRAG CHAINS INCLUDE:

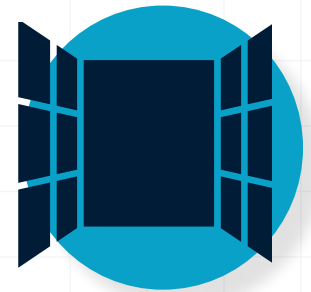


Chip repellent materials that protect against flying metal chips as hot as 1,500° F.

### CHIP REPELLENT

### CLEANROOM

Cleanroom materials that do not create any dust or debris, making them suitable for use in applications that need super clean environments (e.g., semiconductor manufacturing).

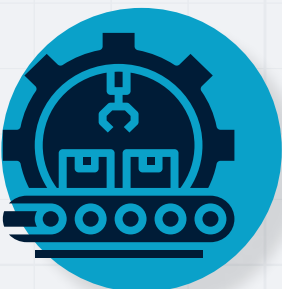


Electrostatic discharging materials for sensitive electronic device manufacturing.

### ELECTRONIC DISCHARGING

### FLAME RETARDANT

Flame retardant materials for environments with combustible materials.



Magnetically detectable materials whose fragments can be detected by metal sensors, making them suitable for operations requiring minimal product contamination (e.g., food processing).

### MAGNETICALLY DETECTABLE



# APPLICATIONS OF CABLE DRAG CHAINS

Drag chains are available in a wide range of designs to suit different applications.

FUNCTIONALLY, THEY CAN BE GROUPED INTO TWO CATEGORIES:

## LINEAR:

MOVING IN A STRAIGHT LINE FOR DISTANCES LESS THAN ONE METER TO MORE THAN 100 METERS



**CIRCULAR (OR ROTARY):**  
MOVING IN CIRCULAR ARCS

ADDITIONALLY, THEY CAN BE CLASSIFIED BY APPLICATION:



## STANDARD CARRIERS

Standard carriers have a simple design that allows quick installation of cables.

Advanced carriers have variable chain widths and more separation options than standard ones.

## ADVANCED CARRIERS



## EXTREME CARRIERS

Extreme carriers are typically made from steel or stainless steel to suit harsh environments.

Carriers for 3D applications use rotational or swivel type movements in multiple dimensions.

## CARRIERS FOR 3D APPLICATIONS





SOME OF THE SPECIALIZED PLASTICS  
EMPLOYED IN CABLE DRAG CHAINS  
INCLUDE:

## PORT CRANES



## VEHICLE TRANSPORTERS & WASHING SYSTEMS



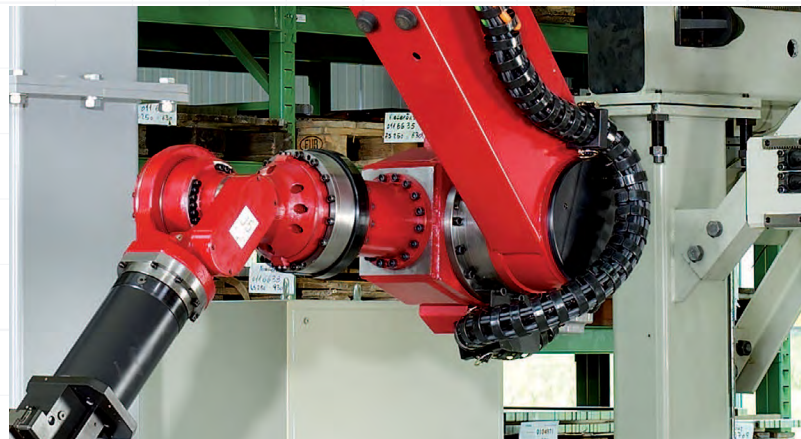
## GREEN ENERGY SYSTEMS



## MACHINE TOOLS



## PROCESS & AUTOMATION EQUIPMENT





## Quality Drag Chains: Tsubaki Kabelschlepp

U.S. Tsubaki, a subsidiary of Tsubakimoto Chain Company, is an ISO 9001 certified company that manufactures high-quality power transmission, motion control, and bulk material handling equipment, including drag chains under the KabelSchlepp brand. To learn more about our product offerings, visit our KabelSchlepp® [cable carriers page](#). [Contact us](#) today for assistance choosing one that meets your requirements.





## ABOUT U.S. TSUBAKI

TSUBAKI KABELSCHLEPP has been part of the TSUBAKI Group since 2010 and is responsible for the Cable & Hose Carrier business. For more than 40 years, both companies have been close cooperative partners. With this integration, we will leverage our successful working relationship in one strategic enterprise.

TSUBAKI KABELSCHLEPP is currently a global player with international representatives and subsidiaries in more than 70 countries and cable carrier systems are a permanent component of almost every machine. Our innovative solutions have proven themselves worldwide in the most diverse industries – and in fact, no longer just in the classical application areas such as machine tools, crane systems, washing lines and medical and laboratory technology, but also in industrial robots, high-sea oil drilling platforms and space travel. Our experts develop individual products even for complex and unusual fields of usage. In this process, the application defines the material – in addition to steel cable carriers, plastic and hybrid systems are also available. This allows for a wide range of products which can be used for countless applications.

TSUBAKI KABELSCHLEPP also provides customized solutions for your individual needs that can be designed to fit your specific applications. With over 100,000 product and accessory options, TSUBAKI KABELSCHLEPP has the right cable carrier for you. Accessories include, strain reliefs, divider systems, channels, hoses, cables, brackets and ready-to-install complete systems.

### VIEW OUR RESOURCES

by visiting our website  
[Request Literature Page](#)

### CONTACT US

by viewing our  
[Contact Us Page](#)

### FOLLOW US



EMAIL: [sales@ustsubaki.com](mailto:sales@ustsubaki.com)

[www.kabelschlepp.com](http://www.kabelschlepp.com)

Note: In accordance with the policy of U.S. Tsubaki Power Transmission, LLC to consistently improve its products, the specification in this brochure are subject to change without notice. The logos, brand names or product names in this brochure are trademarks or registered trademarks of Tsubakimoto Chain Co. and its subsidiaries in Japan, the U.S. and other countries.