

CURRENT COLLECTOR



A current collector is a device used in various electrical systems to collect electric current from a moving part, typically in rotating machinery or in systems where electrical contact needs to be maintained. Current collectors are commonly used in applications such as electric trains, trams, cranes, and other electrically powered vehicles or equipment.

There are several types of current collectors, and the choice depends on the specific application. Here are a few common types:

1. Pantograph:

1. A pantograph is a hinged apparatus mounted on the roof of an electric train or tram. It uses a mechanical linkage to maintain contact with an overhead wire or catenary system. The pantograph can move up and down and pivot to accommodate changes in the height of the wire.

2. Trolley Pole:

1. Trolley poles are used in some older tram systems. A trolley pole is a cylindrical rod that extends vertically from the vehicle and makes contact with an overhead wire. It is spring-loaded to maintain contact as the vehicle moves.

3. Third Rail Collectors:

1. In some rail systems, power is supplied through a third rail alongside the tracks. Current collectors, such as shoes or skids, make contact with the third rail to collect electric power.

4. Brush Collector:

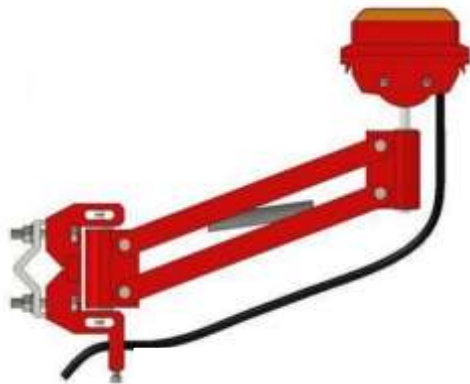
1. Brush collectors consist of carbon brushes that maintain electrical contact with a rotating or moving part. These are often used in applications such as slip rings, where continuous electrical contact is needed while allowing for rotational movement.

5. Slider Collector:

1. Similar to brush collectors, slider collectors use sliding contact to maintain electrical connection. These are commonly used in applications where a linear movement is involved.

The choice of a current collector depends on factors such as the type of power supply system, the speed and nature of movement, and the specific requirements of the application.

Current collectors play a crucial role in ensuring a reliable and consistent supply of electric power to the moving parts of electrical systems. Proper maintenance and design are essential to minimize wear and tear on both the collector and the contact surface, ensuring efficient and safe operation.



DSL BUSHBAR



DSL Busbars are made up of highly electrically conductive metals and they distribute & carry power from a source to a destination or multiple destinations . They are used in EOT Cranes to supply power from the grid to the crane control panel. Full Form of DSL busbar is Down Shop Lead. When it comes to industrial overhead EOT cranes, power distribution is crucial for safe and efficient operation. DSL busbars provide a reliable and cost-effective solution for power distribution, allowing for smooth crane operation and minimizing downtime. Our DSL busbars are made with the highest quality materials to ensure maximum conductivity and durability.

C REIL STEEL TROLLEY



A cable carrier, also known as a cable chain, drag chain, or energy chain, is a protective covering designed to secure and guide cables and hoses on automated machinery or equipment. These carriers are commonly used in industrial settings, such as manufacturing plants, to manage and protect cables from damage due to bending, abrasion, and other environmental factors.

The primary functions of a cable carrier include:

- 1.Cable Protection:** The carrier shields cables and hoses from mechanical stress, such as bending, twisting, and abrasion, which helps prevent damage and extends their lifespan.
- 2.Guidance:** It guides the movement of cables and hoses, ensuring they follow a specific path and preventing tangling or snagging during the operation of machinery.
- 3.Organization:** Cable carriers help organize and bundle multiple cables and hoses, making the overall system neater and more manageable.
- 4.Safety:** By containing and protecting cables, these carriers contribute to the safety of both the machinery and the operators. They reduce the risk of accidents and unplanned downtime caused by damaged cables.

Cable carriers are commonly used in applications such as CNC machines, robotics, material handling equipment, and other automated systems where there is a need to manage and protect cables and hoses that move with the machinery. They come in various designs and materials to suit different

CRANE SCALE



A crane scale is a specialized weighing instrument designed for the weighing of heavy loads suspended from a crane or other lifting equipment. It is commonly used in industrial and manufacturing settings where materials, products, or containers need to be lifted and weighed simultaneously. Crane scales come in various configurations to suit different applications, but they generally share common features.

Here are some key aspects and features of crane scales:

- 1.Design:** Crane scales are typically compact and durable, designed to withstand the harsh conditions of industrial environments. They often have a robust construction to handle heavy loads and may be enclosed in a protective housing.
 - 2.Load Cell:** The weighing mechanism in a crane scale is typically a load cell, which measures the force applied to it by the suspended load. The load cell converts this force into an electrical signal that is then used to determine the weight of the load.
 - 3.Display:** Crane scales usually have a digital display that shows the weight of the lifted load. The display may be integrated into the scale or provided as a remote unit for visibility and convenience.
 - 4.Remote Control:** Many crane scales come with remote control units, allowing the operator to control the scale, zero it, and read the weight from a safe distance.
 - 5.Wireless Connectivity:** Some modern crane scales feature wireless connectivity, enabling data transmission to a computer or other devices for data logging and analysis.
 - 6.Capacity and Accuracy:** Crane scales come in various weight capacities to accommodate different load sizes. The accuracy of the scale is an important consideration, especially in applications where precise weight measurement is crucial.
 - 7.Power Source:** Crane scales are powered by batteries or, in some cases, through a power supply. Battery-powered scales offer flexibility and mobility.
- Crane scales find applications in industries such as manufacturing, logistics, shipping, and material handling, where accurately measuring the weight of lifted loads is essential for operational efficiency and safety.



4 WHEEL CABLE TROLLEY



A 4-wheel cable trolley refers to a device used in industrial settings to guide and support electrical cables or hoses along a predetermined path. These trolleys typically have four wheels that move along a track or rail system, allowing for smooth and controlled movement of the cables. The primary purpose of using a 4-wheel cable trolley is to manage and protect cables in applications where they need to move horizontally across a defined route.

Here are some key features and considerations related to 4-wheel cable trolleys:

1.Wheel Configuration: As the name suggests, these trolleys have four wheels arranged in pairs. The wheels are designed to roll along a track or rail, providing stability and ease of movement.

2.Mounting: The cable trolley is usually mounted to an overhead structure, such as a beam or rail. This overhead mounting allows the cables or hoses to be suspended and moved without obstruction on the floor.

3.Cable Capacity: 4-wheel cable trolleys are designed to carry electrical cables or hoses. The trolleys are often equipped with cable clips or other mechanisms to secure and organize the cables during movement.

4.Material and Construction: Trolleys are typically constructed from durable materials such as steel or aluminum to withstand the environmental conditions of industrial settings. They may also have features like corrosion resistance for longevity.

5.Applications: These cable trolleys are commonly used in various industrial applications where there is a need to move cables horizontally, such as overhead cranes, conveyor systems, and other material handling equipment.

6.Adjustability: Some cable trolleys are designed to be adjustable to accommodate different cable sizes and weights. This adaptability is useful in settings where multiple types of cables or hoses need to be managed.

7.Safety: Cable trolleys contribute to safety by keeping cables off the ground, reducing the risk of damage, tripping hazards, and interference with other equipment.

These cable trolleys play a crucial role in maintaining the integrity and functionality of electrical cables and hoses in industrial environments, ensuring that they can be moved efficiently and safely as part of various machinery and equipment systems.

CABLE CARRIER



cable carrier, also known as a cable chain, drag chain, or energy chain, is a protective and guiding system used to manage and protect cables and hoses on automated machinery or equipment. The primary purpose of a cable carrier is to ensure the safe and organized movement of cables while protecting them from external elements and mechanical stresses.

Here are some key characteristics and functions of cable carriers:

- 1. Protection:** Cable carriers shield cables and hoses from environmental factors such as dust, dirt, moisture, and other contaminants. They also protect against mechanical stresses like bending, abrasion, and torsion, helping to extend the life of the cables.
- 2. Guidance:** The carrier guides the movement of cables and hoses along a predefined path, preventing tangling or snagging during the operation of machinery. This guidance ensures a smooth and controlled motion.
- 3. Organization:** Cable carriers help organize and bundle multiple cables and hoses, preventing them from becoming tangled or interfering with each other. This organization makes it easier to manage and maintain the cables.
- 4. Flexibility:** Cable carriers are designed to be flexible, allowing for movement in various directions. This flexibility is crucial for applications where the cables need to move with the machinery or equipment.
- 5. Materials:** Cable carriers are typically made from durable materials such as plastic or metal. The choice of material depends on the application's specific requirements, including factors like load capacity, environmental conditions, and resistance to chemicals or extreme temperatures.
- 6. Mounting:** Cable carriers are mounted to the machinery or equipment, and they can be either fixed or moving, depending on the application. Some cable carriers are designed for vertical or horizontal movements, while others can handle multi-axis motion.
- 7. Easy Access:** Many cable carriers feature openable or easily accessible designs, allowing for convenient installation, inspection, and maintenance of cables without the need for complete disassembly.

Cable carriers are commonly used in a variety of industries, including manufacturing, automation, robotics, and material handling. They play a crucial role in ensuring the reliable and efficient operation of machinery by protecting and managing the cables that provide power, control signals, and communication between different components.



ELECTRIC MAGNETIC BRAKE



An electric magnetic brake, also known as an electromagnetic brake, is a type of braking system that uses electromagnetic force to control the motion of a mechanical system. These brakes are commonly used in various applications, ranging from industrial machinery to vehicles. The basic principle involves the application of electromagnetic force to generate friction and slow down or stop the movement of a rotating component.

Here are the key components and features of an electric magnetic brake:

- 1. Electromagnetic Coil:** The brake includes an electromagnetic coil that produces a magnetic field when energized. This coil is usually part of the brake assembly.
- 2. Armature Plate:** Connected to the moving part of the machinery or vehicle, the armature plate is attracted to the electromagnetic coil when it is energized.
- 3. Friction Surfaces:** The electromagnetic force causes the armature plate to make contact with friction surfaces within the brake assembly. This contact generates friction, leading to the deceleration or stopping of the rotating component.
- 4. Spring Mechanism:** Many electromagnetic brakes incorporate a spring mechanism that disengages the brake when the electromagnetic force is removed. This allows for the free movement of the mechanical system when the brake is not actively engaged.
- 5. Control System:** The electromagnetic brake is typically controlled by an electrical circuit. When power is applied, the electromagnetic coil is energized, attracting the armature plate and engaging the brake. When power is cut off, the spring mechanism or other means disengages the brake.

Applications of electric magnetic brakes include:

- **Industrial Machinery:** In various industrial applications, such as conveyors, cranes, and machine tools, electromagnetic brakes are used to control the motion of rotating components.
- **Automotive:** Some vehicles, particularly electric or hybrid vehicles, use electromagnetic brakes as part of regenerative braking systems, where the kinetic energy during braking is converted into electrical energy.
- **Elevators:** Electromagnetic brakes are commonly used in elevator systems to ensure the safe and controlled movement of the elevator car.
- **Wind Turbines:** In wind turbine systems, electromagnetic brakes may be used for emergency stopping or maintenance purposes.

These brakes offer precise control, rapid response times, and the ability to handle heavy loads. They are valued for their reliability and durability in various industrial and transportation applications.



SINGLE DISC A/C BRAKE COIL



A "Single Disc A/C Brake Coil" likely refers to a specific component within an air-conditioning (A/C) system or a brake system, often found in automotive or industrial applications. However, the term is a bit ambiguous, and its exact meaning may vary depending on the context. Let me provide information on both possibilities:

1. Single Disc A/C Brake Coil (Automotive Brake System):

1. This term could refer to a component within a brake system, particularly in vehicles. In this context, a "single disc" brake typically implies a braking system that uses a single disc or rotor for each wheel.
2. The "A/C" in this case might stand for "Air Cooled," indicating a brake system that relies on air circulation to dissipate heat generated during braking.
3. "Brake Coil" could refer to an electromagnetic coil used in the brake actuation system, particularly in electronic or electric brake systems.

2. Single Disc A/C Brake Coil (Air Conditioning System):

1. Alternatively, the term could relate to an air conditioning system component. In this context, "single disc" might not be directly relevant to air conditioning, and "A/C" would stand for "Air Conditioning."
2. "Brake Coil" in this case might refer to a coil or solenoid used in the control or actuation of a valve, damper, or other components within the air conditioning system.

For a more accurate interpretation, it would be helpful to know the specific context in which you encountered the term "Single Disc A/C Brake Coil." If you have additional details or if this term is part of a larger system or product, providing more information would allow for a more precise explanation.



DOUBLE DISC A/C BRAKE COIL



A "Double Disc A/C Brake Coil" likely refers to a component within a brake system, particularly in the context of automotive or industrial applications. Let's break down the possible meanings:

1. Double Disc Brake:

- "Double Disc Brake" typically implies a braking system that utilizes two discs or rotors for each wheel. This design is often used in high-performance vehicles or heavy-duty applications to enhance braking performance and heat dissipation.

2. A/C Brake Coil:

- The "A/C" in this context might stand for "Air Cooled," indicating a brake system that relies on air circulation to dissipate heat generated during braking.
- "Brake Coil" could refer to an electromagnetic coil used in the brake actuation system. In some braking systems, particularly those with electronic or electric components, a coil is used to engage or disengage the brake mechanism.

Putting it together, a "Double Disc A/C Brake Coil" could be a component within a sophisticated braking system that incorporates two discs per wheel for enhanced braking performance, and the system may utilize air cooling for heat dissipation. The "brake coil" likely refers to the electromagnetic coil involved in the actuation of the brake mechanism. It's worth noting that the specific details may vary depending on the manufacturer, the type of vehicle or machinery, and the intended application. If you have more context or specific details about where you encountered this term, it could help provide a more accurate and detailed explanation.

THRUSTER BRAKE



A thruster brake is a type of braking system commonly used in industrial applications to control the speed and stop the motion of hoists, cranes, winches, and other similar machinery. It is an electro-hydraulic braking system that utilizes a device called a thruster, which generates the braking force.

Here are the key components and features of a thruster brake:

1. Thruster: The thruster is an electro-hydraulic device that converts electrical energy into mechanical force. It typically consists of a motor, a set of gears, and a hydraulic mechanism. When electrical power is applied, the thruster generates force that is transmitted to the braking mechanism.

2. Braking Mechanism: The braking mechanism is activated by the force generated by the thruster. In the case of a thruster brake, this mechanism often involves the application of brake shoes or brake pads onto a braking surface, such as a brake drum. The friction between the shoes/pads and the drum creates the braking force that slows down or stops the motion of the equipment.

3. Control Panel: The thruster brake system is controlled by an electrical control panel. This panel allows for the engagement and disengagement of the brake, providing a means to control the speed and movement of the machinery.

4. Applications: Thruster brakes are commonly used in various industrial settings where precise control of braking and holding forces is required. They are frequently employed in material handling equipment like hoists, cranes, and winches.

5. Advantages:

1. **Precise Control:** Thruster brakes offer precise control over the braking force, allowing for smooth deceleration and stopping.
2. **Reliability:** These brakes are known for their reliability and durability in industrial applications.
3. **Maintenance:** They generally require less maintenance compared to some other braking systems.

