



Custom Heavy Duty Material Handling Solutions



PHILLIPS PRODUCTS

Part of the Industrial Sales Group of
Irwin Car and Equipment



Reliable Material Handling Equipment "Since 1863"

The Phillips Group of Irwin Car and Equipment designs and builds customized heavy-duty rubber-tired steerable material handling equipment, under hook equipment and fork lift attachments.

Our Auto-Dump crane buckets, Automated Guided Vehicles, motorized Transporters, Trail Skids and Industrial Trailers are of heavy-duty all-welded steel construction. Our products are designed to provide years of dependable and reliable service for the industrial, manufacturing or custom applications for which they are engineered.

Our material handling equipment and solutions can support your operations during any phase of your manufacturing process.



The experience of the Phillips Group, coupled with the resources and expertise of its parent company Irwin Car and Equipment and its QMS (Quality Management System), yield equipment that is second to none.

Many of our customers around the world are still operating original Phillips equipment decades after it was delivered.

Your options are endless with equipment from Phillips. Contact us today to discuss your application or particular material handling needs... we may have already designed a solution to your problem.

"Specials are Standard"

Automated Guided Vehicles (AGV) & Transporters

- Any dimension with capacities from 2,000 -300,000 lbs.
- Speeds up to 150 ft. per minute
- Front wheel steer, all wheel steer or crab steer
- Flat deck or custom fixtures to secure your load



AGV Transporters

- Fully automated to travel a predetermined travel path
- Capable of multiple safety and workstation stops as necessary
- Guided via wire embedded in the floor or by laser guidance system
- Collision avoidance safety system



Transporters

- Manually driven forward and reverse via hand held pendant
- Can be steered by pendant control, that can be corded or wireless
- Can travel a predetermined path with a guide wire embedded in the floor or by laser guidance
- Complete with collision control safties

“Specials are Standard”

Industrial Trailers — Custom designed up to 400 ton capacity

Custom General Purpose Trailers

- Any deck size or configuration
- Flat, Drop Deck, Roller Deck or Containment
- 6 steering types (see back cover)
- Custom fixtures and decking



Custom Trail Skids

Trail Skids are extremely maneuverable and can double or triple your forklifts capacity. Available as shown with swiveling fork pockets or with king pin for towing.



Problem Solving Specialty Trailers

- Lifting decks
- Decks with powered rollers
- Push – Pull mechanisms for transferring loads



Expandable Trailers



Pipe/Tube Trailers



Tank Trailers

Crane Buckets & Hoppers



Auto Dump Buckets

All functions of the Auto Dump Buckets are handled by the crane operator. They cannot be dumped in mid-air or accidentally. There are 18 standard sizes with custom sizes available up to 20 cubic yards. Load can be discharged without shock to crane, bucket or load. Buckets can be built for pick up with hooks, coil tongs, fork pockets or magnets. Options are available for stacking and with wheels.



Scrap — Bottom Discharge Buckets

Scrap and Bottom Discharge buckets are made to last in the most demanding environments.

Self Dumping Hoppers

Only Phillips builds Self-Dumping Hoppers larger than 4 cu. yd. with available sizes of 7-10-15 and 20 cu. yds.

“Specials are Standard”

Fork Attachments

Phillips Roto-Box Chargers

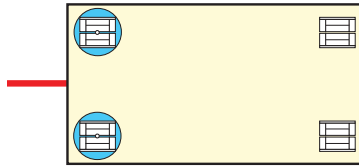
Available in whatever box capacity and box size you require, this attachment couples with the separate boxes to form an integral Charging Machine.

Phillips Billet Grabs

This attachment provides gripper pins of alloy steel with machined contact grooves, features a fixed sturdy mount to the truck apron, without boom rotation, and facilitates the loading and unloading forging furnaces, as well as the loading of the anvil of a press.

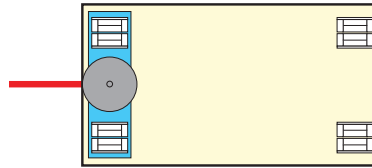


Trailer Steering Options



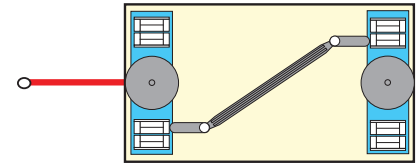
Caster Steer

There are numerous methods of positioning swivel and rigid wheels; shown above is the most common arrangement, the two swivel front and two rigid rear. This is normally used on smaller and hand-powered units. Stability is excellent, as corners of unit are supported at all times.



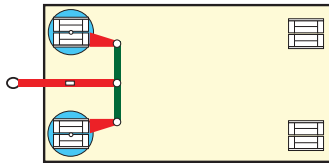
Fifth Wheel Steer

The most common arrangement for power-drawn wagons. Single pivot point of front bolster and fifth wheel assembly has good maneuverability and simplicity of design. Stability is good and this "Standard" type has wide versatility.



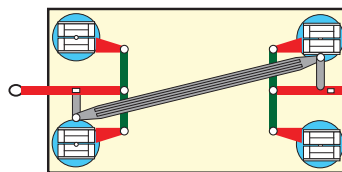
Four Wheel Steer

For applications of limited aisle space and "Train-Type" towing of multiple units. Cross-connecting tie bars are synchronized to turn unit in minimum amount of area. This type of unit can be furnished with a removable tongue which allows towing in either direction by a quick tongue change. Overall stability is less than caster, fifth-wheel, or automotive type. Also supplied without tie bars and with locking pins and removable tongue for "Double Fifth Wheel" steer if desired.



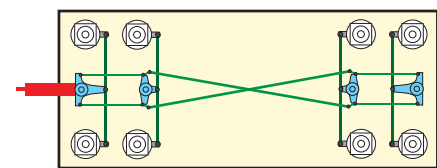
Automotive Steer

For excellent stability on larger units. Towing tongue pivots, in place, as well as each set of front wheels. Wheels are synchronized with tie bar to turn correct amount for each individual radius, thus providing an easy rolling unit with no scuffing.



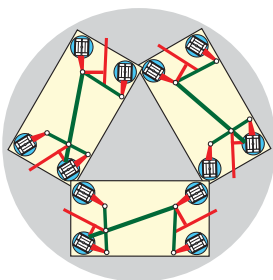
Four Wheel Automotive Steer

Combines the maneuverability of four wheel steer with the stability of automotive steer to offer maximum performance.

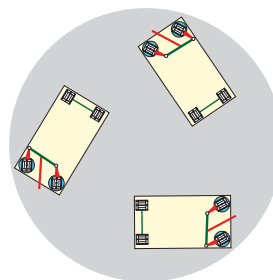


All Wheel Synchronized Steering

When capacity, height restrictions, or ground loading considerations dictate more than four wheels, but maximum maneuverability is still required, then all wheel synchronized steering is what is needed. This unit is more complex, but has smooth and scuff free steering.



Four wheel automotive steer units virtually turn around on themselves.



As two wheel steer units drive around in a circle, their outside front corner juts out away from center.

Turning Radius - Illustrated

This illustration demonstrates a comparison between two wheel or single end automotive steer, and four wheel automotive steer. The trailers shown in the two diagrams are of the same size and wheelbase. Note the drastic reduction in turning radius provided by the four wheel automotive steering.



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