

Atlas
Transfer Cart Solutions



Overview

The Atlas Transfer Cart was developed to dramatically reduce the material handling requirements of cranes and fork trucks while providing quick, safe and smooth movement of materials and/or products through manufacturing facilities. Transfer Cart construction is based on our world renowned die carts and provides controlled movement of heavy and oversized loads such as dies, coils and work in progress. Atlas Transfer Carts are available in a number of configurations specifically designed to suit the needs of our customers.



The Atlas Advantage



Atlas pioneered die change technology and is the industry leader in heavy and large cart based floor handling systems with over 30 years of experience and more than 800 carts installed around the world. Our innovative and robust engineering practices are the highest of quality, to the point that Atlas *IS* the benchmark in reliability and maintainability. The engineering architecture of our carts is modular, scalable and flexible which allows us to provide the perfect solution to a wide variety of customers in numerous different industries.



Benefits

Transfer carts increase production by eliminating lost time waiting for materials to be delivered to the desired location

Transfer carts greatly reduce the potential for damage to material and/or product caused by rough handling or dropping of a load

Transfer carts improve plant safety because the movement of the material and/or product is completely controlled. No more loads overhead!

Transfer carts are easy to operate and provide the lowest cost lifecycle available

Your Atlas transfer cart is built to last and will provide excellent return on investment



Transfer Cart Standard Features & Available Options

- Flat decks or fixtures for transporting specific payloads
- Custom deck configurations may include lift, tilt, or rotate functions
- Payload capacities from 10,000 to 180,000 pounds
- Fixed speed or variable speed capabilities
- On board charging for DC powered drives
- Many drive and steering configurations available to satisfy a wide range of requirements
- Drives include forward and reverse
- Drives with acceleration and deceleration capabilities
- Options for self loading/unloading
- Options for automatic operation
- Available safety equipment includes horns, lights, E-stop, bumpers and laser

Cart Styles – Die and Material Transfer Cart

Our most popular cart is the Die Transfer Cart, which is used to move dies or materials between the pressroom and the die storage and maintenance area. This transfer cart has the advantage of moving the entire length of a manufacturing facility where as dies that are moved by cranes are limited to the distance of the crane travel, or must be transferred from crane bay to crane bay. The Atlas standard cart top is a raised tubular construction with decking . This allows customers the ability to sling dies with crane chains beneath the load. As an option, this cart may be configured for wash booths by changing the top decking to an angle to allow water to shed off the cart. The die transfer cart is supported and guided on Atlas standard floor track. One track guides the cart with the two flanged wheels, while the other track is only used to support the weight of the cart and its load with two flat wheels. Atlas floor track is installed so that it is flush with the floor, thereby eliminating trip hazards to manufacturing personnel. The cart controls are self contained below the cart decking. This leaves the top of the cart completely unobstructed and greatly reduces the risk of damage to the battery, charger, drives, etc. when loading the cart.

Specifications:

Load Size/Shape:	Customer Supplied
Load Weight:	Up to 180,000 pounds
Cart Travel Speed:	Up to 60 foot per minute (or plant safety standard)
Power:	Electric, battery or hydraulic



Cart Styles – Coil & Specialized Material Transfer

Coil and specialized material transfer carts are similar in construction to our die transfer cart but are designed with fixtures to accommodate the customer's exact needs. Shown below is a cart designed to carry and transport two coils from the coil storage bay, to a cut-to-length operation. This benefits the customer by not only freeing up cranes and fork trucks, but also greatly reduces damage to the coils. Less damage means more through put, higher profit margins and less scrap handling.



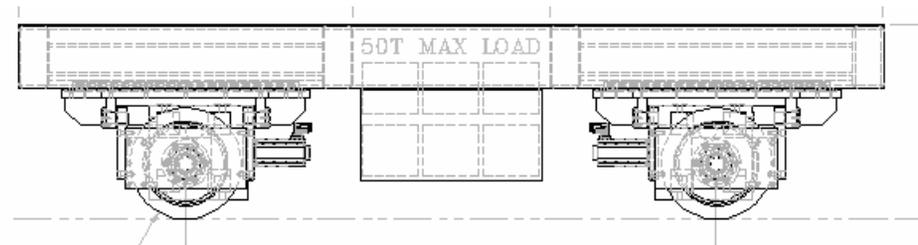
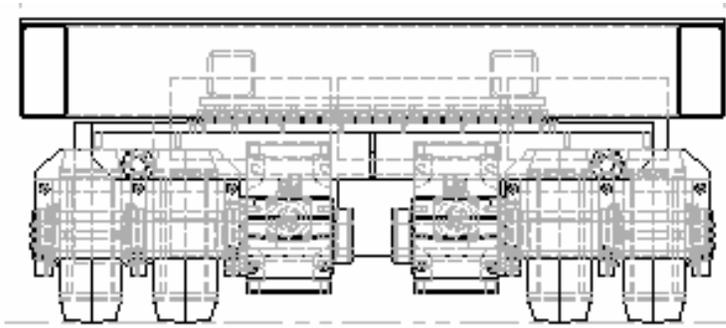
Cart Styles – Work in Progress Transfer

Work in progress transfer carts are ideal for moving excessively large items from one process center to another. Shown below is a cart that was designed and built for a customer in the heavy equipment industry. The top of this cart was designed to move large welded frames for earth movers from heavy fabrication to their assembly area within the plant. Other industries that benefit from this cart design with customization are the agricultural, wind turbine, defense and many other industries.



Cart Styles – Trackless, Non-Guided & Steerable

The newly designed Atlas Trackless Cart is ideal for moving materials, dies, coils or working in progress throughout a manufacturing facility without limitations to track length and distance. Controlled synchronized steering of the front and rear wheels is provided with independent drive motors on each of the four wheel assemblies. The front two wheel assemblies and two rear wheel assemblies alike are mounted to a wheel plate via a rocker arm connection to accommodate for floor irregularities and uneven tire wear. This also help to maintain the resistance required for the drive wheels. Our standard heavy-duty design is capable of transferring 65 tons at 60 foot per minute. A hand held joy stick controls the all wheel steering, and forward/reverse functions. The turning radius is very small due to all four sets of wheels being driven by servo motors and independently controlled through the PLC. The turning radius is approximately 3M (10 feet) from center of the cart to the rotation point.



Cart Styles – Shuttle Buggy Units

Shuttle buggy units operate in sets of two, one powered, one non-powered. They are utilized to move work in progress through all of the stations of an assembly and fabrication process. Shown below, Atlas shuttle buggies move railcars from the frame fabrication area all the way through final assembly, stopping at various process locations throughout the plant. At the final assembly process, four hydraulic jacks activate to raise the rail car from the shuttle buggy pair. The shuttles then return empty to the initial process station. Several pair are used within this facility ensuring swift movement of the work pieces from station to station without delay. These units are track mounted and utilize four flanged wheels for support of the load during transport. Two of the four wheels are driven and connect through a common drive shaft. The powered cart contains a low profile electrical enclosure that is equipped with all the necessary components, such as the motor starter, terminals, fuses, pilots etc.





Manufactured in America with Pride

Atlas Transfer Carts are manufactured and assembled in Fenton, Michigan. We utilize only top of the line components from as many local suppliers as possible.

We take great pride in our ingenuity and engineering skills and are proud to say, without hesitation that we have the finest machine builders available. Our plant is full service, from mechanical and controls engineering to fabrication and machining...we offer it all under one roof.

Every Atlas project is spearheaded by a contract manager that is intimately familiar with your industry and requirements. We feel that one point of contact for all of your program needs ensures complete information and less hassle for you.

Our service department offers the best coverage in the industry...24-7-365 in the event you ever need it.

What does this mean to our customers? Quality. Durability. Satisfaction.



Die Handling Automation • Robotic Integration • Sheet Metal Handling • Tri-Axis Transfers
System Integration • AS/RS • Washer & Oiler Systems • Automation Tooling

Why Atlas?

Our Promise....Atlas listens to you, the customer.

We embrace your vision and understand your motivation.

It's our culture of total commitment that allows us to conceptualize solutions tailor made to fit your specific applications...creating world class material handling systems that will exceed your expectations.



3100 Copper Avenue
Fenton, Michigan 48430 USA
Phone: +1 810.629.6663
Fax: +1 810.629.8145
www.atlastechnologies.com