

Crane Wheels | Furnace Cars | Custom Steel Wheels | Industrial Wheel Assemblies | Mining Products | Transfer Cars
Hot Metal Ladle Cars | Signals & Controls | Mold Oven Cars | Hydraulic Hand Tools | Ventilation | Slag Pot Cars
Locomotives | Skip Cars | Filtration | Scrap Cars | Kiln Cars | Drilling Tools | Scrap Buckets | Weigh / Scale Cars

Roll Transfer Cars | Die Transfer Cars | Turntables | Shot Blast Cars | Mobile Quench Car | Steerable | Industrial Trailer
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IRWIN CAR AND EQUIPMENT

Heavy-Duty Material Handling Products

www.irwincar.com

Building on a Century of Excellence

Irwin Car and Equipment

designs, manufactures, and repairs heavy-duty handling equipment for a wide range of mine and industrial applications, including: **furnace cars, wheel assemblies, crane wheels, ladle & tundish cars, scale & transfer cars, and turntables.**

The company, which has been in business for more than 120 years, also produces quality mining equipment, such as belt winders, material handling systems, drills & other tools, filtration and ventilation products, and OEM replacement parts. Irwin Car and Equipment is located in Irwin, PA, The company also has operations in Blairsville, PA and warehouses throughout the U.S.



Industrial Sales Group

Irwin Car and Equipment specializes in the design and manufacture of standard and custom industrial wheels and wheel assemblies that can handle loads of up to 100+ tons per wheel in applications ranging from transfer cars to gantry-type overhead cranes to walking beam reheat furnaces to new prototype equipment. We also design custom industrial cars in AC, DC battery, diesel and propane-powered self-propelled configurations, as well as non-powered idler models that can handle loads of more than 500 tons.

Irwin **transfer cars, scrap cars, ladle cars, die transfer cars and coil cars** are custom engineered to meet the specific needs of our customers for decades of dependable service. They feature:

- Robust, heavy-duty, all-welded construction
- AC, DC, diesel, propane and air-powered models
- Capacities from 6 to 600 tons



Our **hot, cold, self-propelled and non-propelled furnace cars** are carefully engineered for your unique operating conditions. Employing our own extra-high-temp wheel assemblies, these cars can operate at temperatures up to 1200°F and carry loads of 500 tons maximum.



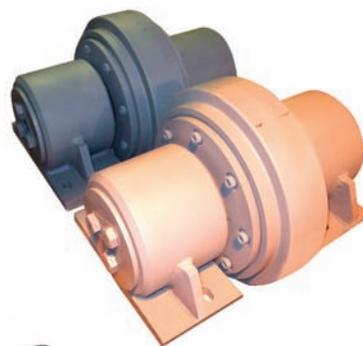
Industrial Sales Group

For decades, the world has turned to Irwin to supply custom transfer cars and material handling equipment for critical applications and harsh environments. Custom products have included **transfer cars** that operate at absolute zero to **explosion proof cars** to 500-ton capacity **mobile quench cars**. Regardless of your application, Irwin is always ready to put our expertise to work for you.



For more than 100 years, Irwin has been synonymous with wheel assemblies. With more than 10,000 standard and **custom wheel and wheel assembly designs** in service, chances are we have already solved your problem. Our designs feature:

- Diameters from 6" to 72"
- Capacities of up to 100+ tons per wheel
- Drive, idler, extra-high temp, marine duty, shot blast and crane wheel assemblies



Because we know the one thing you cannot afford is downtime, Irwin maintains a large inventory of **carbon and alloy steel materials**, and our in-house machining capabilities make breakdowns and rush delivery situations our specialty. Available in carbon and alloy steels in a range of hardnesses to suit any application, Irwin engineers and manufactures crane wheels with:

- Diameters from 6" to 36" and up
- Hardness ranges of 43-47 Rc, 50-55 Rc & 58-62 Rc
- Custom replacement wheels for any application
- Wire rope sheave wheels from 6" to 30"
- Material Certifications & Hardness Test Reports



Irwin can also manufacture **custom material handling equipment** to your designs and specifications. More than just a fabrication shop, having your equipment manufactured at Irwin allows you to bring the weight of our experience to bear on your project, and can save you time and money by identifying problems before projects are complete and in the field. Call today to discuss your project with us.



Industrial Sales Group

Atlas Car Products

Atlas Car Products builds some of the world's strongest self-propelled mill duty transfer cars for the most challenging material handling needs.

Our **truck assembly repair & rebuild** capabilities keep your transfer cars and locomotives on the job with an extensive parts inventory that helps to decrease maintenance costs and downtime.

With a wide selection of **heavy-duty turntables**, Atlas Car has the ideal solution for your indoor and outdoor load requirements.

We make our steel mill-tough **industrial cars** to any capacity, size, power supply and configuration.

Two of America's favorite pastimes are riding **scenic railroads and visiting railroad museums**.

To make sure that your cars always operate safely and maintain their historical integrity, let Atlas Car supply replacement parts and handle your rebuilds with:

- Coupler Pockets
- Lock Lifts, Throwers & Knuckles
- Sharon 10 and 10A Couplers
- Trucks
- Wheels
- Willison Couplers
- Willison Reduced Couplers



Industrial Sales Group

Phillips Products

Steerable Material Handling Equipment Drives Excellence in Harsh Environments

Phillips Group has been designing and building customized heavy-duty material handling equipment since the Civil War.

Our mobile, rubber-tired material handling equipment, including transporters, auto-dump buckets, trail skids and heavy-duty industrial trailers, are made of heavy duty, all-welded steel construction capable of withstanding the roughest punishment in the harshest environments of steel mills and other manufacturing facilities, as well as on process lines.

Phillips Transporters are available in self-powered, steerable platforms or as automatically guided vehicles (AGVs). Their capacities range from 50,000-200,000 lbs, and they are powered by DC batteries.

Our **Heavy-Duty Die Transporters** are supplied with maintenance-free battery power and floor-mounted chargers. The electro-mechanical drive-and-steer function is managed using a walk-along pendant control. Laser-scan bumpers are optional.

Our **Heavy-Duty Industrial Trailers** are available in capacities ranging from 2,000 to 800,000 lbs. Our in-house engineering team can customize the deck and steering arrangement to your specifications.

For efficient and safe handling of almost any loose industrial material, **Phillips Auto-Dump Buckets** are ideal. These crane-operated units are available in junior, standard, mill and custom sizes, with integrated locking elements, that are strong enough to ensure positive operation. This design keeps personnel at a safe distance during discharge to eliminate the risk of injury.



Irwin Car

Specialty Mining Cars

For rail-based material handling solutions that can withstand the harshest environments, look no further than Irwin Car and Equipment.

Our car bodies are customized to your requirements, and are made of all-welded, reinforced steel, and our wheels are made of the highest quality steel, which makes them rugged, dependable and cost-effective.

Key features and benefits of our Low-Boy Carrier Cars are:

- Low to the rail for maximum payload height and workspace
- 4- or 8-wheel versions available
- Capacities from 10 to 85 tons



Our Supply Cars are:

- Available in 4- or 8-wheel construction for any track gauge
- Available in capacities from 15 to 30 tons
- Made with heavy-duty frames and truck assemblies



With Irwin Roof Support Transport Cars, you get:

- 4- or 8-wheel construction for any track gauge or for rubber-tired units
- An ideal carrier of chocks, shield supports, longwall equipment and supplies, when your longwall move is complete
- Capacities from 20 to 35 tons or custom designed to meet your special requirements



Our Ballast Cars feature:

- Individually adjusted discharge doors
- Available in 4- or 8-wheel construction for any track gauge
- Customization options for any length, width, height and capacity



To keep your cars together, depend on Willison Couplers. Their strength, simplicity of design and minimal number of operating parts make them the best couplers for loads ranging from capacities of 1 to 40 tons. Willison Couplers and draft gear can be fit or added to any size car or locomotive.

Irwin Car

Locomotives & Mantrips

Everything Rail for Mining, Tunneling and Industrial Applications

Irwin Car and Equipment offers a wide range of custom-designed locomotives, personnel carriers and utility vehicles that are ideal for mining, tunneling and above-ground industrial use. Our locomotives are powered by diesel, battery, trolley and a combination of battery/trolley.

The benefits of our vehicles include:

- Easily accessible dry disc brake systems that don't require major disassembly
- Suspension systems that provide maximum trackability
- Maintenance-friendly machine design
- Ergonomic cab design for maximum comfort, safety and visibility
- State-of-the-art IGBT control system that delivers maximum power from start to stop

Besides manufacturing locomotives and related products for mining and industrial applications, we also provide complete rebuild or redesign of existing rail equipment, with refurbishment to "like new" condition.

Our definition of rebuild is:

- Determining the equipment problem
- Repairing equipment so it runs
- Applying an exterior coat of paint

To us, remanufacturing means:

- Disassembling down to the bare chassis
- Sandblasting, then repairing any structural damage
- Inspecting, repairing or replacing all components
- Assembling and testing our in-house track with a 5% upgrade

When upgrading equipment, Irwin Car:

- Replaces motor control systems with the latest IGBT systems
- Replaces mechanical-pneumatic or -hydraulic brake systems with wet or dry disc brakes to reduce the need for maintenance
- Improves or installs suspension systems
- Improves integrity of frames
- Improves passenger seating for added comfort, increased lumbar support and reduced fatigue
- Improving operator cab layout, including control positions, viewing and general ergonomics



Irwin Mine and Tunneling Supply

For constant tension winches, belt winders and other belt products that are second-to-none, depend on Irwin Mine and Tunneling Supply.

Electronic Constant Tension Winches

Our electronic constant tension winches offer:

- State-of-the-art direct torque control electric drive with mining duty mechanical components
- Easy installation & relocation
- Remote operation from up to 150 feet
- No load cell requirements
- Power failure protection
- Minimal maintenance requirements



Customized Belt Winders

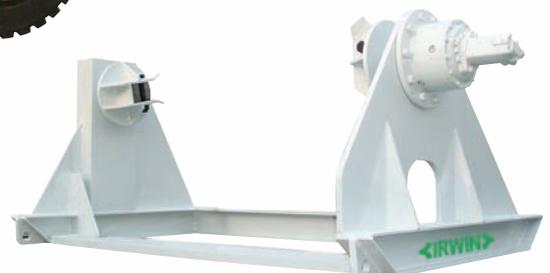
Because every application is different, we custom-engineer each belt winder to your specific needs.

Key features of our belt winders are:

- Up to 160,000 lbs. of line pull capacity; more if required
- Direct- or chain-drive
- Manual or hydraulic turntable
- Rail/wheel/skid mount
- 36" to 108" belt widths
- Roll-up to 128" diameter & higher
- Belt roll weight up to 40,000 lbs.; more if required
- Optional electric or diesel hydraulic powerpack
- Optional turntable for full-load operation



Many more options are available.



Irwin Mine and Tunneling Supply

Other Products

To help you move materials efficiently through the harshest environments, Irwin Mine and Tunneling Supply designs and manufactures a wide range of belt products and other related equipment.



Main Ventilation

- Spendrup Fans for the harshest environments
- Quality ensures minimal downtime
- Accessories include silencers, power trickle dusters, duct adaptors, inlet cones and bells

Mobile Base Fans

- Mobile system reduces damage to fan
- Easily relocated
- Sturdy design for wet, rough terrain



Bulk Rock Duster

- Heavy duty rail car
- Superior 12" wheel assemblies (4/truck)
- Willison Couplers with draft gears
- Larger diesel engine on drive units
- DC, AC and diesel compressor drives
- Superior unloading valve system
- Bottom cleanout access
- Modular drive and valve system



Portable Air Compressor Cars

- Rail cars
- Rubber-tired & tireless cars
- Portable skids
- Powered mobile bases
- Stationary air compressors



Irwin air compressors and pneumatic tooling are inexpensive to operate and can be used in environments that have limited power access.

Irwin Mine and Tunneling Supply Replacement Parts

Our warehouses are conveniently located in Waynesburg, PA, and Beckley, WV. They include affiliated stocking distributors in Warrior, AL, and Price, UT, which carry large inventories of replacement parts for mining systems manufactured by:

- Cableform
- Damascus
- DBT (CAT)
- Fairchild
- Fletcher
- Goodman
- JB Long
- Johnson
- Joy
- Long Airdox (CAT)
- McLanahan
- Schroeder
- S&S (CAT)
- Stamler



We also stock a wide range of equipment, including:

- | | |
|---------------------------------------|-----------------------------|
| ■ Ansul Fire Suppression | ■ Hand-held drills |
| ■ Belt clamps | ■ J&R plugs and receptacles |
| ■ Belt heaters | ■ Miniveyors |
| ■ Belt winders | ■ Mobile fans/bases |
| ■ Compressors | ■ Pillow blocks |
| ■ Contactors | ■ Ram muckers |
| ■ Dana Spicer | ■ Rock drills |
| ■ Electronic constant tension winches | ■ Rock dusters |
| ■ Exchange units | ■ Roller chains |
| ■ Face drills | ■ Solid-state drives |
| ■ Feeder breakers | ■ Trash pumps |
| ■ Filters and elements | ■ Wheel burros |



Irwin Transportation Products

Transportation Products

Irwin Transportation Products specializes in the design, engineering and manufacture of rail switching systems, signals and controls.

The **T-3 Electric Track Switch Operator** offers:

- 100 years of solid reliability for in-street switching
- Service throughout North America and Canada
- Solenoid operation with spring holding
- Authoritative throw with trailing ability
- Submergibility

For higher speeds our new **Locking T-3** provides:

- Solid point locking to 20,000 pounds
- Simple solenoid and lever operation
- Proven reliability
- Submergibility
- Between-the-rails mounting
- Easy hand throw

Our **AC-Powered Switch for Ballasted Rail** is ideal for mining and industrial applications, and features:

- Electrical versatility from 110 -575 volts
- Motor drive with trailable spring rod
- Point indication
- BOTE-certification for PA

The **DC-Powered Switch for Ballasted Rail** may be used in mining and industrial environments, and features:

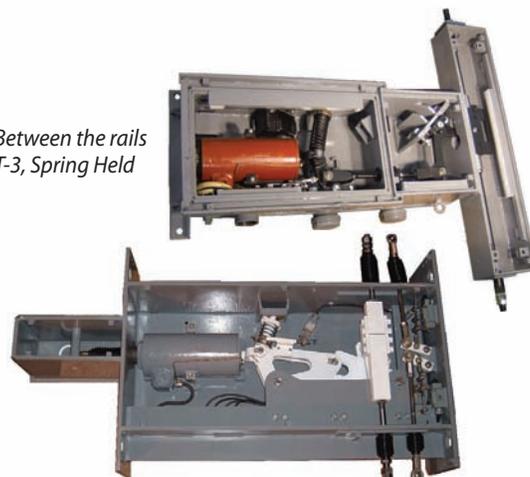
- Electric power from trolley line 300 VDC
- Solenoid-driven with integral springs
- Point indication
- BOTE-certification for PA
- Vertical mounting option

Irwin **Controls** for all switching applications include:

- PLC-based systems
- Vehicle-to-wayside radio control
- Track circuits and indicator control
- Power-on, Power-off control
- Lane auto routing for yards



Between the rails T-3, Spring Held



Between the rails T-3, Locking



Solid as the Products We Make

With a commitment to product innovation that dates back more than a century, Irwin Car and Equipment is in a strong position to help companies meet their rail- and rubber tire-based material handling needs. As a leader in designing, manufacturing, and rebuilding/repairing heavy-duty material handling equipment, Irwin Car is also committed to supplying customers with replacement parts, state-of-the-art mining tools, and filtration and ventilation products. We are also dedicated to designing and manufacturing switching devices for mass transit applications.



IRWIN CAR AND EQUIPMENT

CORPORATE HEADQUARTERS

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IRWIN AFFILIATES



MINE AND TUNNELING SUPPLY

PHILLIPS
GROUP



TRANSPORTATION PRODUCTS

