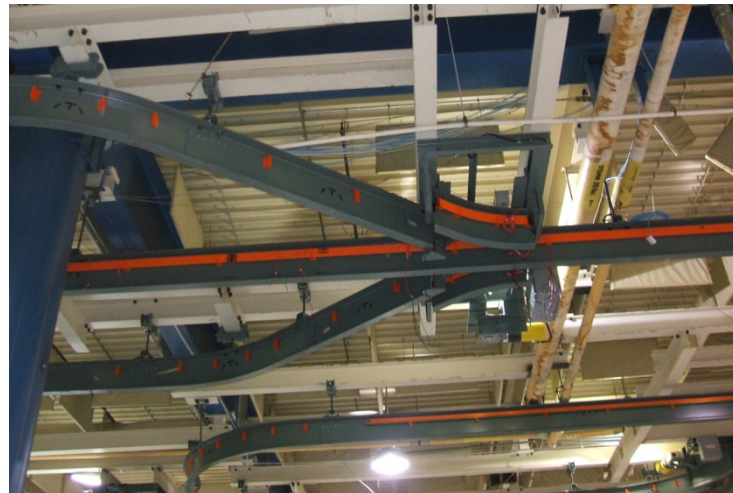


Patented Track Cranes and Monorails



➤ **Patented Track Cranes and Monorails provide a safe and productive method of lifting and transporting loads up to 40 tons.**

Patented Track Profile

Durable and Adaptable

- The hard alloy steel profile provides long life even in heavy duty applications.
- The high strength and low deadweight of the profile allows long spans with minimum loading transferred to the support structure.
- Inverted “T” design with machined running surface insures smooth trolley travel with little wear.
- Precise tolerances insure that track connections are smooth providing a seamless running surface for the trolley.
- Multiple profile sizes allow precise matching of the track size to the task at hand, keeping costs low and deadweight to a minimum.
- The standardized design of system components and bolted connections reduce procurement and installation time when compared to I-beam systems.

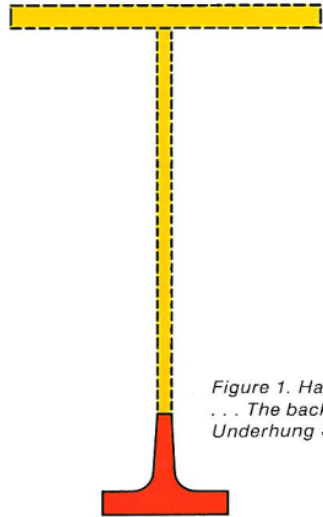
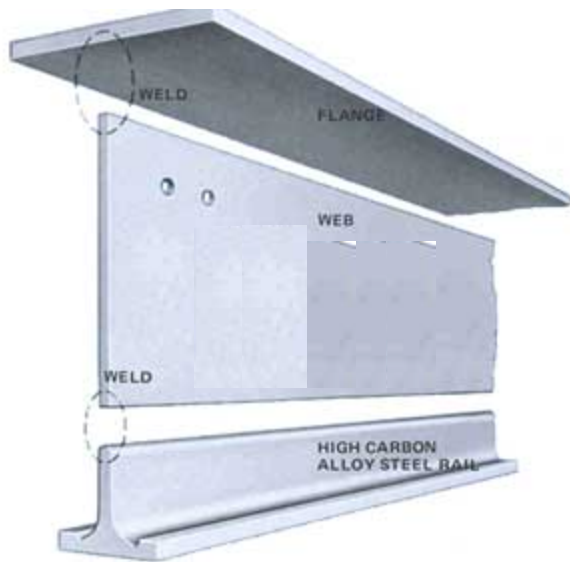


Figure 1. Hard alloy steel inverted “T”
... The backbone of the track used in
Underhung Systems.

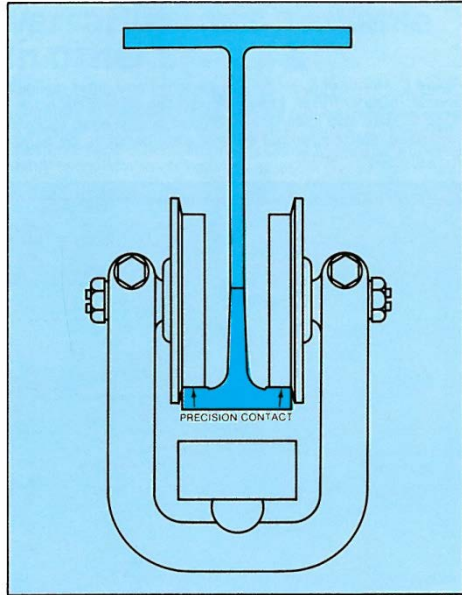


Patented Track Hangers Adaptable and Strong



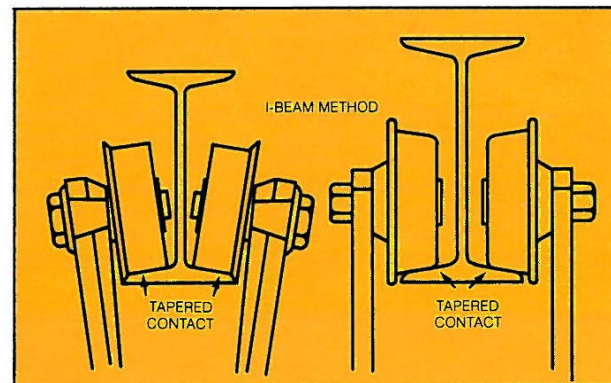
- Hanger rods made from high tensile steel insuring strength, long life and reliability.
- Flexible Track suspension greatly reduces bending stresses in the rod and stresses transmitted to the building structure. The flexible suspension also promotes smoother operation of the trolley and prevents binding of the end trucks.
- Suspensions via threaded rods allow the entire system to adjust to the ideal height required for the application. Systems can be installed beneath obstructions and suspensions from structures with varying elevations is possible.
- The track is suspended from above resulting in concentric column loading and potentially reduced building costs.
- The Flexible Track suspension provides faster installations, saving time and money for the customer.

Patented Track Trolleys Smooth and Durable



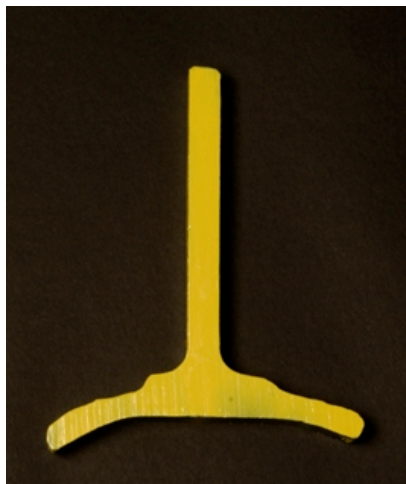
- Hardened Flat trolley wheels are designed to perfectly match the patented track profile, insuring less friction, less thrust and true vertical loading resulting in longer bearing and track life when compared to I-beam systems.
- High quality sealed antifriction bearings provide very little rolling resistance.
- The articulating design of the trolleys insures equal wheel loading which improves trolley wheel and track life.
- A variety of trolley arrangements and connection methods allow the safe suspension of most lifting devices and manipulators.

In contrast, rigidly mounted wheels operating on tapered I-beam track cause excess wear and required more effort to propel, resulting in higher maintenance and replacements costs.



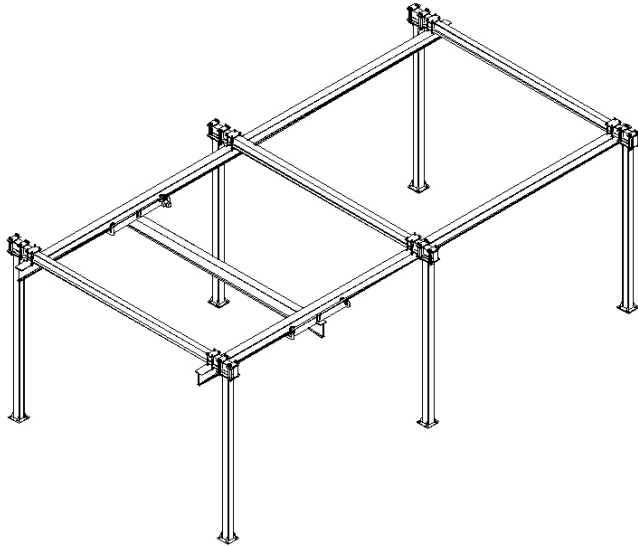
Patented Track Advantage

The effects of wheel loads

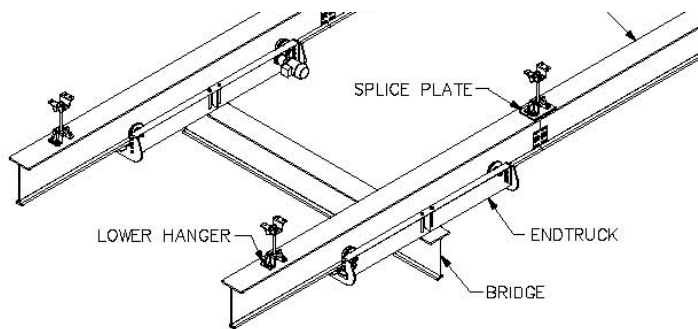


- True vertical loadings on Patented Track wheels polish the high carbon rail and wear evenly
 - Rail tread wears flat and evenly resulting in a consistent rolling surface for the life of the beam.
 - The reduced resistance on the wheels extends the life of gearing and motors.
- Tapered wheel loads on a structural beam flange result in an outward cold flow of the mild steel.
 - The photo shows how the lower flange rolls down and thins with usage
 - This “Peening” effect magnifies the rolling resistance against the wheels. Bearings, gearing and motors require regular maintenance and replacement.

Ceiling Supported and Freestanding Patented Track Systems



- A perfectly matched freestanding structure can be provided along with Patented Track crane or monorail system. These are an excellent solution for buildings with very high or obstructed ceilings as well as building structure that is not strong enough to handle the loads imposed by a suspended system.
- Patented Track's superior spanning capabilities allow for custom support centers to fit your facility or process.



- A ceiling supported system has the advantage of introducing no additional obstructions to floor traffic.

Patented Track Interlocking Cranes

Efficient

Due to the underhung design of Patented track crane systems, loads can be safely transferred via an interlock to adjacent cranes, allowing movement between bays or even to other buildings. Cranes can also connect to monorails allowing for almost infinite solution possibilities.

This reduces or eliminates un-necessary re-handling of loads with other material handling equipment.

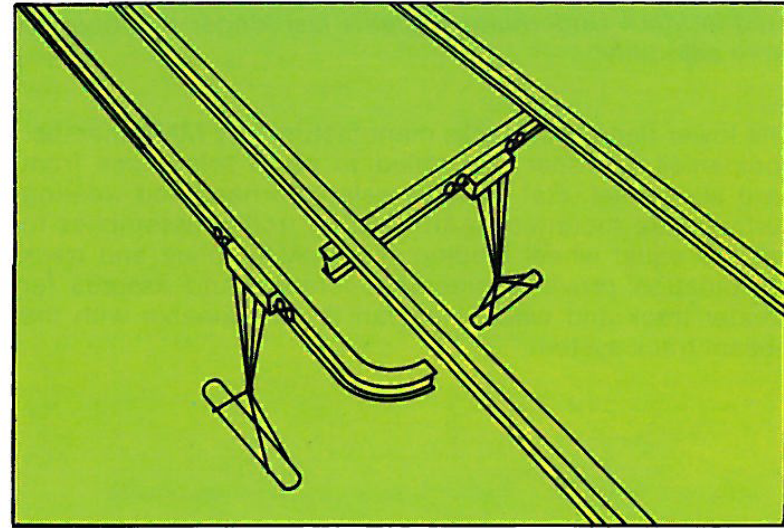
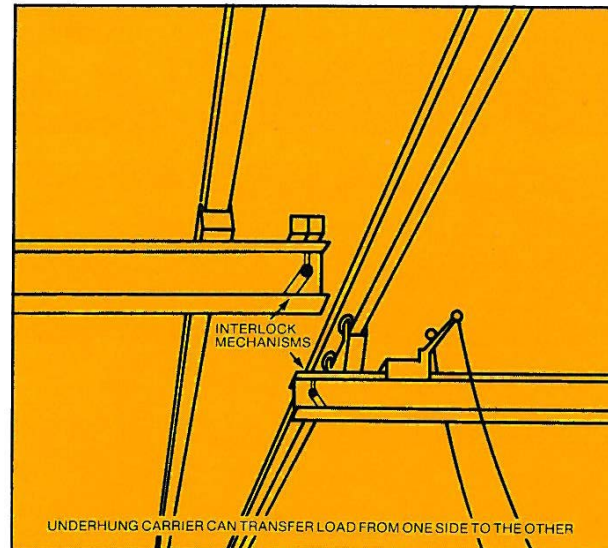
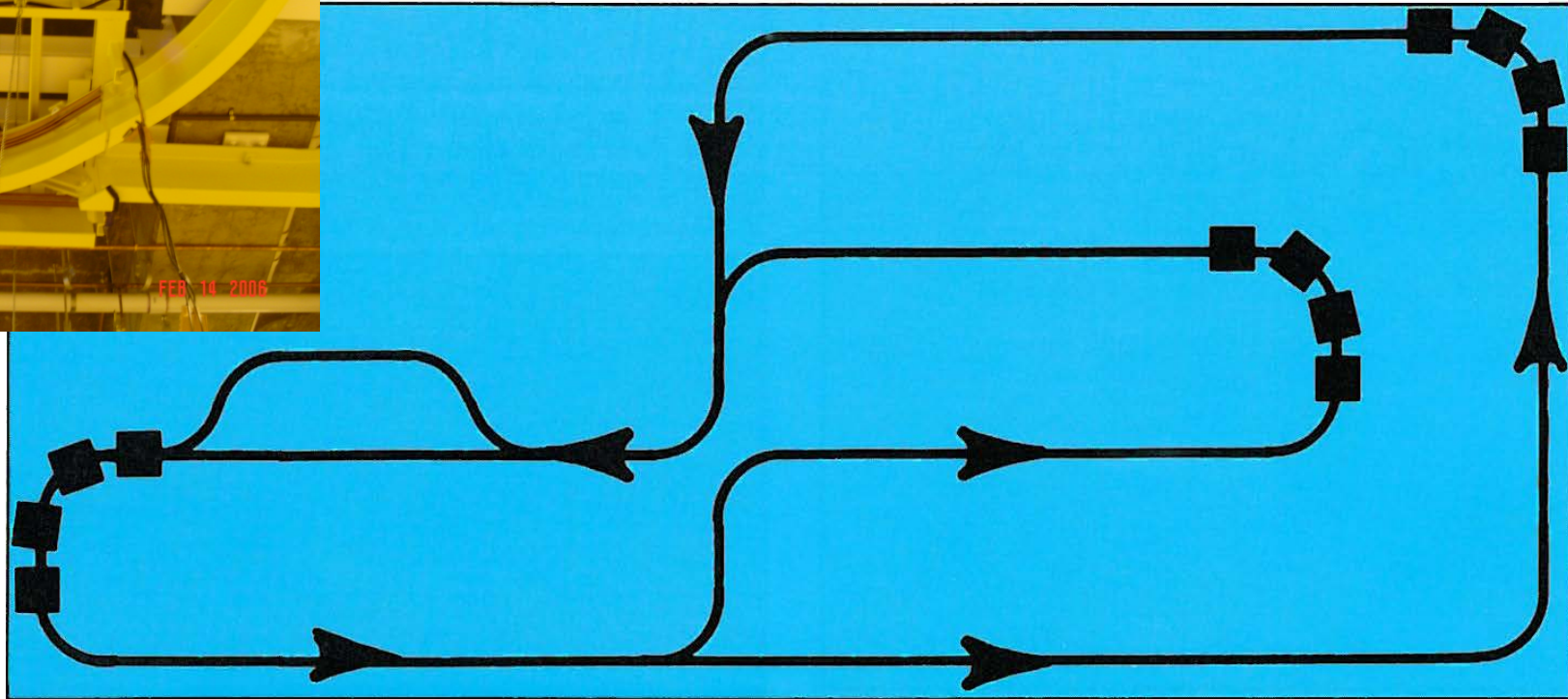
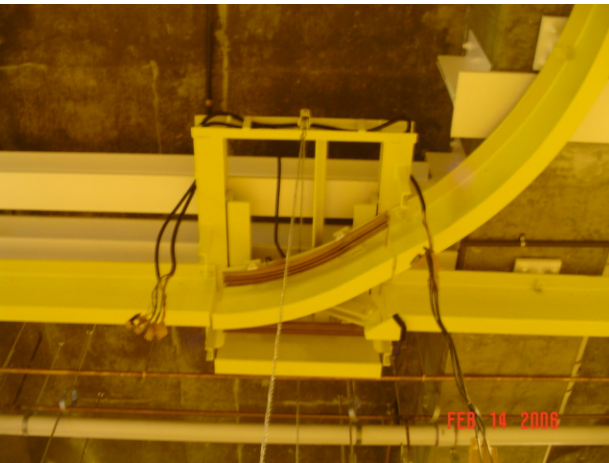


Figure 7. Switches and interlocking devices in Underhung Systems enable Monorail carriers to move onto Underhung Crane Systems.



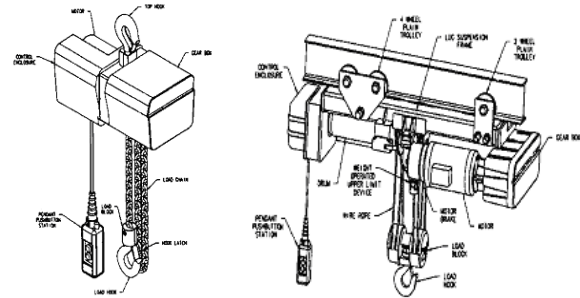
Patented Track Complex Monorails.

In addition to interlocks, track switches and turntables are available which allow complex overhead monorail systems to be implemented. Simple manual or highly automated systems are possible.

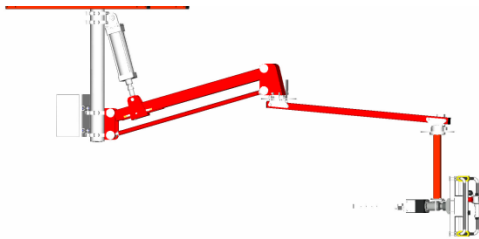


Associated Components

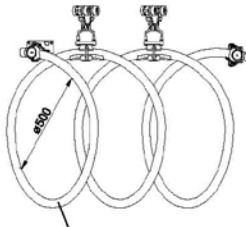
- Patented Track systems are commonly used with lifting devices such as chain and wire rope hoists. Air or electric Tractor drives are also available.



- Custom lifting and manipulating devices are used for special handling applications.



- Air or electric power is easily supplied safely and reliably to all parts of the system via festooning or conductor bar systems.



Manufacturers of Patented Track Systems

