

Further, keeping you on Track

The professionals within the ATRS Flash-Weld Group have one objective in mind...keeping you on track with quality, Flash-Welded Joints. Our Mobile Flash-Welding service provides superior quality welded joints that are unmatched by other Crane Rail joining methods or systems. Our highly trained team of ATRS Flash-Weld Field Engineers and Sales Technicians provides our industry with the best solution for Welding Crane Rail Joints.

The "weak link" in any Crane Runway system is the joined area between two connected rails.

Overtime, mechanical joints fatigue and areas around improperly installed thermite welds will show signs of premature wear. These joints may even fail when the realized combination of operating conditions (high lateral loads, high duty cycles, high impact forces transmitted through wheel tread and flange into the rail head, etc.) is basically too great for the selected rail joining system to manage. Joint deterioration and failure as well as wheel damage are all costly situations to repair and additionally, the very real but difficult to quantify "cost" for major system downtime will always far exceed the cost to initially create a proper and quality joint with the Atlantic Track Flash-Welding Process.

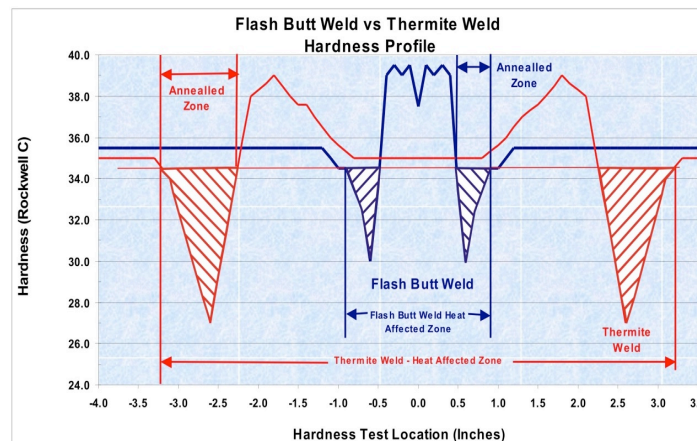
The ATRS Flash-Weld Group is trained in the precise, computerized forging of all Crane Rails. The process can be accomplished on runway systems on the ground or overhead. With the latest in Flash-Weld technology and a process with a history of producing in excess of 20 Million Flash-Welds, the ATRS Flash-Weld Group is absolutely your best solution for creating quality and trouble-free crane rail joints, the first time.

Flash-Welding has become the preferred method of joining Crane Rails in major industries such as Steel Mills, Automotive Manufacturing Plants, Ship Yards, Ports, Power Generation Stations, Aluminum Plants, AS/RS environments and many more Industries.



Advantages of the ATRS Electric Flash-Welding Process

- Flash-Welding is the most time and cost efficient process to join Crane Rail. The ATRS Flash Weld Group will get your runway operational and generating revenue in less time than any other rail joining method.
- Flash-Welded joints have a life equal to that of the crane rail because Flash-Welding is a forging process that does not introduce any filler metal to create the joint. The realized joint is at least as strong as the parent material.
- Flash-Welding is a completely automated and computerized process. The ATRS Flash-Weld head is equipped with special hydraulics and four specially engineered electrode systems that are designed with spring loaded reference points to assure accurate alignment of the rail ends during welding.
- The ATRS Flash-Welding process concludes when our machined shear die unit, removes the excess weld metal from the joint area to within .1250" of the parent material. The weld area is then carefully profiled by an ATRS Grinding Technician to certify that the joint is consistent in geometry with the parent material.
- The Atlantic Track Flash-Weld process creates a noticeably condensed heat affected zone when compared to the thermite or arc welding processes. This is beneficial when you evaluate running surface hardness across the weld and surrounding area.



The Economic Benefits

From a maintenance perspective, the ATRS Flash-Weld process has been proven to be the "no maintenance cost" welding process. A leading Steel Industry Publication even went as far as to state that Flash-Welding is "the most cost effective method of welding Crane Rail."

A case study was conducted at a steel mill in Burns Harbor, Indiana. Over a span of two decades, fourteen (14) miles of Flash-Welded Crane Rail (approximately 960 welds) was evaluated and there is not one recorded Flash-Weld joint failure noted over those twenty (20) years. The case study concluded that approximately 90% of the crane rail maintenance cost was eliminated when Flash-Welded rails were installed.

Other Crane Rail Joining Facts from the study:

- Crane Rails joined with Mechanical Splice Bars assembled with mechanical fasteners had a 95% failure rate in a 2 year period.
- Crane Rails joined with the Electric Arc Weld process had a 16% failure rate within 2 years.
 - Electric Arc Welds are the most costly method to create a welded joint because this method is the most labor intensive. They also create the largest heat affected zone.
- Thermite welding, while not quite as costly as Electric Arc Welding, is also very labor intensive and also creates a significantly wider heat affected zone than that of Flash-Welding. Thermite welding has an approximate 8% failure rate over a 2 year period, but requires a great deal of maintenance time to address the "dishing out" that occurs on either side of the installed thermite weld as the result of the heat affected zone compromising the hardness of the head hardened crane rails.
 - Thermite welding employs a casting technique, meaning that there are filler materials used to create the weld.
- When quality welded joints are the objective, the Atlantic Track Flash-Welding Group is your resource to achieve that goal.