

CLEVELAND



TRAMRAIL
By Gorbel Inc.

CASTELLATED “ARCH” BEAMS

Pose A Potential Risk To Workers

The welds in Arch Beam can weaken over time and experience Martensitic Failure, resulting in the bottom rail peeling away from the web plate. This safety issue should be brought to the attention of management immediately.

Gorbel® issued a memorandum in 2004 warning customers about the dangers of age and fatigue in the welds of Arch Beam systems in their facilities. Despite this, we continue to receive a high number of Arch Beam inquiries that range from the expansion of old systems to accidents that required repair parts.

Due to the seriousness of potential Martensitic Failure in Arch Beams, Gorbel recommends that any castellated beam is inspected regularly, based on capacity and lift frequency, by a certified engineer. We also strongly recommended putting a replacement plan in place based on the inherent risks associated with continued use of castellated beam and the cost and time of frequent inspections.



Arch Beam was last produced in 1962. The former owners of Cleveland Tramrail made this same recommendation in 1992 stating:

- Loading Tables in old catalogs were calculated for new beam as built at that time
- As of this date (March 2, 1992) all Arch Beam should be replaced with Tarca® due to its age, and De-Rating of capacity is no longer advised
- Arch Beam should also be replaced with Tarca® versus ANY repair due to age and many years of fatigue

If you have any questions, please contact Gorbel at 800-821-0086 or email info@gorbel.com