



Avoiding Twisted Cables and Hoses on the Container Terminal

Container cranes are a type of gantry crane often seen at terminals for loading and unloading containers from ships. These cranes are constructed with a supporting framework that is designed to straddle the object it is lifting and can traverse the length of the yard. Instead of a hook to lift the container, they are equipped with a specialized handling tool called a spreader. The spreader is lowered on top of the container and locks onto the container's four locking points. These types of cranes can typically transport multiple containers at a time.

► Problem

Twisting and wear of cables and hydraulic hoses is a risk when the spreader extends and retracts, and as the crane lifts and lowers the container, the hydraulic hoses and electric cables associated with these movements must be controlled to prevent twisting and wear of cables and hoses, which is extremely critical in container terminal workflow.



► Solution

Catrac cable and hose carriers, is manufactured for industrial use, they are designed to be maintenance-free and to protect cables and hoses from abrasion, wear, twisting. Catrac is used on various types of machinery as a means of safely and efficiently conveying power, electrical, air, or fluid (or a combination of these) to equipment in motion.

Broken hydraulic hoses or electrical cables causes downtime. Downtime when loading or unloading a containership is extremely expensive, which is why Catrac cable and hose carriers is now installed on gantry cranes at many international container terminals to help with their equipment's cable management.

A wide variety of options are available from Catrac cable and hose carriers. This is why Catrac have been used on and specified by many OEM machine builders for decades to provide a rugged, reliable, custom-built solution for each machine.



► Benefits

Catrac cable and hose carriers have a proven record of reliability with major container crane manufacturers.

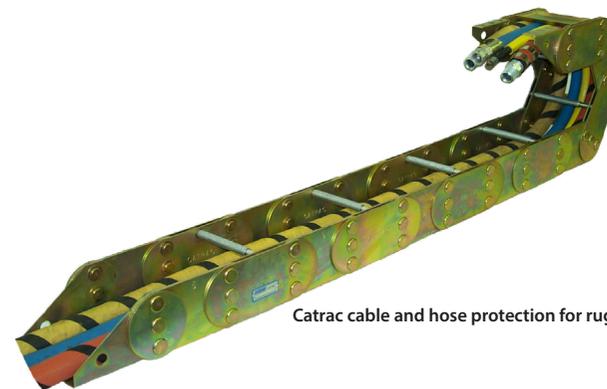
- All components can easily be repaired in the field.
- Catrac uses pins and retaining ring construction for ease of repair/replacement of damaged parts. Cheaper units are riveted together. If these are damaged, the entire hose carrier assembly must be replaced.
- The tracks require no additional supports for moving end.
- Industrial grade 2CP style is 3 metal thick side link construction
 - Cheaper replacement units are very light gauge 2 metal thick riveted construction
- Catrac 203/304 styles are mill-duty with 4 metal thick (high tensile) side link construction. Cheaper replacement units are two metal thick side link construction. Catrac has a welded cross brace for additional strength. Cheaper replacement models are bolted together.
- All parts are zinc plated with a yellow trivalent chromate dip for added corrosion resistance. Other materials of construction such as aluminum, stainless steel and nylon are available.

Catrac brand cable and hose carriers are designed, fabricated, and built by AMETEK Factory Automation in the United States of America.

► Conclusion

AMETEK Factory Automation has over 50 years designing and building custom Catrac cable and hose carriers to meet demanding environments, such as aerial lifts, steel mills, deicing machines, directional drilling machines, stacker reclaimers, etc. We can supply complete systems or spare parts, as needed.

Please contact our applications engineers for additional information or to discuss your specific needs in detail.



Catrac cable and hose protection for rugged environment

