

Robolite®

SPINNING TUBE CONVEYOR

LIGHT-ASSEMBLY SYSTEM 500-POUND CAPACITY

Robolite, as the name implies, was developed specifically for light assembly or sub-assembly operations. In addition to employing all of the standard **CARTRAC**® features, it is the most flexible design in terms of configuration and installation mounting options. **Robolite** is available in two versions, one features aluminum plate carriers and extruded aluminum track sections (Figure 1), the other features fabricated steel carriers and track sections (Figure 5). All other components are basically identical. In the **Robolite** aluminum version, carriers are captive to the track assembly and, as a result, operate equally well regardless of system mounting orientation. This version of **Robolite** can be inverted and suspended from a ceiling or fixture, mounted side-ways to a wall, or installed conventionally on a floor. Systems can be configured in a loop of most any shape or merely in a straight line for a reciprocating application. **Robolite** system configurations can be combined and or integrated with each other in a synergistic manner to solve most any application requirement (as illustrated in Figure 6). One configuration well suited to **Robolite** is the over/under loop system (Figure 2). In this configuration components to be assembled are loaded onto carriers and index to each station for the length of the assembly line. At the end of the assembly line carriers are

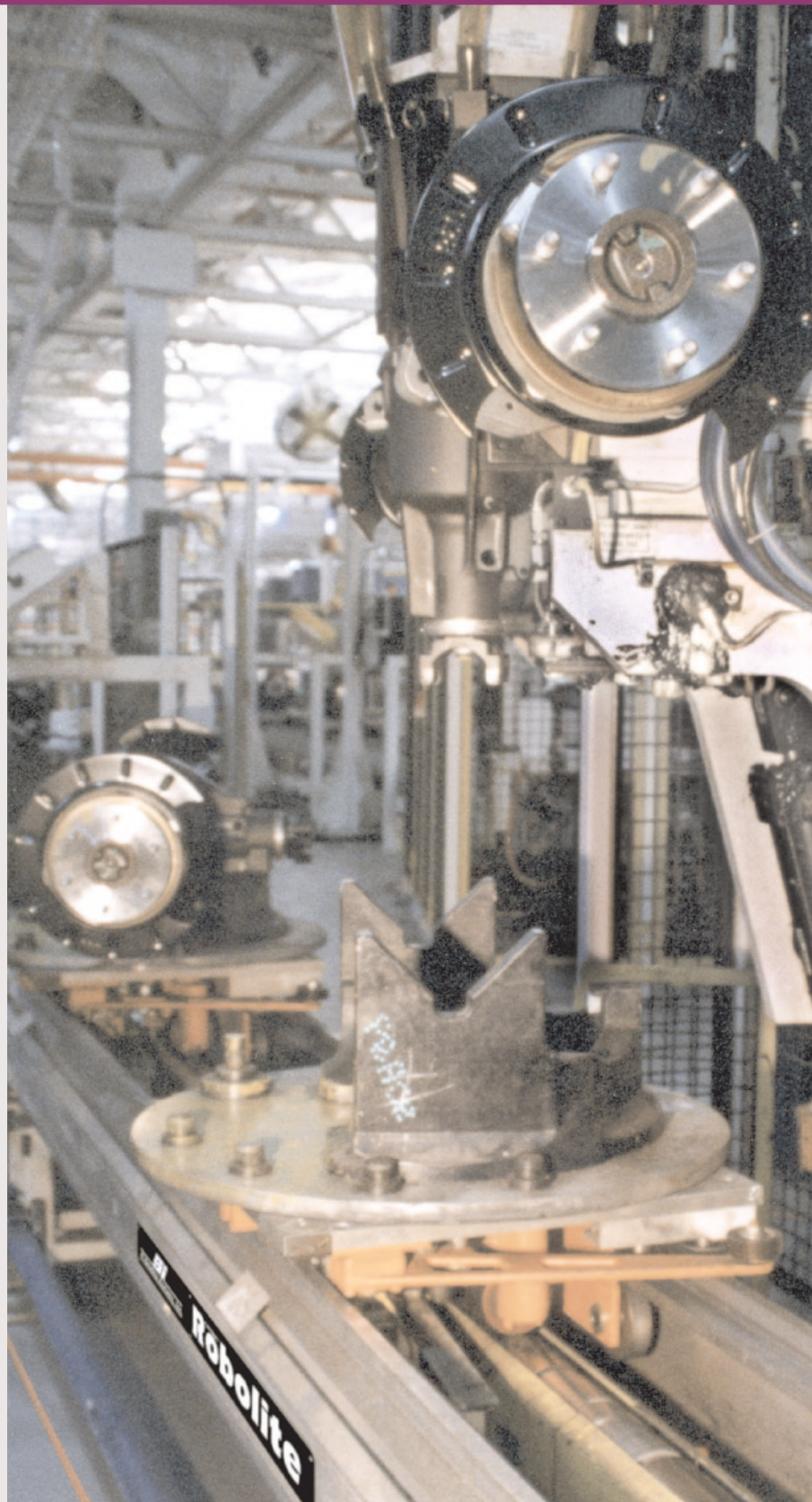


Figure 1: **Robolite** extruded aluminum track and aluminum plate carriers are used in this axle assembly installation where empty carriers are transferred to and suspended from inverted over-head track for return to the beginning of the assembly system.

unloaded and a 180° vertical rotator transfers the carrier to the under side of the system, as shown in Figure 2. The carrier is returned (inverted) to the beginning of the system where another 180° vertical rotator transfers it to the load station on the upper portion of the system and the cycle is repeated. This configuration is particularly useful where access to both sides of the conveyor is necessary or desirable and / or when space is at a premium. **Robolite** was designed with aesthetics in mind. It is clean, quiet and aesthetically pleasing, as shown in Figure 3, and yet is rugged enough to be used in a dirty and harsh environment as shown in the foundry installation in Figure 5.

FEATURES:

- High Speed Indexing
- Non-Synchronous Carrier Movement
- Smooth Acceleration / Deceleration
- Zero impact Accumulation
- Simplistic Design with Minimal Number of Moving Parts
- Wide Range of Load Capacities
- Modular Construction
- Accurate Stopping Repeatability

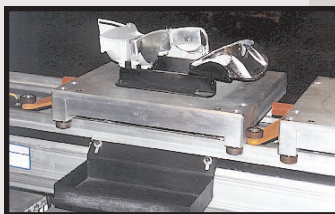


Figure 3: **Robolite** is clean, quiet and aesthetically pleasing.

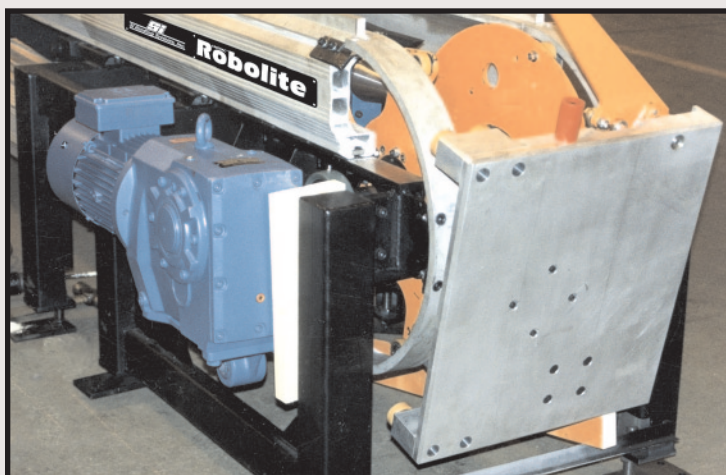


Figure 2: At the end of the assembly line carriers are unloaded and transfers to the under side of the system to return to the beginning of the assembly line to repeat the cycle.

INSTALLATION EXAMPLES

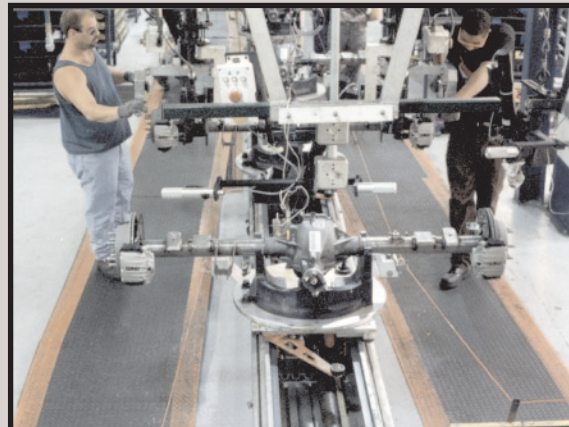


Figure 4: In this rear axle assembly installation **Robolite** interfaces with people as well as robotic operations such as shown in Figure 1 on front page.



Figure 5: In this core assembly foundry installation **Robolite** demonstrates that it functions well in a harsh environment.



Figure 6: Both floor mounted and inverted over-head **Robolite** (extruded aluminum version) are combined in this installation for handling a corrosive polymer material. (See insert.)