A **Constant Tension Winch** is used in conjunction with high capacity belt storage and/or take-up units. Line pulls can vary from 25,000 to 100,000 lbs. depending upon the HP required. Added metal safety guarding and covers can be affixed to this unit to protect workers from moving parts.

**Benefits:**
- Quicker response time
- Improves conveyor operation
- Minimal installation
- Provides constant tension under dynamic loads to relieve motor overload — regardless of belt speed
- Better option for longer take-up travel for high tension applications
- Varying amounts of line pull and greater belt storage capacity

**Components:**
- **Bearing Setup**: One SAF22538 split-house, 4-bolt pillow block bearing is affixed to either side of the drum.
- **Winch Drum**: This heavy-duty winch drum has 150 ft. of live wire rope capacity. It’s grooved to prevent the wire rope (single lap design) from collapsing on a flat surface. The drum has an oversized keyless shaft locker and is rated at 39,000 lb. capacity.
- **Motor**: This winch has a custom Reliance 150HP L3213Z variable speed alternating current motor with 1800RPM. The totally enclosed unit is designed for a shaft-mounted motor brake that mounts to the input shaft of the motor.
- **Reducer**: A Sumitomo Paramax 9000 Reducer is used, offering full design availability while being economical at the same time. The input shaft of the reducer is connected to the motor by a 1090T10 grid coupling. The output shaft is using an oversized 1170T10 grid coupling for connection to the drum.
- **Cable Holding Drum**: The 1090T10 grid coupling is connected to the winch drum using a reverse angle connection.
- **Brake**: MSB-9 Force Control Brake. A MagnaShear® MSB-9 fully electric motor brake readily mounts to a NEMA standard motor frame size. The technology within this totally enclosed braking unit stops activity that could deform or damage motor shafts in high-torque applications. The “Quick Mount” design of this part allows for easy connection to a drive motor.