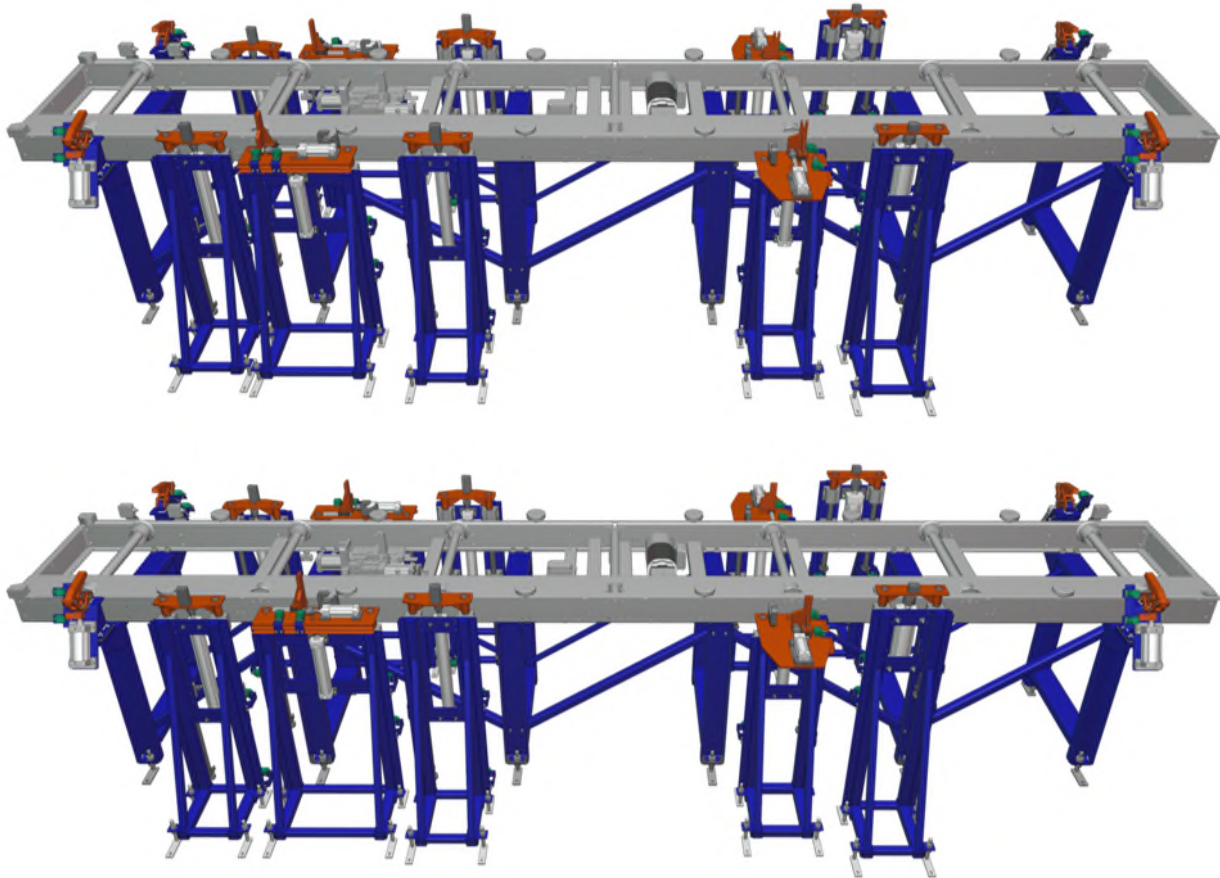


Skid Lock/Unlock Station – Typical Components

The Lock/Unlock Stations contain the following major components:

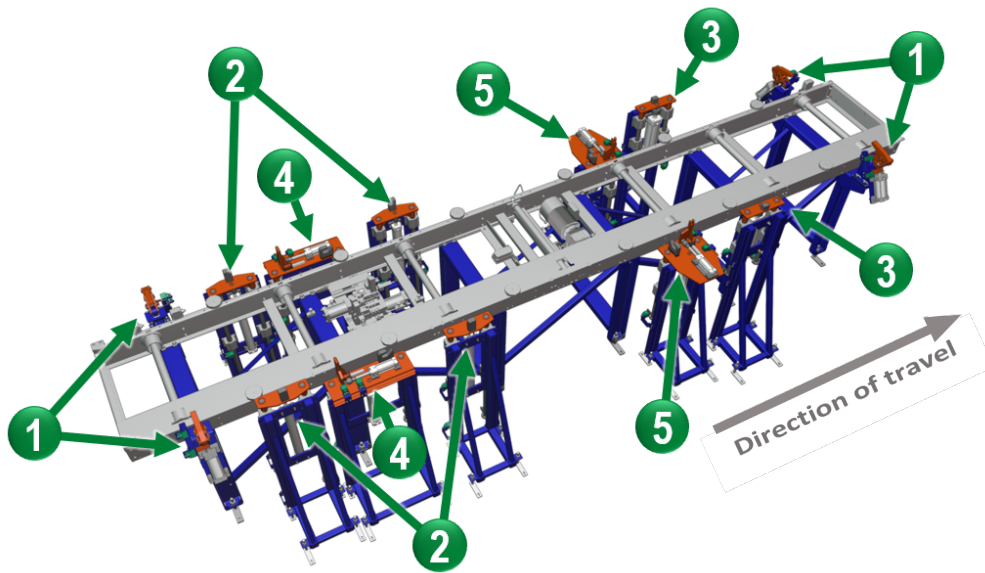
- Carrier Clamps
- Box & Cab Thumpers
- Box & Cab Locks/Unlocks
- Mounted Power Roll Bed



Lock/Unlock Station – Overview

The Skid Lock/Unlock Station's purpose is to lock down a vehicle body to its skid to prevent any movement or floating while being submerged in liquid. When a skid rolls onto the fixture, it is held in place by 4 carrier clamps while box locks and cab locks engage the skid's locking mechanisms. Once locked, the body is jostled by thumpers to ensure it is locked securely before continuing.

Lock Station – Components



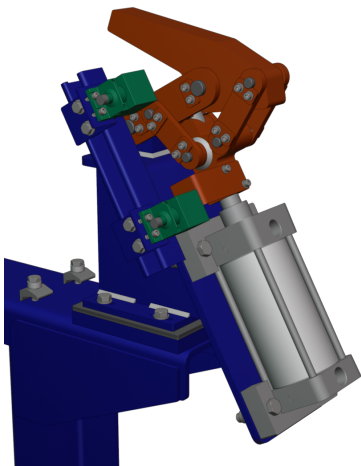
1 Carrier Clamp

2 Box Thumper

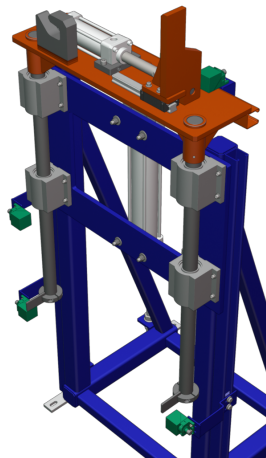
3 Cab Thumper

4 Box Lock

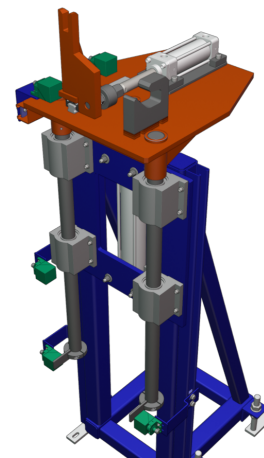
5 Cab Lock



▲ Carrier Clamp

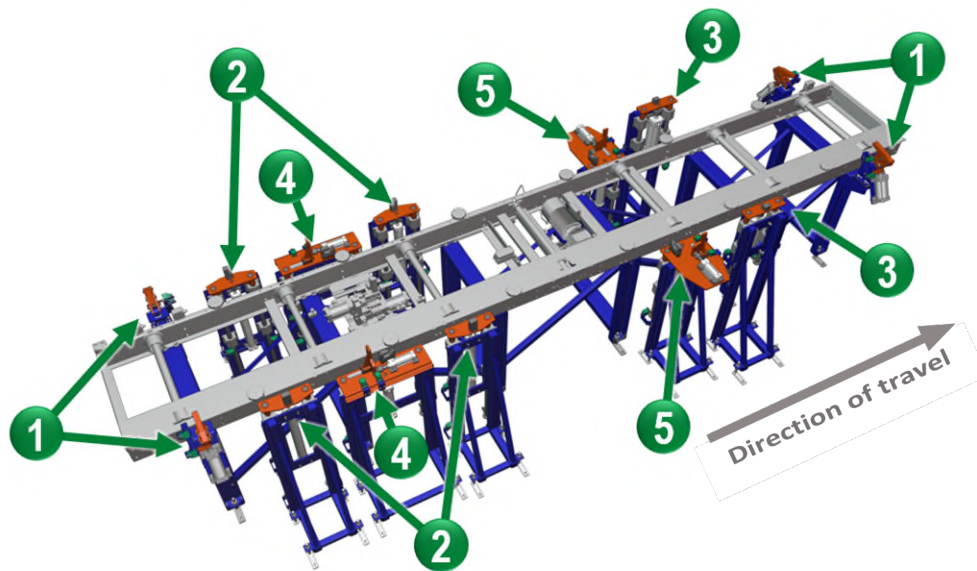


▲ Box Lock



▲ Cab Lock

Unlock Station – Components



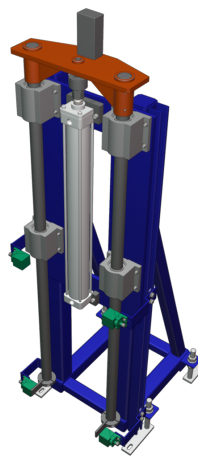
1 Carrier Clamp

2 Box Thumper

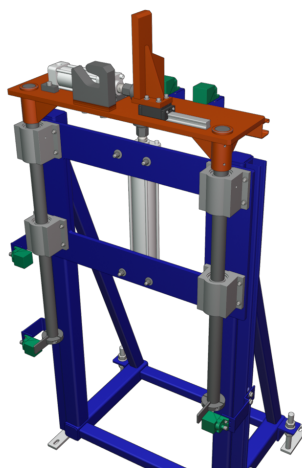
3 Cab Thumper

4 Box Unlock

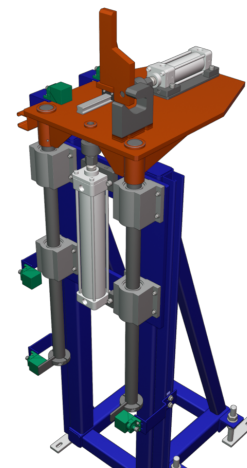
5 Cab Unlock



▲ Box Thumper

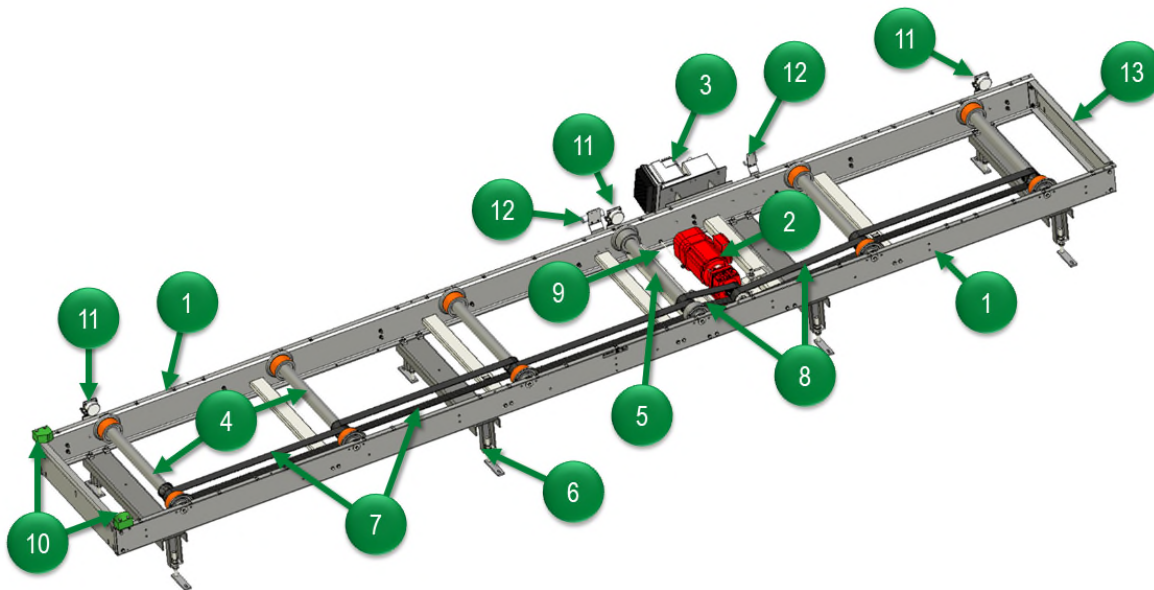


▲ Box Unlock



▲ Cab Unlock

Mounted Power Roll Bed – Components



▲ 3D rendition of "6 Roll" Power Roll Bed with safety covers removed to show detail.

- | | | |
|-------------------------------------|---------------------|-----------------------|
| 1 Side Frames | 6 Adjustable Feet | 11 Proximity Switches |
| 2 Gearmotor* | 7 Driven Belts | 12 Tee Brackets |
| 3 Integrated Drive Controller (IDC) | 8 Drive Belts | 13 Dashboard |
| 4 Driven Rollers | 9 Motor Brake Level | |
| 5 Drive Roller | 10 Lead-In Blocks | |

* - Gearmotor may be installed internally or externally of PRB frame depending on application and customer specifications.

Power Roll Bed Normal Application Overview

Power Roll Beds are a major element of FATA Automation's Skid Conveyor Systems. The products are modular in design using common components such as motors, belts, rollers, switches, cords, and trunk cables as a complete package.

The side frame of a Power Roll Bed is made of bended Z-profile that mounts the carrying rollers. These side frames have a height of 200mm and in the front and rear of the Power Roll Beds are connecting ends called dashboards.

Underneath the frame are mounted support feet that are adjustable for a height range of 25mm. The typical height from top of floor to the bottom of the skid is 500mm.

The length of Power Roll Beds ranges from 1 roller (bed length 310mm) to 9 rollers (bed length 8862mm) available. At least one drive roller assembly in each Power Roll Bed is made completely out of steel to discharge static voltage from the skid.

The standard track width is 800mm from center to center of 50mm wide skid runners. The supporting width is 60mm and the distance from roller to roller is 1064mm.

The drive frame unit can either be mounted between the side frames, typically near the center of the bed, or may be externally mounted depending on customer specifications or application.

The gearmotor is connected to adjacent drive rollers with its double tooth pulley fitted to the motor shaft and they in turn are connected to the driven rollers and timing belts to transport skids along the table.

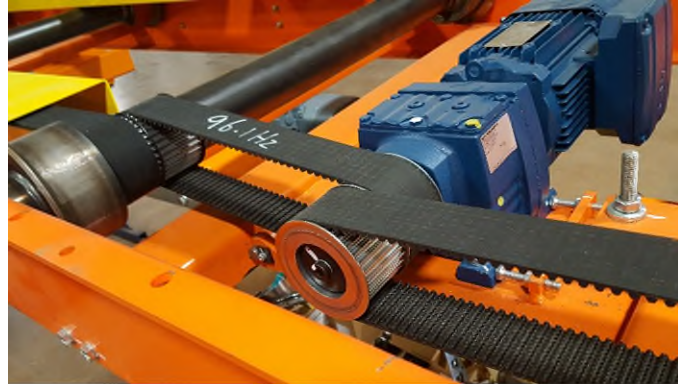
The typical drive roller assembly consists of a flange disc at each side and a polyurethane-coated center (125mm diameter). The continuous solid shaft has internal bearings that are locked at each shaft end.

A variety of cover options are available to protect the belts and pulleys. The complete Power Roll Bed can be covered with full guard plates as an option.

The function of each individual Power Roll Bed is ensured by the integrated drive controller (IDC).

Unistrut is laterally mounted on one side plate. Adjustable proximity switch brackets are mounted on the Unistrut as well as any TEE and IDC brackets.

System Components | 5



▲ Close up of a Power Roll Bed drive frame showing a gearmotor, double pulley and drive belts.



▲ Power Roll Bed with drive mounted externally.



▲ Driven roller assembly.