

4.2.14 Target Pile Installation Equipment

Standard rigging equipment is used to install many of the target pile components. The blue blocks have integral lifting handles that are designed to work with standard equipment. All of the steel slabs are drilled and tapped so they can be lifted with swivel hoist rings. The concrete covers are equipped with Swift Lift anchors and can be lifted using the matching lifting eye.

Special lifting fixtures are needed to lift green Duratek blocks (**Figure 4.2-43**), T-blocks (**Figure 4.2-44**), the modules (**Figure 4.2-45**), and top-closure Duratek blocks (**Figure 4.2-46**). Duratek blocks are lowered down the access shaft in a custom designed basket. A transporter from the neutrino fixed target beam line will be used to transport materials from the access shaft to the target hall. The transporter is pulled and pushed using a standard, hand-operated, electric driver. The transporter rides on rails that are welded to the steel floor plates. The rails are removed after installation. It might be necessary to design a coupling to connect the driver to the transporter. A special fixture is needed to hold the work cell door on the transporter and to install it. Special wheeled frames are used to move the modules.

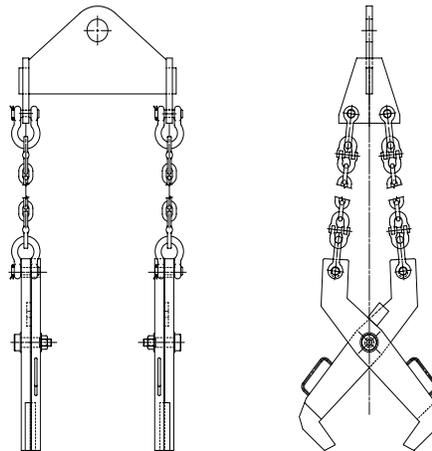


Figure 4.2-43 Green Duratek block lifting fixture



Figure 4.2-44 T-block lifting fixture

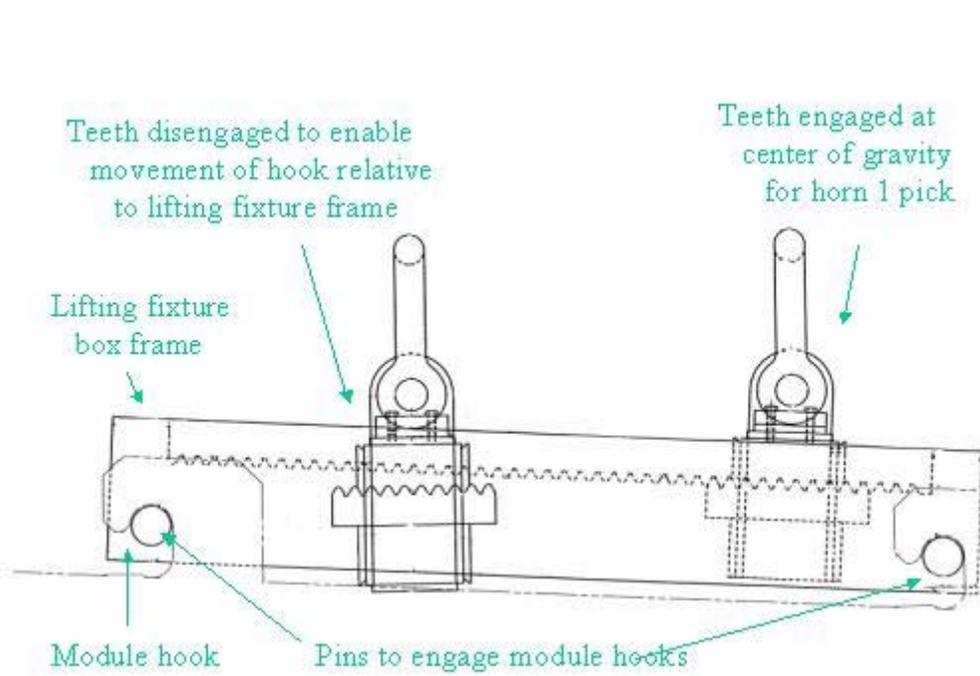


Figure 4.2-45 Module lifting fixture

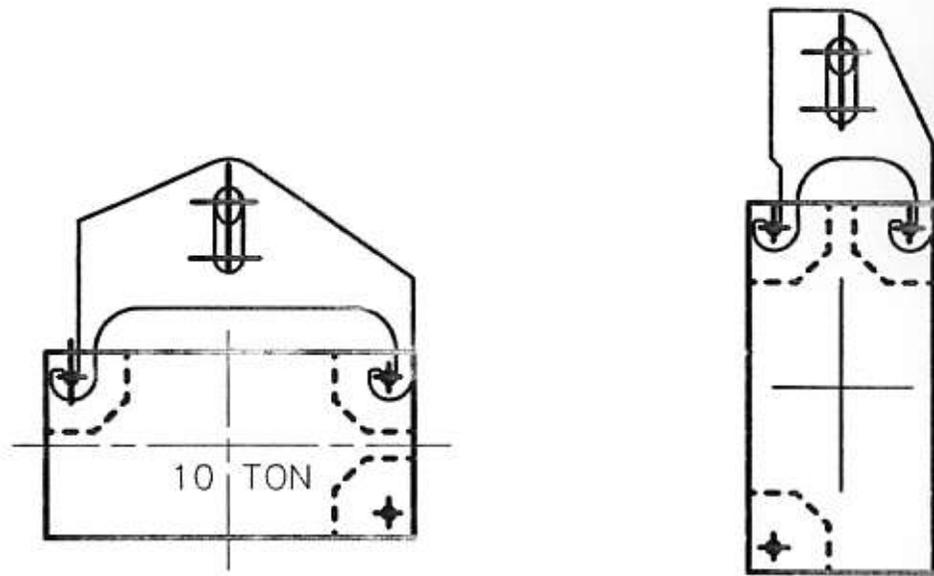


Figure 4.2-46 Blue Duratek block lifting fixture