Slide Rail Shoring

The SBH slide rail shoring system can often eliminate many safety and productivity issues found when using trench shields, tight sheeting, beam and plate systems and wood shoring systems.

The Slide Rail system, by design, is a modular component system used in place of driven tight sheeting or build-in-place timber shoring systems. The modern slide rail system is a “dig and push” system that allows quick installation of a typical pit or linear system in usually one day. This “dig and push” feature, in many cases, can greatly reduce the risk of cave-in and trench collapse common in Open Trench excavation methods.

The benefit adds a great deal of safety for adjacent structures and for personnel. Another benefit of slide rail is that since the modular components of the system are designed for a wide range of applications, many unique designs can be installed quickly and usually with one reasonably sized excavator. In many instances, the individual slide rail components are lighter and easier to handle than large trench shields.

When properly designed, slide rail systems offer unequalled pipe clearance and large free span work zones. Rolling strut carts allow the spreader assemblies to be quickly moved up and down within the system as need be for placement of pipe or equipment and to change the free span work zone provided by the system.

Slide rail systems also offer unique flexibility when users encounter crossing utilities or unforeseen underground obstacles. Various slide rail components have been designed to allow the user to safely and quickly install protective systems around such obstacles and crossing utilities to allow the project to continue as planned with minimal disruption.

The slide rail shoring consists of individual trench shoring components, which only inside the trench are combined to form a close shoring wall. Plates, slide rails and rolling struts are slide-able parallel to each other.

The trench width remains unchanged at any time during the construction phase. Due to this fact, the forces required for installation and removal are considerably reduced. There is less vibration and the trench shoring itself is nearly settling-free.

The H-shape of the rolling strut offers perfect conditions in all work phases. During installation, the rolling strut is located in the lower range of the slide rail and gives the excavator operator a clear view, enabling him to work with a short boom. Another advantage are large strut clearance heights, which are also continuously adjustable during laying of pipe. The required working width is achieved by means of distance pieces. Depending on trench depth, the customer can select a single, double or triple slide rail trench shoring system.

The Single Slide Rail shoring is used mainly in middle sized trench constructions where high strut clearances are required and the terrain tends to settings. With a soil support, larger strut clearance heights can be realized and with the SBH-patented adjustable clamping device, even strut-free trench shoring pits are realizable. Pits and trench ends can be completely enclosed with corner slide rails and trench shoring plates.

The double slide rail system has two guides for the shoring plates. Due to the second guide, not the entire shoring height must be removed at one time but only the trench shoring plate in one guide must removed first. As with the other trench shoring systems, the compatible rolling struts can be used and offer a wide range of applications. Double slide rail shoring is mainly used in deep trench construction where high strut clearances are required.

The triple slide rail system has three guides for the trench shoring plates. The trench shoring is very robust and designed for extreme site conditions. Nevertheless, the trench shoring system remains fast and flexible during assembly. Due to the huge dimensions, strut clearances can be realized which are not exceeded by any competitive trench shoring system. Heavy construction machinery must be available in order to handle the weight of the slide rail frame. Also the height must be appropriate to set up the triple slide rail frame. This trench shoring system is mainly used in very deep trench constructions where high strut clearances are required.


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