

## Trench Shoring/Safety Products



### American Shoring

American Shoring manufactures a Rolling Strut Trench Box with rolling struts that move independently on the side panels and can be locked in place. This allows clearance for larger pipes and increases the operator's view during digging. Another advantage of rolling struts is better operator visibility while digging and allowance for maximum boom clearance. The Rolling Strut Trench Box is made of high-strength steel

construction, built-in lifting lugs and comes in interchangeable widths. Professional engineered certified, the Rolling Strut Trench Box complies with the latest OSHA regulations. (800) 407-4674, americanshoring.com



### PRO-TEC Equipment

The ProSeries steel line includes 4-, 6- and 8-inch thick sidewall models. The PalSeries Lightweight steel shields include 3-inch single wall and 3- and 4-inch double wall models. High Clearance Arch Spreaders providing up to 10 feet of clearance are also available. The ATS aluminum line includes 2 1/2-inch thick sidewall models in standard sizes. The ModSeries line consists of modular 2 1/2-inch thick panels that are pick-up truck transportable and hand assembled. The Aluminum Hydraulic Vertical Shoring line includes four sizes in the stan-

ard line and seven sizes in the heavy-duty line. PRO-TEC's Slide Rail Shoring System is ideal for use in poor soil conditions and where support in deep excavations is needed. All PRO-TEC shielding is professional engineer certified to meet OSHA regulations. (800) 292-1225, pro-tecequipment.com

### Trench Shoring Company

UltraShore panels are made of a specially corrugated aluminum that gives protection in trenches up to 12-feet deep, even in Class "C" soils. All panels can be used horizontally or vertically and are stackable.



Use UltraShore as parallel shield panels or in "vee" or "wedge" configuration. These lightweight panels can easily be lowered into an excavation by one person. Two people can lower a stacked assembly of two panels into an excavation. Special options such as wheel kits and legs make these panels OSHA regulated. (800) 423-4411, trenchshoring.com



### Quik-Shor

Quik-Shor's Double Cylinder Power Shore utilizes two, 2-inch diameter hydraulic cylinders. Offering superior strength and versatility, it can be used in a wide range of shoring projects. The double cylinder power shore allows for large horizontal and vertical spacing of shores against steel plates. Horizontal and vertical spacing can be as much as 10 feet, depending on conditions. There is also high clearance with these shores.

The shores can be spaced up to 5 feet from the bottom of the trench. Double cylinder power shores were developed to work in conjunction with 1-inch steel plate. (800) 493-7827, quik-shor.com

### Speed Shore Corporation

Trench Rescue Shoring is a fast, safe, and versatile means of rescuing victims trapped in excavation cave-ins. Speed Shore's Trench



Rescue Shoring Kits feature customized Rescue Shores designed specifically for use in rescue applications. The equipment included with each kit is lightweight, portable and reusable. Trained rescue personnel can install and remove Speed Shore's Trench Rescue Shoring from a safe position outside the excavation within minutes of arrival at the accident site. Color coded extensions to increase cylinder's range snap on the shores quickly and easily and all shores have

a slip proof pad to further insure the safety of the rescue team. (800) 231-6662, speedshore.com

### Efficiency Production

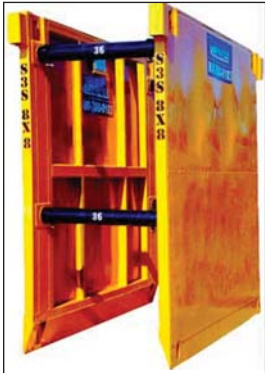
Efficiency Production provides a wide selection of standard and custom trench shielding and shoring systems. Efficiency's trench



shields are made of steel or aluminum, from 4- to 10-inch wall thickness and in lengths and heights to suit a wide variety of job requirements. Efficiency's versatile products are designed specifically for safe and cost effective installation of utility systems and infrastructure improvements. All products are professional engineered certified to meet OSHA standards. (800) 552-8800, epi-shields.com

Efficiency's versatile products are designed specifically for safe and cost effective installation of utility systems and infrastructure improvements. All products are professional engineered certified to meet OSHA standards. (800) 552-8800, epi-shields.com

### Trench Shoring/Safety Products



#### Safe-T-Shore

S3D single and double wall three-inch steel shields are perfect for municipal maintenance and repair work since they can be handled by smaller equipment. These shields offer comparable shield capacity with a lower initial cost and less maintenance than aluminum shields. Features include: reinforced top rails; 1/2-inch top rail plates; flat bottom or knife edge; thru-wall spreader collars; spreader connecting pins; stacking pockets for stacked shields; lifting eyes; and four-

point lifting system. (800) 380-0103, safe-t-shore.com



#### Kundel Trench Boxes

The Titan Drive Box from Kundel, is made from the standard Titan side wall panels with the end tube designed to accept a vertical rail

section or a steel beam to hold the sides apart. An extensive selection of side panels exists to match any job requirement. A range of rail sizes and lengths with different configurations is offered, including standard steel beams. Different lengths and configurations are available: standard spreader pipe and flexible, movable frames. (877) kundel3, kundel.com



#### Mabey Bridge & Shore

Mabey's heavy-duty trench boxes can be equipped with a high-arch spreader, allowing easy access for large pipelaying, boring and jacking, etc. or tubular static struts. Both traditional and "static" tubular-strut box are available. Dimensions range from 10-feet to 28-feet long and 8-feet high. Wall thicknesses of 4, 6 or 8 inches are available, depending on the soil requirements. Extension boxes are available for greater depths; rated to 27 feet in Type C soil. High arch spreaders are available for large

pipelaying operations. (800) 956-2239, mabey.com

## Zero Tail Swing Excavators



### Kubota

Three new zero-tail-swing (ZTS) excavators have been added to Kubota's U-Series lineup – model U15, U25 and U45 model. These 1.5-, 2.5- and 4.5-ton hydraulic excavators can accommodate a variety of attachments, such as breakers and augers; and the auxiliary hydraulic connections are located within easy reach, incorporating short hoses that are less easily tangled or damaged.

In addition, long-lasting pin bushings are installed at all pivot points along the swing bracket, boom, arm and bucket. To enhance operator comfort, speed and efficiency, the 2-speed travel switch on all three models is located on the dozer lever, complemented by adjustable wrist rests to help reduce arm movement. In addition, a wider foot-area provides a more comfortable working platform, matched by a suspension seat that can accommodate operators of all sizes. As an extra level of safety and security on the job, each features an OSHA-certified ROPS/FOPS canopy. (888) 458-2682, kubota.com



### Vermeer

The CX219z weighs 3,968 pounds and is 3.3-feet wide. It has the ability to dig to a depth of 8.3 feet, reach is 12.4 feet, and bucket breakout force is 3,307 pounds. The power is drawn from a Kubota D 722-E diesel engine. The maximum digging height of the CX219z is 11.4 feet and dumping height is 7.8 feet. The machine can swing up to 50 degrees to

the left and 85 degrees to the right. The zero tail swing feature on this machine means that there is no overhang – the excavator can fit into and maneuver through smaller spaces to get the job done. (888) 837-6337, vermeer.com



### Case

The Case CX27B, CX31B, CX36B and CX50B excavators (all zero tail swing) have been upgraded to Tier 4 certification. This upgrade delivers more efficient power and faster cycle times to get the operator quickly through the toughest jobs. Featuring Yanmar engines, the Case CX B Series compact excavators range from 5,566 to 10,261 pounds and deliver from 21.3 to 39.8 net hp. These models provide bucket

digging forces up to 7,936 pounds and maximum dig depths from

8 feet 4 inches to 11 feet 9 inches. A three-post ROPS design on these compact excavators makes it easy to get in and out of the machine while providing enhanced visibility. A heater and floor-to-ceiling glass cab is available as an option on all models. All models are equipped with a hydraulically controlled backfill blade for added stability and light dozing work. The backfill blade efficiently boils material in front of the blade for easy backfilling. A full range of buckets, thumbs, arm lengths and coupler options give the Case CX B Series compact excavators the ability to handle applications from trenching for utilities to general excavation in tight, restricted areas. (262) 636-6011, casece.com

### John Deere Construction & Forestry

Ranging in size from three to six metric tons, the John Deere 35D and 50D zero-tail-swing compact excavators provide reduced cycle



times; better comfort with updated controls and cab; and lower operating costs with the introduction of auto-idle and longer oil change intervals. Increased productivity begins with faster operating speeds and more drawbar pull, which will increase productivity

when transporting around the job site or back-filling. These features are combined with auto-idle to reduce fuel consumption. A long arm and heavy counterweight option provides an additional foot of dig depth and reach. Automatic shifting between high and low travel speeds allows the machine to automatically shift into low gear when more power is needed. The D-Series machines are powered by Yanmar large displacement, Tier II compliant engines with a higher torque curve than previous models. The wide variety of Worksite Pro attachments work with D-Series machines. (800) 503-3373, deere.com



### Ditch Witch

The XT850 features a dual-pivot excavator system with a 260 degree total excavator sweep for wide offset digging capability. The 24.5-hp XT850 has independently controlled rubber tracks for zero-radius turning capability in

tight areas. It's made for tight budgets, too, as it comes complete with a specially designed trailer and attachments. The XT850 offers a quick-connect attachment plate that accepts more than 70 Ditch Witch compact utility attachments and a choice of turf-friendly or aggressive tracks, depending on jobsite conditions. All functions are controlled with just two joysticks, and the XT850's infinitely variable, pilot-operated controls help even a novice quickly learn to operate it. The compact XT850 weighs less than 4,000 pounds. (800) 654-6481, ditchwitch.com

## Zero Tail Swing Excavators



### Hitachi

The Zaxis 27U-2 zero-tail swing excavator is productive, smooth to operate and features a very comfortable operator's station. Competitive fuel economy and long service intervals deliver low operating costs. It is ideally suited

to a wide variety of applications, thanks to its swinging boom, back-fill blade, and standard quick-coupler/hydraulic-attachment package. The operator's station is comfortable and offers more interior room and better visibility. The cab door features a bi-fold design so it can be locked back against the cab in the open position. Factory-installed air conditioning is standard when the optional ROPS cab is ordered. Multifunction operations mean the operator can easily execute simultaneous operations such as swinging and traveling. (800) 675-8459, [hitachiconstruction.com](http://hitachiconstruction.com)



### Bobcat

The 418 compact excavator with zero tail swing, which replaces the model 316, has an operating weight of 2,593 pounds and a dig depth of 6 feet. Pilot-operated joysticks control the 418 excavator. Standard pattern joystick and ISO operation through a control pattern selector valve are available. For tight work areas, the undercarriage retracts to less than 28 inches. The TOPS folds down so that the excavator can travel through a standard-size doorway and work in interior jobsites. The TOPS should be redeployed after transport and before working with the excavator. Two travel speeds are available to operators of the 418 excavator with a range of 1.3 to 2.1 miles per hour. The hydraulic cylinder is mounted on top of the boom to prevent the cylinder from coming into contact with the trench, bucket or nearby obstacles which may damage the cylinder. The hoses on the 418 excavator have been routed through the inside of the work group to protect them from damage. (866) 823-7898, [bobcat.com](http://bobcat.com)



### Kobelco

The new 17SR ACERA zero tail swing compact excavator features a new "Smart Hydraulic System" fueled by three pumps that ensure maximum power for simultaneous lifting, swinging and travel operations as well as excellent controllability for fine grading. The 17SR features a 15.2-hp, three-cylinder, Tier III-certified diesel engine. The machine has a bucket breakout force

of 2,900 pounds and an arm-crowding force of 2,158 pounds. The 17SR also offers a 10 percent increase in swing torque for a total of 310 pounds and a 7.5 percent increase in draw bar pull force. The 17SR features an in-cab lever, allowing the operator to move between expanded and contracted configurations without leaving the cab. The 17SR's cab is comfortable and easy to enter because the design requires only a three-post canopy to meet both ROPS and FOPS standards while providing more room for the operator. The machine has a maximum operating weight of 3,638 pounds and a maximum digging depth of 7 feet, 1 inch. The bucket capacity is 0.88 to 1.55 cubic feet. [kobelcoamerica.com](http://kobelcoamerica.com)

### Mustang Mfg.

Models 5003ZT and 7503ZT excavators have a zero-tail-swing design, creating improved maneuverability and visibility for the operator. The side-mounted engine compartment on each model is designed with a built-in barrier that limits the engine noise and vibration that can some-



times reach the cab of a compact excavator. A 30 percent increase in cooling capacity makes the optional air conditioning systems on the excavators among the top in the industry. Because each unit is available with a cab as standard, an 11-vent heating system is also included. The boom system consists of one piece of steel, making it less susceptible to wear. (507) 451-7112, [mustangmfg.com](http://mustangmfg.com)

times reach the cab of a compact excavator. A 30 percent increase in cooling capacity makes the optional air conditioning systems on the excavators among the top in the industry. Because each unit is available with a cab as standard, an 11-vent heating system is also included. The boom system consists of one piece of steel, making it less susceptible to wear. (507) 451-7112, [mustangmfg.com](http://mustangmfg.com)

### Terex

Offering a stable, zero-tail swing platform, the TC50 excels in restricted work environments. The TC50 is designed with a 39.4 hp



Yanmar 4TNV88 engine and load-sensing and load-independent flow division hydraulics system that are matched to the machine's size. It weighs in at 11,067 pounds, and offers a maximum dig depth of 12 feet 1 inch and a maximum reach of 20 feet 4 inches. The optional quick-attach coupler system allows for easy bucket and attachment changes for greater

versatility. It is able to handle 2.5 - 13.2 ft<sup>3</sup> bucket capacities, and it is ideal for using a hydraulic hammer. The 78-inch wide dozer blade is independently controlled from the track drive for uninterrupted operation. And with a simple flip of a switch, operators can change from ISO to SAE controls to suit personal preference. The spacious, insulated steel cab is comfortable even for full-sized operators, reduces noise levels and provides excellent visibility. It is FOPS/TOPS certified for operator safety. The design incorporates a new dozer control lever, directly next to the joystick, which is more intuitive for operators. (662) 393-1800, [terex.com](http://terex.com)