



Geotechnical Systems

DSI Product Overview

DYWIDAG Bar Anchors

General Overview

System Description

Anchor Design

Corrosion Protection

Steel Properties

DYWIDAG Multistrand Anchors

DYWIDAG Soil Nails

DYWIDAG Rock Bolts

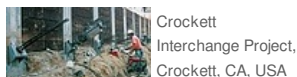
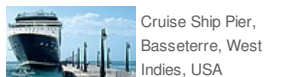
DYWIDAG Driven Ductile Iron Pile

DYWI® Drill Hollow Bar System

GEWI® Piles

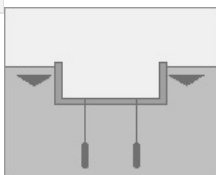
DYWIDAG Tie Rods

DYWIDAG Micropiles

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Crockett, CA, USACruise Ship Pier,
Basseterre, West
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Prestressed rock and soil anchors have become an important tool for the geotechnical engineer. Their safe and reliable use in both permanent and temporary applications is accepted throughout the world.

Soil Anchors are pressure grouted anchors installed in either cohesive or non-cohesive soil or loose rock. The anchors transfer forces into the ground by means of a steel tendon and a well-defined grout body. In the free stressing length, the anchor remains free to move.

Rock Anchors are post-tensioned tendons installed in drilled holes for which at least the entire bond length is located in rock. The anchor force is transmitted to the rock by bond between the grout body and the rock. Rock anchors can remain unbonded in the free stressing length, allowing the anchor to be checked and retensioned at any time. In such cases, adequate corrosion protection for the stressing anchorage and the free stressing length must be provided. On the other hand, the free stressing length can also be fully grouted after the anchor has been stressed, in which case force adjustment is no longer possible.

As a full service organization, DSI is prepared to supply design assistance and practical field know-how. This service can also be used to optimize the design process by helping to select the anchor system best suited to meet specific project requirements. The regional warehouse and fabricating centers strategically located throughout North America, coupled with an extensive network of local sales/service centers, provide prompt, reliable response to customers' needs. Most orders can be supplied from inventory with short lead time. To minimize site labor and to optimize quality control, a variety of shop prefabricating services are available for both bar and strand anchors.

In many cases, the anchors can be delivered to the site ready for immediate installation without the need for site assembly. The application of corrosion protection grouting at the job site can also be minimized and in many cases completely eliminated, saving time and money. In some locations both supply and installation, including drilling services, are available for any size project.

Whatever you need, you can count on DSI for quality from start to finish. The dedication of our staff to quality and service will help you complete your project successfully and on time.

Rock and Soil Anchors

System Description

DYWIDAG-Systems International was a pioneer in the development of rock and soil anchor systems and technology. Today, DSI is a world leader in this field with an outstanding reputation of product quality and customer service. The double corrosion protected THREADBAR® anchor is universally recognized as the "standard" for anchor performance and corrosion protection. DSI is dedicated to the advancement of the "State-of-the Art" for rock and soil anchors and stands ready to support you during the design, planning and construction of your project. When questions arise, contact your nearest DSI representative.

DSI offers a complete line of THREADBAR®s and multistrand anchors designed for both temporary or permanent use, manufactured from materials best suited to meet the needs of your project.

DYWIDAG Soil Anchors are generally used to:

- Anchor support structures for excavations such as sheet pile walls, soldier piles and lagging, drilled piles and slurry walls
- Counteract uplift forces in structures subjected to buoyancy lateral loads
- Transfer external forces to the ground; e.g., wind, earthquake
- Stabilize eccentrically loaded foundations
- Stabilize material or excavated slopes

Multistrand Anchors

manufactured from 0.6" dia. (15.2 mm) 270 ksi (1861 MPa) strand are available in sizes up to 61 strands. Larger anchors are available but system components are not stocked.

Special steels for high impact, seismic and low temperature applications can be made available on special order.

DYWIDAG Rock Anchors are generally used to:

- Anchor external forces and uplift forces
- Anchor retaining walls
- Stabilize eccentrically loaded foundations, slopes, rock walls and cuts
- Stabilize underground excavations and mines
- Increase the stability of dams

THREADBAR® Anchors

are available in 1" (26 mm), 1-1/4" (32 mm) and 1-3/8" (36 mm) nominal diameter, in lengths up to 60 feet (18.3 m) without couplers, with a guaranteed minimum ultimate tensile stress of 150 or 160 ksi (1034 or 1103 MPa).

Subject to modification.