

MOVABLE BRACE FRAME FOR SELF-INSTALLING PLATFORM

Abstract

Pre-assembled self installing platforms with improved performance due to additional rotational restraint to supporting legs and methods of installation are disclosed. A self-installing platform includes a hull, legs movable relative to the hull, at least one brace frame movably connected to at least two of the legs. Upon installation, the brace frame may be positioned at a desired elevation and rigidly secured to the legs. This way, rotational restraint is provided to significantly reduce leg stress and increase rigidity of the legs. With the increased rigidity, it has become possible to install platforms in relatively deep waters and harsh environments, and yet preventing large overall platform sway induced by adverse weather or sea conditions. As the brace frame is securable to the legs after the legs or footings are penetrated into or supported on the sea bed, differential penetration of legs or footings into the seabed has become possible without risking large structural loads in the brace frame.

(Figure 1B)