CUSTOMER
Transocean Sedco Forex Inc

BACKGROUND
Transocean Sedco Forex Inc operates three large, self propelled, semi-submersible drilling rigs that are each equipped with four 7 MW (9,390 hp) electrically driven mermaid pod propulsion units, two on each pontoon.

Two of the drilling platforms, the Sedco Express and the Sedco Energy, were built by DCN in France, while the third rig, the Cajun Express, was built by PPL Shipyard in Singapore.

Each propulsion pod uses a Dellner disc brake to stop and hold the propeller when maintenance is needed.

APPLICATION
Each brake system consists of a Dellner SKD 2x100 hydraulic pressure applied disc brake working on a 1,160 mm (45.7 in) diameter disc and a pressure intensifier system.

The brakes are actuated with up to 150 bar (2,180 psi) of hydraulic pressure generated through a pneumatic to hydraulic pressure intensifier system with a pressure increase ratio of 1:25. The brake system produces up to 47 kNm (416,000 lbf-in) of braking torque.