CUSTOMER
Hägglunds Drives GmbH – The Netherlands

BACKGROUND
A cutter dredger (CSD) uses a cutter head to loosen the material to be dredged and pump the dredged material via a pipeline to the shore or into barges. They operate by swinging in circular segments, by means of the side or swing winches, with a spud pole as the centre, which is also used to push the CSD forward.

The swing winches are placed on deck and have mooring wires running from the lower end of the cutter ladder to anchors at either side of the dredger. By pulling on alternate sides, the dredger clears an arc of cut.

APPLICATION
A Dellner SKP 220 spring applied, hydraulic released caliper disc brake is mounted on each of the two Ridderinkhof swing winches on this Vosta LMG built CSD, which is operated by Arab Potash on the Dead Sea in Jordan.

The winches are directly driven and controlled by Hägglunds motors type CB 560, which also control the swing movement of the dredger.

The Dellner SKP 220-248 has a braking force of 252,600 N (56,800 lbf) acting directly on the winch drum and is used to ‘park’ the CSD and hold it in place in all weather conditions.