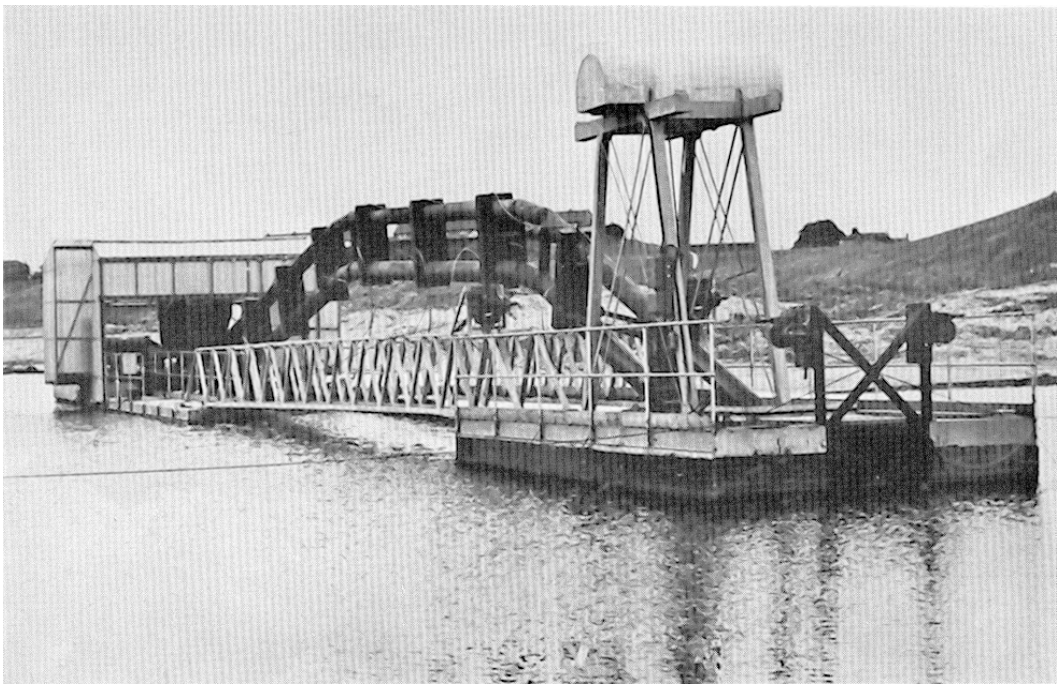
Metallisation
Application Data Sheets

AC2
Anti-Corrosive



Jet Pump Dredger

Since the metal spraying process was pioneered in the U.K. by Metallisation Ltd., of Dudley, West Midlands, one of its principal applications has been as an anti-corrosive protective treatment for structural and other steelwork.
The Zinc Spraying of a new Jet Pump Dredger provides an interesting example of the very widespread use of metal spraying. The dredger extracts sand by high-pressure suction jet, and has an output of 250 tons of sand per hour.
The vital statistics of the dredger are length 41M (135ft), width 6.7M (22ft), and height from the water line to the top of the hoist 4.55M (15ft). Fabricated in mild steel the dredger will spend its entire working life afloat on the quarry lake, so that the problem of corrosion is quite considerable.
Using Metallisation MK45 Metal Spraying Pistols (Latest version is MK73), the contractor Thomas Gilks & Son, Nene Terrace, Crowlands, Nr. Peterborough has gritblasted the steelwork and sprayed with zinc. Below the water line a deposit of 100μm (0.004") zinc has been applied followed by two coats of bitumastic paint; above the water line the dredger hull and deck structure have been gritblasted and zinc sprayed to a thickness of 100μm (0.004").
In addition to the normal corrosive attack of water, the method of operation creates corrosive and abrasive conditions above the water line so that the best available anti-corrosive treatment is essential. It is anticipated, that the metal sprayed zinc will protect the dredger throughout its entire operational life without further treatment.