CORROSERV (M) SDN BHD

CASE HISTORY ~ CH00074

LEAK SEALING AND REHABILITATION OF 14" CLOSED DRAIN CAISSON

THE CHALLENGE: The 14" Closed Drain Caisson encountered several pitted portions with a major defect of 70 mm hole. The caisson has a design pressure of 4.0 Bar and operates at ambient temperature. The caisson contains waste liquid from the platform operation that were drained out through the caisson and then were disposed according to the client's protocol. Therefore, a defect on this system will cause the waste liquids to leak out to the sea water and further pollutes the ocean. Thus, the leak has to be sealed immediately and Corroserv™ was given the task of solving this problem.

THE SOLUTION: Corroserv (M) Sdn. Bhd. being one of the pioneer in leak sealing and rehabilitation services, proposed the Bas-Rap™ system as the solution to the client's problem. The surface was prepared to SSPC SP10 standards (Near white metal finish) and followed by degreasing with a cleaning solution to remove all grease and oil contaminant from the caisson. Later, the caisson was washed with Chlor*Rid to remove all chloride, nitrate and sulphate contamination from the surface. The 70 mm hole were patched with combination of Rapid Epoxy Sticx – Titanium / Corro-Fix 911 beginning from the edge of the defect and closed towards the core of the hole. Upon that, the caisson's eroded wall was rebuilt with Corro-Dur™ 563 and followed by reinforcement with Bas-Rap™ system to a minimum of 6 layers (6.0 mm thick). The laminate thickness of the Bas-Rap™ system was calculated based on ISO24817 / ASME PCC-2 guidelines to resist a maximum pressure of 4.0 Bar which is also the design pressure of the caisson. Finally, the system was finished with Corro-Dur™ 258 as a top coat.
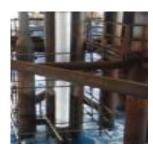

Figure 1.0: The application process for Corro-Wrap™ Wet Lay-Up

APPLIED SYSTEM:	YEAR:	LOCATION:
CORRO-WRAP™ WET LAY-UP	2010	TERENGGANU

NO SEA TOO DEEP, NO JOB TOO TOUGH!