

CASE STUDY

BUMI ARMADA RTM CLUMP WEIGHT RETRIEVAL

✉ info@vertech.com.au

🌐 www.vertech.com.au



VERTECH

INTRODUCTION

Vertech were contracted to deliver a confined space, multi-disciplinary solution to assist in retrieving a lodged clump weight and cable stopper from the client's FPSO. The component had become stuck over 70 metres below sea level within the central shaft of the facility's Riser Turret Mooring (RTM), supported by a 141mm wire rope. The obstruction prevented the FPSO from detaching and sailing away—an urgent concern for the client. Given the complexity and risk, Vertech played a key role in early feasibility and hazard assessments.

PROCESS

Vertech collaborated with Furmanite to support their mechanical solution while navigating one of the most challenging access scenarios offshore. Entry required rope access through seven confined shafts—none designed for personnel—and each chamber needed up to 12 hours of ventilation to ensure safe atmospheric conditions. Teams operated on long-line breathing apparatus, contending with narrow 600mm hatches, dense equipment congestion, and the need for carefully staged rescue stations. After locating the lodged clump weight, initial attempts to dislodge it failed. The team then cut into the shaft above and below the weight to create access for specialised tooling. Final removal was achieved by precision milling the clump weight from 480mm to 440mm diameter.

OUTCOME

The milling was successful, and Vertech maintained 24-hour operations until the clump weight was fully freed. Their mechanical fitters and riggers then repaired the shaft with a custom-engineered clamp system. The project's success was underpinned by early collaboration, strong planning, risk mitigation, rapid deployment of specialist equipment, and adaptability in extreme offshore conditions. The result showcased Vertech's capability in delivering complex, safety-critical solutions under pressure.

