

WOODSIDE OFFSHORE PETROLEUM NORTH WEST SHELF 2ND TRUNKLINE Trencher Plough Feasibility Study

This study was undertaken for Woodside / Brown & Root - Kenny in 1997/98. The study addresses trencher and plough options for stabilising the proposed 42" second trunkline.

Trenching machine options are being considered due to the existence of cap rock, which cannot be ploughed over a large proportion of the route. The concept proposed, utilises two powerful cutter slicers, which precede the plough and allow the material to be removed by the plough section.

This project was carried out in conjunction with KIRK Engineering Consultants and other specialist sub-consultants.

The first stage of this work was completed in 1997. The second stage of the study which involved model testing the rock cutting principles was undertaken in 1998.

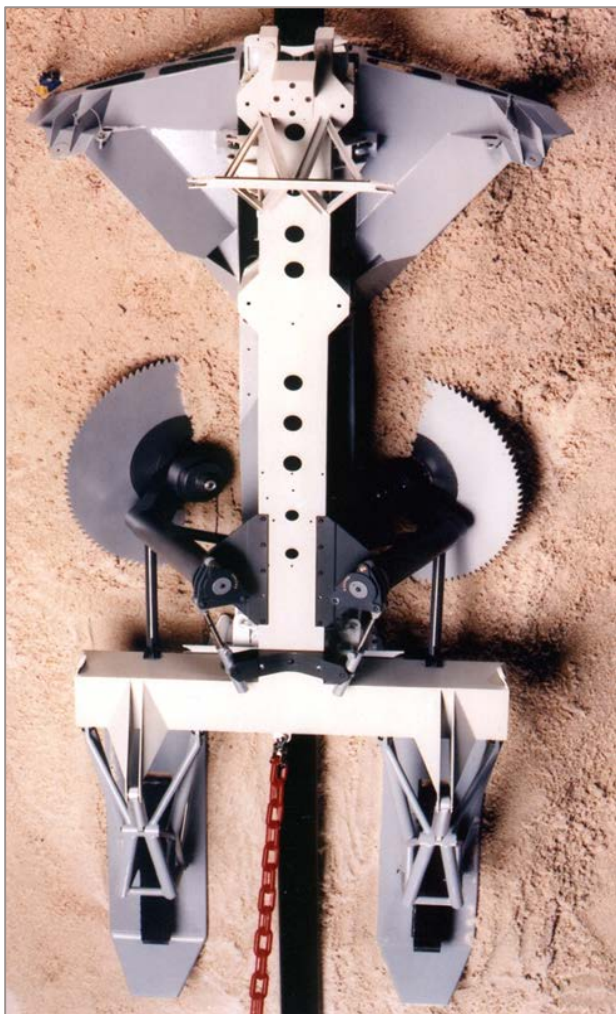


Elevation of Trencher Plough

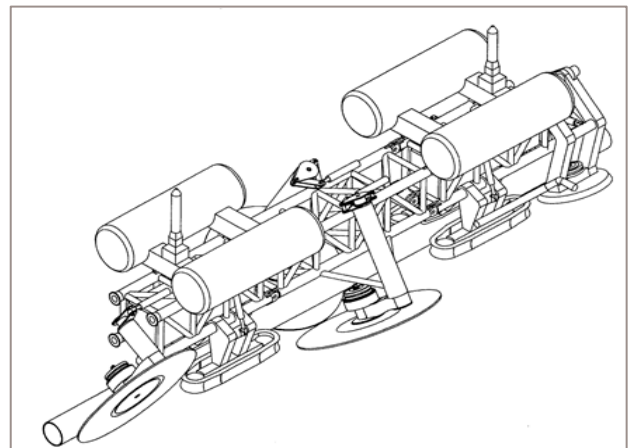
The above machine would utilise about 1MW to drive the large cutting wheels and would weigh between 300 and 400 tonnes. It is designed to cut up to 4km/day.

Alternative Options

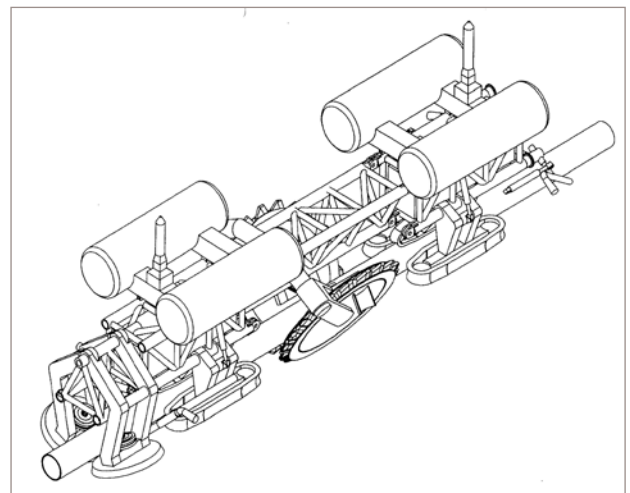
Alternative stand-alone machines to carry out the pre-slicing or remedial trenching were also developed to concept stage.



Plan View of Model Trencher Plough



View of Pre-Slicing Machine



View of Remedial Trencher