



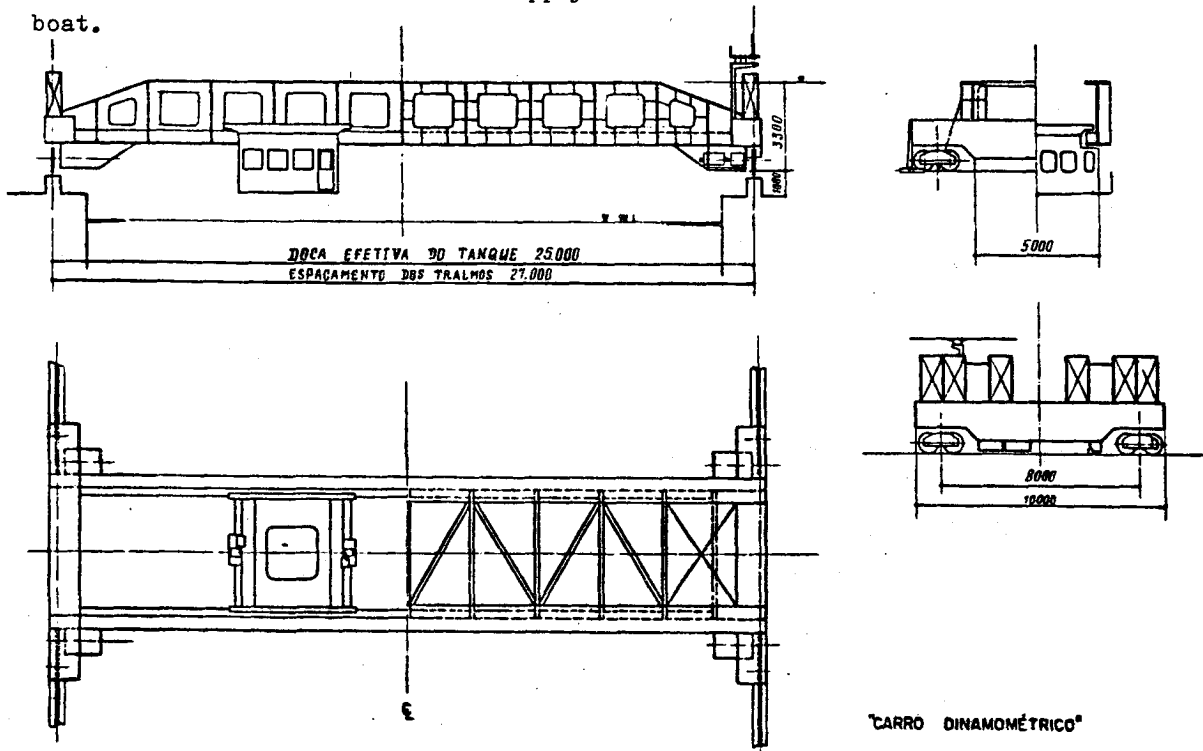
d) Ocean Resources

- dynamic behaviour of floating structures to support marine life cultures for feeding or energy uses.
- dynamic behaviour of systems designed for ocean mining.

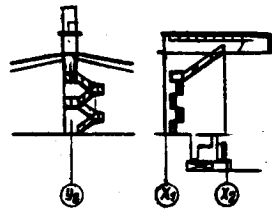
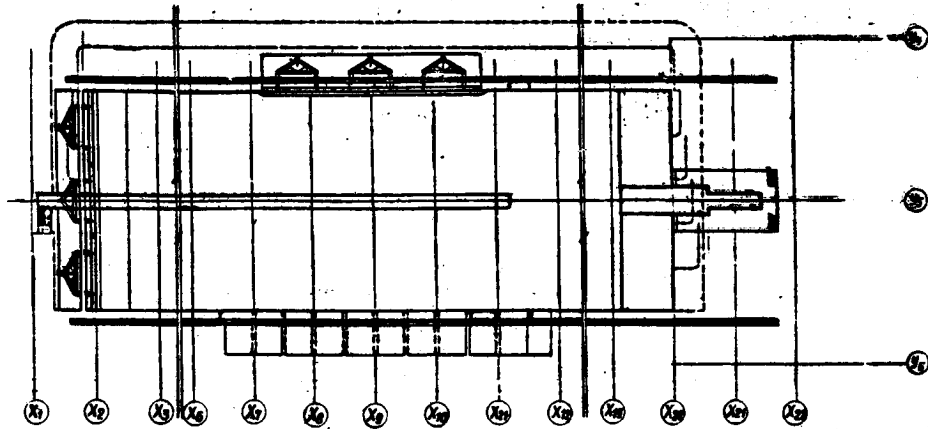
APPENDIX

Some examples of offshore studies developed at IPT are described below:

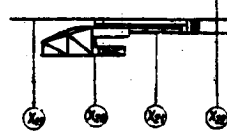
1. Study of a single point mooring buoy for the south coast of Brazil which would frequently break its main rising hose. The solution was found with an improved buoyancy distribution.
2. Physical simulation of the transportation, launching and positioning of the Garoupa jacket production platform for a water depth of 120 m, and for the Curimã jacket production platform for a water depth of 48 m.
3. Experimental determination of forces on mooring cables and chains, for a four legs permanent tanker mooring system.
4. Experimental study for a platform-supply boat personnel transfer ramp which shall stabilize the roll of the supply-boat.
5. Instrumentation of the full scale transportation and launching of the Curimã jacket production platform.
6. Full scale and model study of an ocean pipeline launching from a barge in shallow and deep water with a stinger system.
7. Long-term meteo-oceanographic data acquisition and processing for PETROBRAS.
8. Development of a mathematical model for digital simulation of the behaviour of an ocean pipeline during lateral launching and recovery.
9. Study of the state of the art on wave energy absorption systems as the first step to develop a system for the Brazilian coast.



PLANTA DO TANQUE



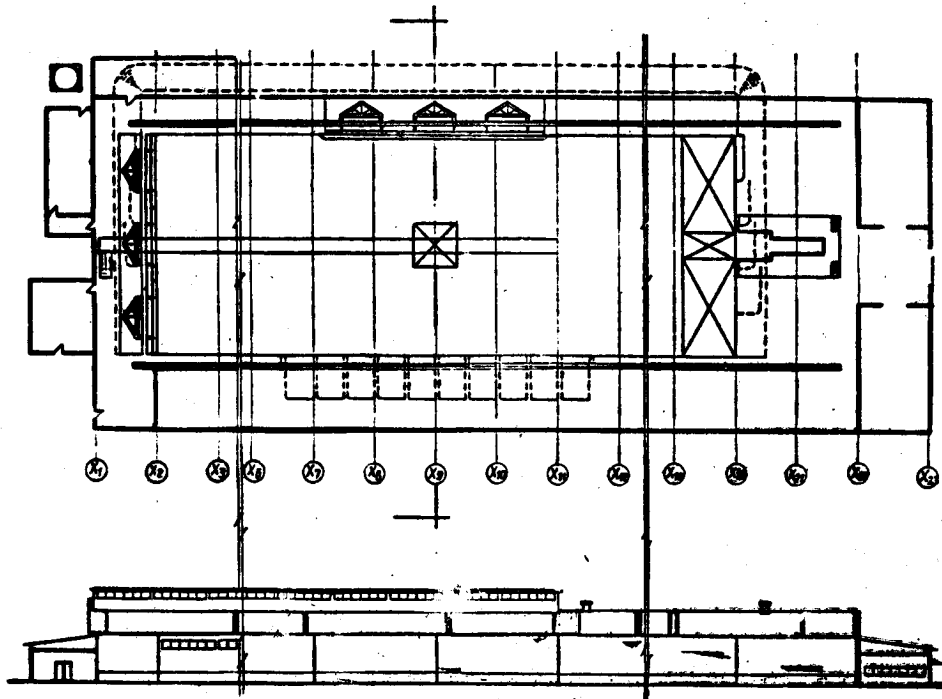
CRANES PARA MANEJAMENTO



SEDA DO TANQUE DE 100T

„TANQUE OFFSHORE”

PLANTA DO 1º PISO



ELEVADO

„TANQUE OFFSHORE”