A FAMILY OF LAND-BASED HYDROBARIC TEST FACILITIES (DK)

for hydrostatic loading tests of deep-water submersibles and other products



Feature	Fa DK-600	cility DK-1000
Max. width of test object, m	3.0	1.6
Max. length of test object, m	9.0	5.0
Max. weight of test object, t	120.0	120.0
Tank inner diameter, m	3.2	1.8
Tank depth, m	9.5	5.5
Max. static test pressure, MPa	100	150
Max. cycle test pressure (static cycle loading tests), MPa	60	100
Loading cycle rate of repeated static tests, cycle/hour	8–12	10–15
Max. pressure under long-term loading tests, MPa	60	100

The tests at hyperbaric facilities are designed to verify:

- Specified (design) and actual allowable operating depth of pressure hull or any other structure of deep-water submersibles.
- Crack resistance, creep, long-term and low-cycle strength of materials in structures of deep-water submersibles.
- Water tightness of deep-water submersibles under main oprating loads.
- Strength and tightness of containment systems designed for sea and rail transportation of liquid and gaseous cargoes.
- Functional performance of outboard and suspended equipment subjected to high hydrostatic pressures. Evaluation of ultimate pressure causing structural damage of deep-water submersibles.

High responsibility, rich experience and professional excellence of the laboratory researchers and engineers grant high-quality results to the satisfaction of customers.

