

SIMULATION TESTS OF REACTION HYDROMACHINES AT ENERGY-CAVITATION TRIAL STANDS

Areas of Application

The hydromachine laboratory includes two closed hydrodynamic trial stands ECS-15 and ECS-30 designed for comprehensive experimental research while designing high-performance flow passages of hydromachines; research studies of working process in hydromachines; and for acceptance tests of all types of vertical reaction hydromachines

Specification

The hydrodynamic laboratory stands meet all recommendations of the IEC 60193 international standard.

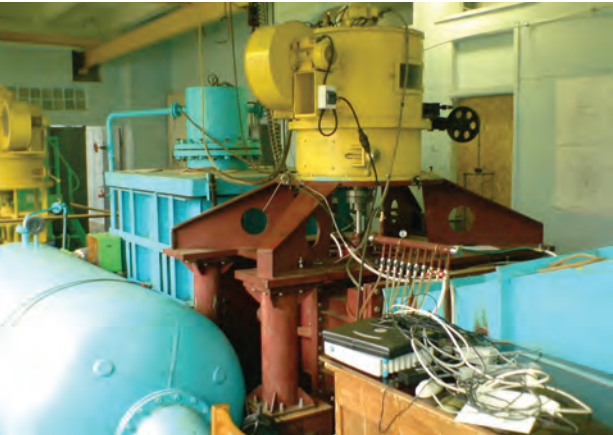
	ECS-15	ECS-30
Diameter of the model rotor, mm	350 – 380	350 – 400
Height of lift, m	≤ 12 (15)	≤ 25 (30)
Consumption rate, m ³ /s	≤0.56 (≤0.7)	≤0.3 (≤0.5)
Power of DC drive motors of circulating pumps, kW	≤160	≤160
Power of balanced engine, kW	≤200	≤180

Advantages

The hydrodynamic trial stands are unique installations that surpass the existing analogs in Ukraine in terms of all basic indicators

Stage of Development. Suggestions for Commercialization

IRL7, TRL5
Researches and acceptance tests of all types of vertical reaction hydromachines



Model unit of rotary blade hydroturbine PL30 installed on the ECS-15 energy-cavitation trial stand



Installation for testing micro-HPP on the ECS-30 stand

IPR Protection

IPR2

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