

해외 수력발전설비 성능평가설비 및 평가 방법

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Performance evaluation facilities and evaluation methods for hydropower equipment

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The variable demand on the energy market, as well as the limited energy storage capabilities, requires a great flexibility in operating hydraulic turbines. But, present in Korea, the absence of testing laboratories and technical criteria for the performance test of small hydropower degrades the efficiency of the domestic hydropower machines, A performance guarantees for hydro turbines shall be contain, as a minimum, guarantees covering power, discharge and specific hydraulic energy, efficiency, maximum momentary overspeed and maximum momentary pressure and/or maximum steady-state runaway speed, as well as guarantees related to cavitation. Performance test are conducted by the test standard. Test codes based on extensive research data are written under the leadership of an IEC. Performance evaluation is carry out several test(performance test, cavitation test and runaway test). The paper presents the international turbine test laboratory and performance test standard.

Key words : hydro power (수력 발전), turbine(수차), performance test(성능 시험), cavitation test(캐비테이션 시험), runaway test(무구속 속도 시험)

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