MONTHLY BULLETIN TURBINE TESTING LAB JUNE, 2025

Project Closure Meeting of CMHydro (Condition Monitoring of Hydropower Plant owned by NEA) project held on June 5 together with NEA officials. The major outcomes from the project are:

- Installation of a demonstrative condition monitoring system at Marsyangdi Hydropower plant with vibration and pressure sensors
- Development of condition monitoring guidelines for hydropower turbines
- An online portal where the condition of turbines can be checked in real time. (<u>https://ttltesting.ku.edu.np/</u>)



CMHydro project closing meeting

Pressure			Legend	Legend		
Inlet: Draft Tube:	9.5 bar 1.56376 bar		Zone	RMS Velocity (mm/s)	P-P Displacem (µm)	
X Axis Vibratio	n		Zone A/8	≤ 1.6	≤ 30	
RMS Acceleration:	1.2969 m/s ²		Zone B/C	≤ 2.5	≤ 50	
RMS Velocity:	0.464164 mm/s	Zone A/8 (≤ 1.6)	Zone C/D	≤ 4.0	≤ 80	
P-P Displacement:	10.2833 µm 🛑	Zone A/B (≤ 30)	Above D	> 4.0	> 80	
Y Axis Vibratio	n					
RMS Acceleration:	1.0843 m/s ²		Unit Operatio	on Status		
RMS Velocity:	0.476218 mm/s	Zone A/B (≤ 1.6)				
P-P Displacement:	16.1086 µm 🛑 👘	Zone A/B (≤ 30)				
Shaft Displace	nent Graph					
		Displacement Over Time				
s (unit) tream	M/M				$\langle \rangle$	

Francis runner design exported to Japan

Design modifications of the existing runner performed for a Japanese power plant for improved efficiency by 10-15% in different operating conditions.

