

Let us remember:

What is cavitation? It's the generation, development and disappearance of cavities in water; these cavities are filled with water vapour and gas.

What is its origin? A drop in pressure caused by a local increase of flow velocity close to the runner blade and in free vortices.

What are its consequences? Erosion, turbine efficiency drop, turbine instability, vibration, noise, fish mortality.

Turbine cavitation quality is determined by:

- head and suction head,
- turbine design,
- accuracy of the runner finish,
- state of the runner surface.

This quality varies during the exploitation:

- Initial surface irregularities and the irregularities resulting from repairs cause cavitation erosion, and it, in turn, intensifies the irregularities.
- The incidental passage of hard bodies or sand through the turbine have the same effect.