Net Positive Suction Head (NPSH): Measurement Methods And Results

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Abstract: The continuous monitoring of turbomachinery resulted in indications of incipient failure: vibration, premature wear of parts, decrease in performance, flow…etc, which enabled specialists at the "pumps and pumping stations laboratory" in the Higher National School of Hydraulics to carry out a theoretical and experimental study of captivation erosion.

The diagnosis was made on the basis of this analysis.

This communication consists in meeting this need as regards the performance of the turbomachinery: to highlight the consequences of captivation erosion and develop a reliable and convenient measurement method.

It is primarily intended for turbomachinery users, as the basis for calculating and measuring the percentage of wear; to enable users to find a quick solution to their problems of installation and operation with good operating conditions.

Keywords: NPSH: Net Positive Suction Head; Captivation; Captivation erosion; charge.