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## **C1Po2C-06: Numerical analysis of the performance of the inlet valve in a liquid hydrogen pump**

*Monday 10 July 2023 14:00 (2 hours)*

Excessive pressure drop will cause the liquid hydrogen vaporizing when the liquid hydrogen flows through the inlet valve, resulting in a decrease in the volumetric efficiency of the reciprocating pump. In this paper, we will optimize the structure and inlet parameters of the inlet valve through numerical simulation to reduce the vaporization rate and improve the volumetric efficiency of the reciprocating pump.

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