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## **Improvement of the operational settings of a helium purifier, leading to a higher purity of the recovered gas**

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The operating conditions of internal purifiers of commercial helium liquefiers are determined by the adjustment of the cold end temperature, the cold flow, the regeneration completion temperature and the heater temperature.

By changing the cold end temperature of the purifier from 32.5 K to 22 K, the purity of the recovered gas is improved from 33% to 99%. The current regulation values for this purification process are now set as follows: cold end temperature 22.0 K, cold flow rate 180 l / min and complete regeneration temperature 145 K.

This paper describes how the improvement in the purification system internal to the helium liquefier has been achieved.

**Author:** Prof. IKEDA, Hiroshi (University of Tsukuba)

**Co-author:** Mr KONDO, Yutaka (University of Tsukuba)

**Presenter:** Prof. IKEDA, Hiroshi (University of Tsukuba)

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