SESSION 16: Cryocooler Applications and Integration

Paper 16.1

Thursday ORAL Session

1:00 PM

Customized Hydrogen Liquefier System for Applications up to 50kg Per Day

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Based on its expertise in cryogenics and on its experience with more than 50 cryostats in operation, ABSOLUT SYSTEM has developed an industrial liquefier system of hydrogen, for applications up to 50kg of liquid hydrogen per day. The liquefier uses Cryomech cold heads, a well-known technology at Absolut System, which is a distributor of this hardware and which ensures its maintenance.

The configuration of the liquefier can be adapted to fit the customers requirements and to optimize its costs: it can be delivered with a capacity from 10 of LH2 per day and up to 50 kg of LH2 per day, with the possibility to upgrade the system later by adding cold heads, in the limit of 50 kg of LH2 per day.

The liquefier can also be delivered together with a full liquefying system:

- Liquefier inside a container, to ease its storage and its transport
- With a LH2 storage, optimized to fit with the liquefier capacity and operation
- With LH2 transfer lines
- With instrumentation as LH2 massflow measurements and online ortho / para analyser

This system brings flexibility and robustness to the customer.