PRODUCT DATASHEET

Helium Recovery and Purification Skid

Collect, purify and recompress helium from labs, MRI and leak testing

Product page





Close-up: purifier and filling manifold

OVERVIEW

The Tech Inc. Helium Recovery and Purification Skid collects helium that would otherwise be vented from laboratory instruments, magnets, cryostats and leak-test stations, cleans it and stores it for reuse. A gas bag or low-pressure buffer takes the returns, a compressor raises the pressure, and a purifier removes air, moisture and oil before the helium is filled into cylinders or a storage bank.

TYPICAL DESIGN DATA

Recovered purity	Typically 99.99% or better after purification, to the use
Storage pressure	About 150 to 300 bar
Compressor	Oil-free or oil-lubricated with oil removal
Codes and standards	Pressure equipment to ASME VIII and ASME B31.3; cylinders to their approved standard
Purification	Adsorption, membrane or cryogenic, chosen by purity and flow
Monitoring	Helium, oxygen and moisture analysers
Control	PLC with remote alarms

MODELS AND CAPACITIES

- **TI-HRP-5** – about 5 Nm³/h
- **TI-HRP-15** – about 15 Nm³/h
- **TI-HRP-40** – about 40 Nm³/h
- **TI-HRP-100** – about 100 Nm³/h

Indicative recovered helium flow at standard conditions.

ORDERING CODE

Example **TI-HRP-15-A-200**: **15** recovered flow, Nm³/h; **A** purifier: A adsorption, M membrane, C cryogenic; **200** storage pressure, bar.

SCOPE OF SUPPLY

Included: factory acceptance test with a written report; drawings for approval, material certificates and manual.
Options: gas bag and recovery piping; storage cylinder bank; remote monitoring; liquefier interface; site survey of helium use.

KEY ADVANTAGES

- **Less helium bought** – most of the gas is reused
- **Automatic** – runs without operator attention
- **Pure enough to reuse** – purification with online analysis
- **Sized to the site** – from one lab to a whole campus

How to cite: Helium Recovery and Purification Skid (model TI-HRP; Tech Inc., Vaughan, Ontario, Canada). www.techincresearch.com/product-page/helium-recovery-purification-skid

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