



- AMBIENT AIR VAPORIZER
- GAS CONTROL PANEL
- ONBOARD ELECTRIC CONTROL PANEL
- ONBOARD FILLING MODULE
- RECIPROCATING PUMP PACKAGE
- EASY LIFTING SEAT

## PRODUCT DESCRIPTION

The Skid Laser was originally born from TECNOCRYO's idea to satisfy the growing demand of nitrogen gas consumption of the major Laser-Cutting machines. Looking at its versatility and simplicity to be moved and installed in different places, it became soon a widely used compact solution also for filling cylinders in industrial, medical and food fields.

The Skid Laser is a user-friendly package for pumping cryogenic liquids at high pressures. Suitable for filling gas buffers and cylinders, this is the best solution for mobile and stationary Filling Stations. Compatibility with all the cryogenic gases is assured using the most reliable materials.

The Skid Laser provides the highest safety standard for every service condition in a tough environment of very low temperatures, high pressures and dangerous fluids. Each component is designed to enable high performances meeting the customer's needs.

## MAIN FEATURES

### Performance data

Pumped fluids	LIN, LOX, LAr, LNG, LCO <sub>2</sub> , LN <sub>2</sub> O, LHe, LH <sub>2</sub> and others available.
Max. pumped pressure	up to 420 barg (design for higher pressure on demand).
Temperature range	-196°C/+50°C.
Suction pressure (NPSH)	up to 18 barg.
Flow range	up to 88 l/min (special pumps for higher flow on demand).
System configuration	Manual to fully automatic with ECP onboard.

### Configuration

- Dedicated HYTC series for LNG Refuelling stations for automotive market, ATEX certified.
- Adaptable to any configuration of cryogenic tanks.
- Manually operated or fully automatic systems by an onboard ECP or a remote controller.
- PLC and TouchScreen available on demand.
- Easy, safe and noise reduced service.

### Certification and testing

- Pumping system hydraulically tested at 630 bar.
- Cleaned and degreased for oxygen compatibility to EN12300.
- Assessment to E.U. Directives: 2014/68/EU PED 2006/42/CE Machine
- Desing and manufacture based on EIGA and ASTM recommendations.



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## TECNOCRYO DESIGN

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### Features

An "All in one skid" solution providing a compact and light package easily movable from place to place using the fork-lift seats located in the bottom of the main baseframe. The skid is supplied with the piping and electrical interface connections to be easily finalized on site by the user.

The pumping and the vaporizing units are set up on the scheduled filling needs respectively varying the size of the pump and the vaporizer. An additional hydro-heater downstream the ambient vaporizer can be installed for severe ambient conditions.

The process supervision is designed for "time-saving" service, allowing the management of filling, stand-by and venting operations through an Electric control panel or a PLC and Touch Screen appliance.

The inherent modular feature of these packages increases the possibility to extend or reduce the size of the filling station with no limits without imposing heavy revolutions.

### Options and accessories

Compact filling modules can be installed onboard the skid for local refilling of cylinders and bundles. The filling procedures will be integrated in the control system.

Static Filling System is a specifically designed tool which allows a more accurate mixture by regulating the pressure in the end of the filling. This system has also a secondary effect to not stop the pump during the short time when no cylinders are being filled, thus increasing the lifetime of the pumps.

Cold Filling System is a designed tool which reduces and controls the temperature of the filling gas to compensate the cylinders warming during the compression. This feature provides an accurate maximum filling pressure.

Container solution is designed to install the skid permanently in a standard road container obtaining the best movable solution.

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## TECNOCRYO QUALITY SYSTEM

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TECNOCRYO relies on a High Quality System which completely merges with the Engineering and Manufacturing facilities, pursuing a strategy of continuous improvement within a moving market of high technology. Attention has been posed to the Standards and the relevant product certifications, specially for the European Directives.

HYTC is a dedicated line for HYdrocarbon fluids, specifically designed for LNG or LCNG applications in the refuelling stations for automotive field. The design and the use of reliable materials makes the difference.

**COLD FILLING  
SYSTEM**



Tecnocryo S.p.A.  
Via Ugo Foscolo 8  
20060 Basiano (MI)  
Italy

phone: +39.0295.7641.20  
fax: +39.0295.7641.02  
web site: <http://www.tecnocryo.com/>  
e-mail: [tecnocryo@tecnocryo.it](mailto:tecnocryo@tecnocryo.it)