Technical Index

*Pump ID Meaning*

<table>
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<tr>
<th>CSH 260 or 185</th>
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<th>5 or 4</th>
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<tr>
<td>(model)</td>
<td>(impeller Ø in mm)</td>
<td>(impeller tip width in mm)</td>
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- **Applications**: Road tankers
- **Liquids pumped**: LO₂, LN₂, LAr, LCH₄
- **Drive type**: Hydraulic (Hytran system)
- **Hydraulic motor power**: Up to 70 kW
- **Design pressure**: Up to 50 bar

*Test Procedure*

Each pump manufactured by CRYOSTAR is mechanically and cryogenically tested prior to shipment in our state-of-the-art testing facility to ensure that performance meets customer specification. The precision of measuring devices provides essential results: differential head, flow rate, seal gas consumption, pump efficiency, NPSH, noise and vibration levels – all documented and submitted to the customer.

*Quality*

Designed in compliance with guidelines like IGC 11/82 norm

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**Transfer Pump CSH**
The hydraulic pump is driven by the truck's power take-off via the truck gearbox which includes an electric piloted flow control valve to allow adjustment of the cryogenic pump speed.

Hydraulic couplings are supplied with fast couplers in order to easily disconnect the vehicle tractor.

The hydraulic circuit is protected by a safety valve installed on the hydraulic pump in order to prevent overloading of the Hytran system.

Control system: a manometer is installed on the high pressure hydraulic circuit to monitor the pressure of the complete hydraulic system.

At constant speed, the cryogenic pump flow can be adjusted via the discharge line valve. The pump is protected by a non return valve, installed on a parallel circuit in order to prevent an suddenly flow shutdown.

The pump shaft is mechanically sealed with a Cryostar composite faced seal, capable of providing up to 4 times the wearing life of conventional carbon faced mechanical seal.

Closed impeller with axial suction and radial discharge. Impeller balance is achieved hydraulically to minimize the axial load on the bearings.

Bronze helical inducer results in low NPSH requirements with hydraulic optimal conception.

Differential pressure switch (protection against dry running)

Cool down temperature probe

Leak detection temperature probe

Purged seal

Complete skid mounted assembly

For more details please contact your local Cryostar representative