

Quintus QIH60 104348 CALHIPSO: EXCALIBURE



1. HIP Dimensions

Lifting weights approx.:

Press module	18	ton
Frame	12	ton
Gas module	2	ton
External cooler (empty)	1,5	ton

2. Customer pipe connections

Cooling water inlet, we end with	DN20 (3/4"), PN16 Victaulic
Cooling water outlet, we end with	DN20 (3/4"), PN16 Victaulic
Emergency cooling water inlet, we end with	3/4" G-thread male
Emergency cooling water outlet, we end with	3/4" G-thread male
Argon gas connection to HIP, we end with:	Swagelok connection 16mm

NOTE: Piping between HIP and gas bottles shall an inner area of 113mm² or larger. (Do not use restricted valves, fittings, filters etc.)

NOTE: A block and bleed panel (not included into Quintus scope) should be installed between the gas storage and the press.

3. Site Utilities supplied by the customer

3.1. Electric power

Supply voltage:	3 phase, 400 V (±5%), 50Hz
Installed power, approximately:	300 kVA
<i>Note, asymmetrical load requires larger feeding fuse</i>	
Lighting Power Supply voltage:	110-240VAC – 6A max (+ground)

3.2. Emergency cooling water supply (city water to be used)

Emergency cooling water supply capacity.	65	l/min (incorrect on contract PDS)
Minimum pressure <u>available</u> ($p_{in} - p_{out}$)	0,3	MPa
Maximum pressure	0,6	MPa
Maximum inlet temperature:	30	°C

3.3. Pressure medium

Pressure medium	Argon gas
Argon gas quality	See Quintus specification SE011028
Gas supply pressure, minimum, at all times (Gas storage needs to be refilled when storage reaches this pressure)	10 MPa
Gas storage recommended pressure	20 MPa
Argon Gas Storage recommended size, minimum	3,5m ³

3.4. Fluids needed

Cooling water incl inhibitor and biocide (3000L needed)	See Quintus specification SE046961-001
Emergency cooling water	Connect to city water
Oil for hydraulic pumps (320L needed)	Grade ISO VG46
Vacuum pump oil (2L needed)	Leybonol type LVO100

3.5. Lubricants needed

Molybdenum disulphide solid film lubricant – 8 cans	Fuchs Gleitmo 900 or equivalent
Vacuum grease – 4 tubes	Dow Corning® high-vacuum silicone grease or equivalent
MoS2 Spray – 8 cans	Fuchs POWDER MoS2 S Spray or equivalent

3.6. Spay water

City water to be connected to the external cooler	30l/min @ 2bar – max 500h per year
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3.7. Environment

The pressure vessel is designed to operate	0-24 hrs / day
Ambient temperature for HIP	10-40 °C
Humidity maximum	90 %
Normal ventilation of HIP room volume per hour. Trickle fan to be placed at floor level near the HIP.	Flow rate to be minimum 2-4 x Room
Emergency Ventilation	Depending on the HIP-room size

4. Customer Preparation before the arrival of goods

4.1. Building /HIP Room

- Dimensional drawing of HIP studied and placement of HIP unit decided.
- Foundation analyzed and approved for the specified loads.
- Oxygen sensors installed.
- Checked ventilation of HIP to fulfill specification.
- Checked if emergency ventilation is needed.

4.2. Cooling Water Supply

- Emergency cooling water installation prepared and pipe installation terminated near the HIP location for fast connection to the equipment

4.3. Gas supply

- Argon gas cryogenic system installed and connection prepared and terminated near gas storage..

4.4. Other utilities

- Fluids and lubricants purchased acc. to the above specification

4.5. Electrical Installation

- Electrical power installation is prepared and cable installation terminated near the HIP location for fast connection to the equipment. Customer to supply electrical power to one point in the electrical cabinet.

4.6. Internet connection

- Ethernet cable with internet access installed and terminated near the HIP (shall be connected to one point in the electrical cabinet during installation)

4.7. Site work environment

- Site office space with furniture including desk, chair, internet access, phone connection.
- Shelves or storage area for HIP components during installation
- Personal safety equipment is available

5. Customer Preparation at the arrival of goods

- Necessary cranes, forklifts etc. to unload the HIP from the truck and to lift the equipment into the HIP area
- Ability to remove wooden crates after unpacking.