FOM2 & ASLUL INSTALLATION SUMMARY

CUSTOMER RESPONSIBILITY PRE INSTALLATION CHECK LIST

EQUIPMENT

- LC-3015FOM2NT with Fanuc AF4000i-C Oscillator
- ASLUL 3015
- Donaldson Lauda UC 400 SC Water Cooler Unit
- Donaldson DFPRO6 Dust Extractor
- TRX 85Transformer

ELECTRICAL REQUIREMENTS

See *Electrical Drawing* for further details.
Customer to supply and connect:

- **Power Supply and Cable to Transformer**
- **Power Supply and Cable to ASLUL**
- **Power Supply and Cable to Cooling Unit**
- **Power Supply and Cable to Dust Extractor**

SPECIFICATIONS

CONNECTION	TO EQUIPMENT	CABLE	BREAKER SIZE
Power Lead to Transformer ***D-Type Motor Rated Fuse***	LC-3015FOM2	**3phase & earth**	**125 amps**
Power Lead to ASLUL ***D-Type Motor Rated Fuse***	ASLUL	**3phase, Neutral & earth**	**32 amps**
Power Lead to Cooling Unit ***D-Type Motor Rated Fuse***	UC 400 SC	**3phase & earth**	**50 amps**
Power Lead to Dust Extractor ***D-Type Motor Rated Fuse***	DFPRO6	**3phase & earth**	**35 amps**

AIR REQUIREMENTS

See *Compressed Air* connection drawing for further details.
Customer to supply:

- Compressed air Supply and Hose to FOM2 Machine
- Compressed air Supply and Hose to ASLUL
- Compressed air Supply and Hose to Dust Extractor
- **OPTIONAL** Compressed air Supply and Hose to Machine as Assist Gas for Cutting

FOM2 & ASLUL INSTALLATION SUMMARY

CONNECTION	TO EQUIPMENT	PIPE REQUIREMENT	FLOW & PRESSURE
Compressed air supply to FOM2 Machine Air Quality must meet: *ISO 8573.1:2001 Class 2.2.1.*	LC-3015FOM2	**½" Air Hose ID 12.7mm**	**1420 L/min at 7 bar.**
Compressed air supply to ASLUL Air Quality must meet: *ISO 8573.1:2001 Class 2.2.1.*	ASLUL	**½" Air Hose ID 12.7mm**	**1000 L/min at 6 bar**
Compressed air supply to Dust Extractor Air Quality must meet: *ISO 8573.1:2001 Class 2.4.2.*	DFPRO6	**3/8" or 6.5mm ID nylon hose**	**270 L/min at 7 bar**
OPTIONAL Compressed air supply for assist gas to FOM2 Machine. Air Quality must meet: *ISO 8573.1:2001 Class 2.2.1.*	LC-3015FOM2	**¾" Air Hose ID 19mm**	**800 L/min at 10 bar**
Compressed air supply Air Quality must meet: *ISO 8573.1:2001 Class 2.2.1.*	**TOTAL REQUIREMENT FLOW & PRESSURE**		
	3490 L/min at 10 bar (1.0Mpa) 2690 L/min at 7bar (0.7MPa) if air is not used as assist gas		

SPECIFICATIONS

LASER GAS REQUIREMENTS

See *Laser and Cutting Gases* drawing for further details.
Customer to supply:

- **Laser Gas Cylinder**

SPECIFICATIONS

GAS	GAS COMPOSITION PURITY	PURITY
Laser Gas, pre-mixed, cylinder Gas Composition: *CO_2 : N_2 : He = 5 : 34 : 61 % by volume*	CO_2 ± 0.25% N_2 ± 2.75% He ± 2.00%	Over 99.9%

EQUIPMENT	SPECIFICATIONS	ADDITIONAL INFORMATION
Laser Gas Regulator	Two Stage Regulator (Special Gases)	Secondary Pressure: 3 bar (0.3MPa) Setting Pressure: 1.5bar (0.15MPa) Regulator coupling supplied by customer Supplied by Amada UK
Laser Gas Connection to Oscillator	10mm OD Nylon Hose 7metres in length	Supplied and fitted by Amada Engineer to AF4000i-C Oscillator

ASSIST GAS REQUIREMENTS

See *Laser and Cutting Gases* drawing for further details.
Customer to supply:

- **Oxygen Gas (10 Bar @ 600 L/min Max.)**
  - **Oxygen Regulator**
  - **Oxygen Hose**
  - **Connector for Hose to Regulator**
- **Nitrogen Gas (25 Bar @ 2200 L/min Max.)**
  - **Nitrogen Regulator**
  - **Nitrogen Hose**
  - **Connector for Hose to Regulator**

SPECIFICATIONS

GAS	EQUIPMENT	SPECIFICATIONS	DATA
Oxygen Cutting Gas	**Two Stage Regulator**	Maximum flow rate	600 L/min
		Maximum operating pressure	10 bar (1.0MPa)
	High Pressure Gas Hose	Internal Diameter	10mm
		Normal operating pressure	15 bar (1.5MPa)
	Machine Connection	3/8" Connection	Nipple length 20mm Hose clip 13-20mm
Nitrogen Cutting Gas	**Two Stage Regulator**	Maximum flow rate	2200 L/min
		Maximum operating pressure	25 bar (2.5MPa)
	High Pressure Gas Hose	Internal Diameter	10mm
		Normal operating pressure	30 bar (3.0MPa)
	Machine Connection	½" BSP Connection	Female

Water Requirements

See *Cooling Specification* for further details.
Customer to supply:

- **240 litres of de-mineralised (de-ionised) water for the chiller**

ADDITIONAL INFORMATION

- All the above items must be prepared and in place for the first day of machine commissioning.