050 Air, Oil, and Power

4.3 Air compressor requirement

The purpose of air compressor is mentioned as following:

(1) The close/open of the ATC door.
(2) The lubrication of spindle.
(3) The oil-air lubrication system of spindle.
(4) The oil-mist for cutting system.
(5) Pneumatic boosting cylinder
(6) Clean of tool holder
(7) Air blow during machining

Air compressor: above 7 Kgf / cm²

In order to reduce the variation of the power supply, the customer can install an air reservoir between the air compressor and machine.

1	Lubricant quantity	Totally 2.4 cc per time
2	Lubricating cycle time	5 min
3	Setting time for oil pressure	10 sec
4	Lubricant chosen	Mobil No.2 ISO 68 or R68 and similar

Lubrication

4.2 Power requirement

Basically the connection between machine and power supply is the responsibility of customer. In addition to the proper specification of power supply, the proper cross section area of supply cable is also required as the followings:

1	Specification of power supply	3~; 380V/400V (50Hz)±10%
2	Cross section area for conductor of cable	Above 22 mm²
3	Cross section area for the grounding conductor	Above 22 mm²

If the power supply is not 380V/400V, a transformer is required. And if the power supply is unstable, a stabilizer is required.

Electric specification

Power list			
	Power unit	Specification	Electricity
1	Servo motor (X)	380V / 3 PH	5.1 kW
2	Servo motor (Y)	380V / 3 PH	4.2 kW
3	Servo motor (Z)	380V / 3 PH	4.2 kW
4	Spindle motor	380V / 3 PH	Refer to machine specification
5	Cooler	220V / 3 PH	3 HP
6	Air conditioner	220V / 1 PH	3 Amp
7	Coolant motor	380V / 3 PH	0.5 HP
8	ATC motor	220V / 3 PH	0.04 kW
9	Transformer	220V/380V, 3 PH	45 KVA
10	No fuse breaker capacity	380V / 3 PH	80 A
11	Power requirement	220V / 3 PH	125 A
		380V / 3 PH	100 A