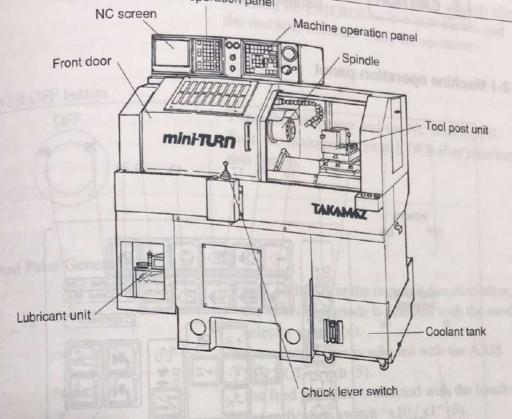
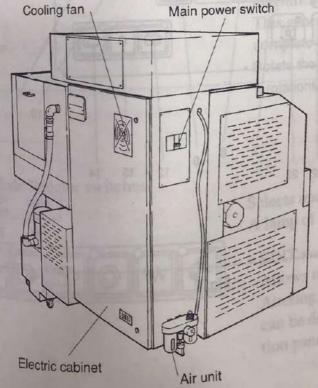
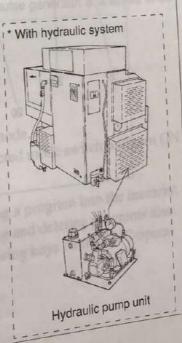
Dutline of Machine

 Names of each component

CNC operation panel







# **Chapter 2 Machine Specifications**

## 2-1 Standard specifications

Item		Unit	Charles - 1
Capacity	Optimum. turning dia.	mm	Specifications
	Swing over bed	138	ø40 x 40
	Max. bar dia.	mm	ø170
	Collet dia.	mm	ø26
	Marcidale	mm	ø26
Canadana	Chuck size	inch	5
Spindle	Spindle nose		Flat type
	Spindle hole through dia.	mm	ø36
	Spindle speed	min-1	250 ~ 4,500
	Spindle bearing I.D.	mm	ø65
Tool post	Type		Horizontal linear
	Max. tool size	mm	16 sq., ø25
	Max. stroke	mm	X: 200, Z: 200
	Rapid traverse	m/min.	X: 10, Z: 16
Motor	Spindle motor	kW	AC 2.2/3.7 (inverter)
	Hydraulic motor	kW	AC 0.75 (for hydraulic system)
	Coolant motor	kW	AC 0.25
Size	Spindle center height	mm	1000
	LxWxH	mm	1,300 x 1,050 x 1,435 (with air system)
	office has equif		1,490 x 1,050 x 1,435 (with hydraulic system
	Machine weight	kg	1,080 (with air system)
		kVA	8
Total power capacity  Controller			TAKAMAZ FANUC 21T-B

<sup>\*</sup> The machine weight differs depending on the specifications.

<sup>\*</sup> The total power capacity differs depending on the specifications.

#### 2-5 Installation space

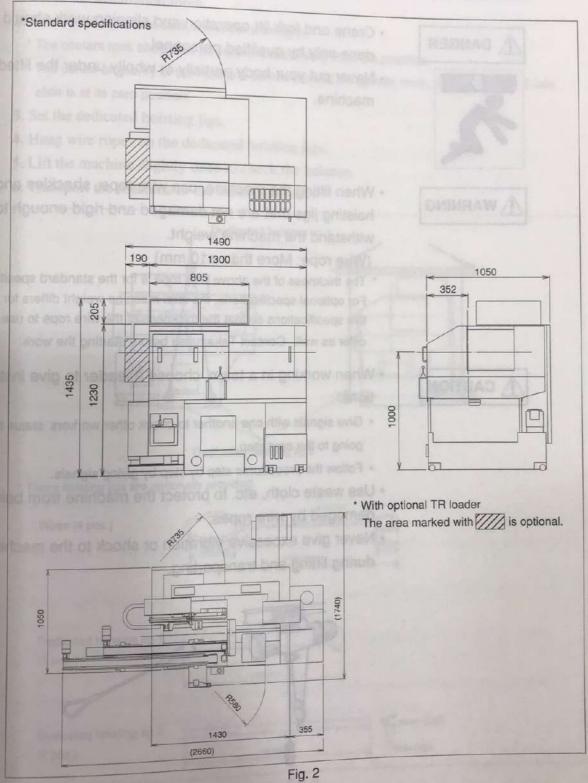
1 VOS

bilge

cton

Installation space should comply with the following:

- There is enough room to open/close the doors.
- There is enough room to supply oil and discharge chips.
- Workpieces can be mounted/removed without hindrance.
  - \* Required installation space may change slightly according to optional accessories and/or a destination of the machine.



Use clean and dry compressed air.

When the air source is jointly used with other facilities, care should be exercised to become low.

### 2-4 Electrical wiring

Prepare the primary power and cables as described below on your side.

· Supply voltage

Within 200/220 V  $\pm$  10%, 3-phase, within 50/60 Hz  $\pm$  2 Hz

CAUTION

If normal voltage is not supplied, the machine may not actuate correctly.

Be sure to measure voltage with a tester. When voltage fluctuation exceeds ±10%, provide a voltage stabilizer.

• Cables (to the main power breaker from the primary power source in the factory) Cable thickness: More than 5.5 mm<sup>2</sup> (in the case of single-wire cables)

Total power capacity: 8 kVA•30 A

Spindle motor 2.2/3.7 kW Electric cabinet 0.9 kVA Hydraulic pump motor 0.75 kW Coolant pump motor 0.25 kW Lubricant pump motor 0.004 kW X-/Z-axis servo motor 1.8 kVA

#### Grounding

Comply with the electrical rules and regulations on grounding prescribed in your country.

Grounding resistance:

Below 100Ω

Grounding cable:

More than 5.5 mm<sup>2</sup> (in the case of single-wire cables)

<sup>\*</sup> For the optional specifications, the electric cables (power cable and grounding cable) to use may be different in thickness. be different in thickness. Contact Takamatsu before connecting the electric cables.