



SCHEDA MACCHINA

Produttore:

Modello:

Anno: 2000

Riferimento: A002652

 Per Informazioni

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Il centro di lavoro orizzontale YASDA YBM 1000N, venduto da Industrial Machinery, è configurato con cambio pallets a 5 tavole e 4 magazzini con un totale di 240 utensili, permettendo di lavorare componenti di acciaio di medie e grosse dimensioni.

Solo poche aziende in Italia possono vantare una macchina tanto precisa e prestigiosa, che può essere utilizzata anche per ricavare particolari in serie che richiedono un elevato livello di precisione.

L'impianto è comandato da un CNC FANUC 160MB con tutte le opzioni previste per il lavoro non presidiato.

SPECIFICHE TECNICHE:

CNC FANUC 160 MB

Estensione asse X 2100 mm.

Estensione asse Y 1400 mm.

Estensione asse Z 1700 mm.

Funzione HAS 1

Esecuzione mandrino SA50 15000-30

N.4 Rack (240 utensili)

Pallettizzazione multipla 5 pallet

Impianto lubrificazione ut. micronebbia

Impianto refriger. utensile alta pressione + aria

Sistema autom. Yasda sonda Renishaw

Separatori olio + controllo livello

Controllo utensili di scorta

Sistema conferma utensili disponibili

Sonda Marposs

Gestione durata utensili

Estensione 2560 mt.

N.9 interruttori salto blocco

Interpolazione elic.

Immagine speculare

Restart programma, maschiatura rigida

Data server

N.B.:

Linea mandrino nuova eseguita in data 04/2017 – in data 02.09.22 ore mandrino per taglio 6499

Machine specification:

Base machine

Spindle speed range

Spindle speed range programming 50 to 15.000 min.

Number of spindle speed rangers 1

Type of spindle tool holder BT 50 (7/24 Taper)

Spindle bearing inner diameter 90 mm.

Spindle drive motor AC30KW (30 min. rating)

Spindle tool holder MAS403 P50T- type retention knob

Spindle speed override setting range: 50 to 120%

Canceling function M48, M49

Canceling display function LED display

Spindle orientation Spindle stops electrically and mechanically

Orientation finish display LED display

Spindle load meter % display

Travel

X-axis travel (longitudinal movement of table) 2100 mm.

Y-axis travel (vertical movement of spindle head) 1400 mm.

Z-axis travel (cross movement of column) 1700 mm.

Distance from pallet top to spindle center	Omn to 1400 mm.
Distance from table center to tool gauge line	300 mm. To 2000 mm.
Standard functions and equipment	
YASDA MASCOT mini	
YASDA self-diagnosis function, signal analysis function and maintenance screen, etc.	
Tool management function by tool number	max 600 groups
Production control function	applicable
Operation condition and amount of machine done	
Hydraulic power unit	
Pump type	variable discharge pump
Pump discharge	48L/min.
Pump discharge pressure	9Mpa (90kg/cm ²)
Motor output	7.5 kw
Reservoir tank capacity	120L
Leveling jack screw	
Way protect cover	
Slideways automatic lubrication unit	
Pump type	gear pump
Pump discharge	200 cc/min.
Tank capacity	6L
Auto power off system	
Oil-air lubrication system for spindle bearing	
Pump type	pneumatic drive
Tank capacity	2.7 L
Operation panel	display section: LCD display
Operation section: CRT/MDI panel	
Spindle speed & tool number indicator	
Manual pendant operation panel box	handle (manual pulse generator)
Earth leakage breaker	available to high frequency
Inductosyn feedback	
Dissambling tool	
Optional functions and devices	
The travel extension (corresponding to the large size work)	
X travel extension 600 mm.	Total 2100 mm.
Y travel extension 400 mm.	Total 1400 mm.
Z travel extension 300 mm.	Total 1700 mm.
High speed spindle (15.000 min.)	
Type	SA50-15000-30
BIG PLUS system	
Spindle end surface in 1.5 mm forward from the taper gauge line.	
Automatic tool changer unit (ATC system III)	
Type of tool shank	MAS BT 50
Type of retention knob	MAS403 P50T-1
Method of tool selection	Random selection
Tool storage capacity	240
Maximum tool diameter	dia.300 mm.
Milling cutter	dia.200 mm.
T-type boring bar (the cutter direction is specified)	dia.400 mm.
Max tool dia. on full setting	dia 100 mm.

Distance between magazine pots	115 mm.
Maximum tool length	550 mm. (only no.1 magazine)
440 mm. (no.2, no.3, no.4 magazines)	
Maximum tool weight	20 kg.
Tool number display	spindle tool/next tool
Tool holder cleaning device	air blow
Manual tool release device (pedal switch)	equipped
Special tool-pots for corresponding to BIG PLUS tools no.1 magazine (60 tools)	
ATC special switching function	
Weight of unit	approx 7.000 kg.

Number of pallets	
Pallet working surface	total 5
Pallet surface configuration	1250x1250 mm.
Thickness of pallet	157-M16 tapped holes
Weight of pallet	175 mm.
Edge locator	1400 kg.
Pallet chucking device	equipped

Number of attached pallets	1
Preload stand (PLS)with automatic pallet changer (APC)	
Method pallet change	rotary shuttle

Number of pallet stands	5
Rotation table control	manual
The PLS no.1 and no.5 are for the large size work	
Automatic program search	applicable
Fixture control function	applicable
Operating condition display	applicable by MASCOT
Pallet random selection function	applicable
Auto power source off function	equipped
Display unit	equipped
Area sensor around the stands	equipped
Weight of unit	14.500 kg.
Spindle head oil cooling unit	2
Temperature controller	follow up base temperature type
Cooling capacity: MPSB-15-CE	5200 kw
MPSB-07-H-CE	3200 kw
Freon gas R22	
Refrigerant	
Cutting ouil unit (AA type)	
Fiat nozzle	6
Pump discharge	40L/min.
Pump pressure	0.3Mpa
Tank capacity	1200L
High pressure coolant unit (for spindle center through coolant)	
Pump pressure	3.5Mpa
Pump discharge	25L/min.
Motor output	3.7 kw
Spindle center throught micron fog (M07)	Bluebe

Micron fog coolant (M37)	Bluebe
Oil skimmer device	equipped
Level switch of coolant tank	lower level 1, upper level 2

When the lower limit is detected, the machine becomes FEED HOLD condition.

When the lower limit is detected, the message is displayed on the CRT display.

Cutting oil temperature control unit	
Oil cooling unit	
Reference temperature follow up type	5°
Cooling capacity	3720W
Refrigerant	Freon gas R22
Sheathed heater	2000W
Ambient temperature	should not exceed 40°C
Pump for pump up	
Pump discharge	50L/min.
Pump pressure	0.3Mpa
Tank capacity	110L
Chip conveyor	TS type
Screw conveyor	TWIN
Control	Auto/manual (CW/stop/CCW)
Automatic running interval	ON: 1 min/OFF: 2 min.
Hinge type chip conveyor and drum type filter	Auto/stop/jog (CW/CCW)
Height of swarf outlet	1504 mm.
Splash guard with automatic door and slide roof	
Door control	automatic and manual
Corresponding to the extended stroke of each axis	
Fluorescent lamp	1
Gyration light	
2 light system	

This is mounted on the splash guard, and APC operator side.

Blinking conditions are as follows.

Spare tool control system (YASDA)	
Number of spare tool control	300 groups
Control number in one group: main tool	1 tool
Control number in one group: spare tool	7 tool
Tool life control system (YASDA)	600 tools
Tool life pre-alarm (number of tool)	max 99 hours and 59 min.
Max 9999 times	
Setting unit of tool life pre-alarm	1 min. or once
Life factor	0.5 to 1.5 in 0.1 increment
Stored tooling content confirmation system (YASDA)	
Stored tooling content confirmation control	400 groups
Part program number	400 pieces
Number of main tool used	total 2000
Auto-measuring system	MP7
Repeated measuring function	max 5 times
Calibration for compensation	applicable
Repeatability of touch probe	0.001 mm.
Total measuring accuracy	0.008 mm.

(under the conditions of no dust)

N/C memory used	150 m.
N/C custom macro common variable used	43
N/C registered program used	29
Automatic tool length/radius compensation system & tool breakage sensing system(YASDA)	
Repeated inspecting function	max 5 times
Repeatability of touch sensor	0.001 mm.
Total measuring accuracy	0.008 mm.

(under the conditions of no dust)

Compensation range when tool length compensation and tool breakage

Sensing are simultaneously performed	5 mm.
Range of cutter compensation	2.5 mm.
N/C memory used	50 m.
N/C custom macro common variable used	31
N/C registered program used	19