

HMTI

HALES MACHINE TOOL, INC.

2730 NIAGARA LN.
PLYMOUTH, MN 55447

Takisawa MAC V 410

	Items	Description
A-0	Travel	
A-1	X axis (table X-Y travel)	760 mm
A-2	Y axis (table cross travel)	410 mm
A-3	Z axis (Spindle head vertical travel)	460 mm
A-4	Distance from table top to spindle end	175-635 mm
A-5	Distance from column to spindle center	470 mm
A-6	Distance from bottom to table surface	800 mm
B-0	Table	
B-1	Table size	900 mm x 410 mm
B-2	Permissible load on table	300 kg
B-3	Shape on table	14 mm T-slots/5
C-0	Spindle	
C-1	Spindle speed	60 ~ 6000 min ^{-1(rpm)} 30 ~ 3000 (OP) 45 ~ 4500 (OP) 80 ~ 8000 (OP) 100 ~ 10000 (OP)
C-2	Spindle taper hole	NT 40
C-3	Spindle bearing inside diameter	65 mm
D-0	Feed Rate	
D-1	Rapid traverse	X, Y axes 24000 mm/min Z axis 18000 mm/min
D-2	Cutting feed	1 ~ 8000 mm/min
D-3	Jog feed	0 ~ 1260 mm/min
E-0	Automatic tool changer system (ATC)	
E-1	Tool shank type	BT 40
E-2	Pull stud type	MAS P 40T-1
E-3	Tool accommodation	18 pcs (24 pcs: OP)
E-4	Maximum tool diameter “ “ “ when there is no tool in adjacent area	80 mm 124 mm
E-5	Maximum tool length	280 mm
E-6	Maximum mass of tools	17.6 lbs / 8 kg

E-7	Tool selection mode	Shortcut, random
E-8	Tool changing time: tool-to-tool	1.8 s
G-0	Electric motor	
G-1	Motor for spindle	5.5kW (30 min) OP: 5.5kW (30 min)
G-2	Motor for feed axes	X, Y, Z: 0.9kW AC
G-3	Motor for coolant oil	0.4kW
G-3	Motor for hydraulic pump	0.02kW
H-0	Required power supply	
H-1	Power supply Power Capacity Lead-in wire	AC 3 PHZSE 200, 220, 230, 380, 415, 440, 460V +/- 10% 50Hz/60Hz +/- 1Hz 16.5kVA (main motor 5.5/3.7kW) (OP: 22.3kVA) 200V – 22 mm ² x 4-core 380V – 8 mm ² x 4-core
H-2	Air source Pressure source Flow Rate Setting pressure	0.5~0.95MPa (5~9.5kgf/cm ²) 150 ³ /min 0.4~0.5MPa (4~5kgf/cm ²)
I-0	Tank capacity	
I-1	Coolant oil tank capacity Hydraulic oil tank capacity	210 l 3 l
J-0	Machine size	
J-1	Height	2576 mm
J-2	Required floor space	2050 mm x 2320 mm
J-3	Machine weight (including NC system)	4000 kg