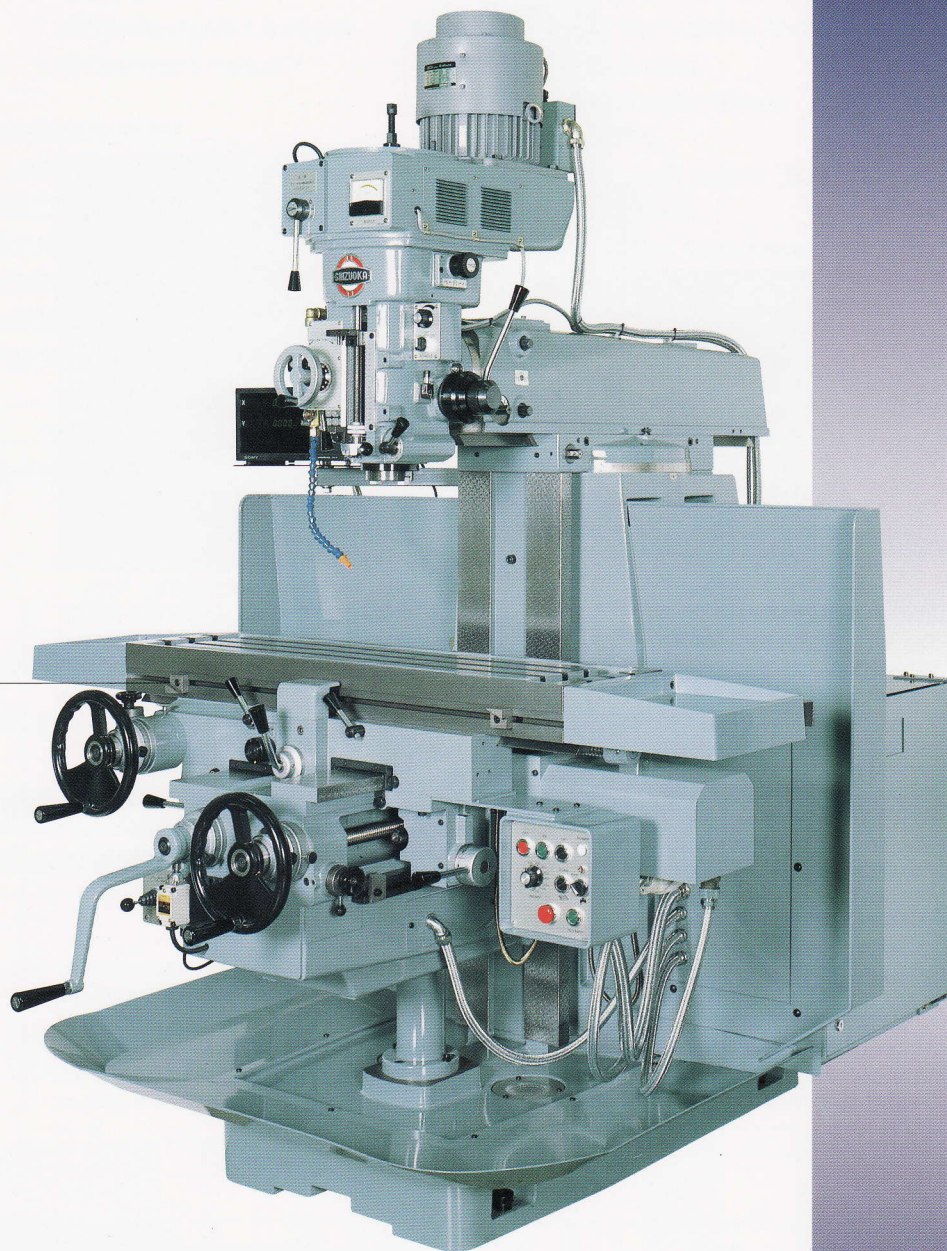


For assure the
precision machining
with making best use
of an expert skill.

At SHIZUOKA, our pursuit of
excellence began in 1877 and
continues today with a
commitment to developing and
producing the ultimate in
machinery.

In fact, our dedication to
maximizing machine precision
and user-friendly operation has
received worldwide attention, and
is your assurance of quality
machinery that meets and even
surpasses your greatest
expectations.



**High Precision Turret Type
MILLING MACHINE**

VHR-SD

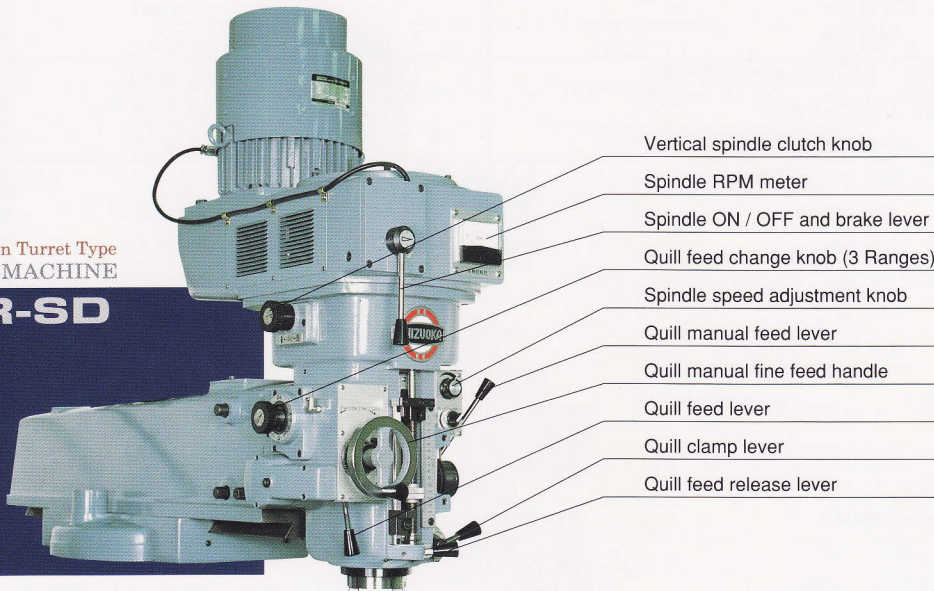


SHIZUOKA MACHINE TOOL CO., LTD.
FOCUSING THE IDEAL "NEXGEN"

VHR-SD THE FLEXIBLE ANSWER FOR METAL MOLDING, JIG AND PRECISION PART PRODUCTION.

High Precision Turret Type
MILLING MACHINE

VHR-SD



Wide applications

The powerful 4 HP spindle motor utilizes an AC inverter which provides smooth, infinitely variable speed changes.

A wide RPM range allows for heavy duty precision cutting of many types of materials.

Tilting head

The vertical head can be tilted up to 90 degrees in either direction for angular milling, and may be locked in any position. A graduated scale is provided for adjustment.

Table feed mechanism realizes high precision positioning

Narrow guided knee slideway surface is hardened and finely finished by precision grinding in combination with the adoption of

special synthetic resin. (TURCITE B) AC inverter motor drives for longitudinal and cross movements of the table. Also high precision ball screws are used for X (longitudinal) and Y (cross) axis. And the fine adjusting handle (X and Y axis) are equipped for manual fine movement. The application of forced lubrication for optimum amount of lubricant will ensure an effective maintenance of the high precision machining over a long period of time.

Accessibility

The feed levers and handwheels for longitudinal and cross movements of the table, a speed change knob, and push buttons for motors are all centrally located near the operator's reach, to permit quick and easy manipulation and fine adjustment

for precision machining.

The table feed is controllable without stopping machine operation.

Working Range

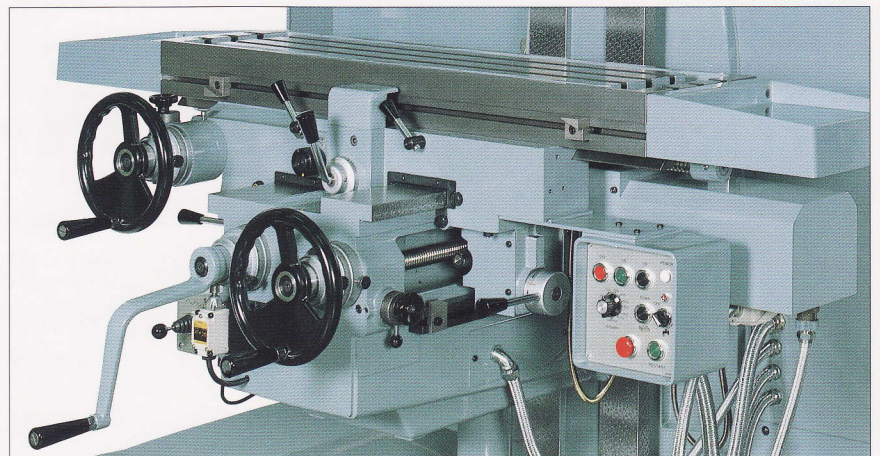
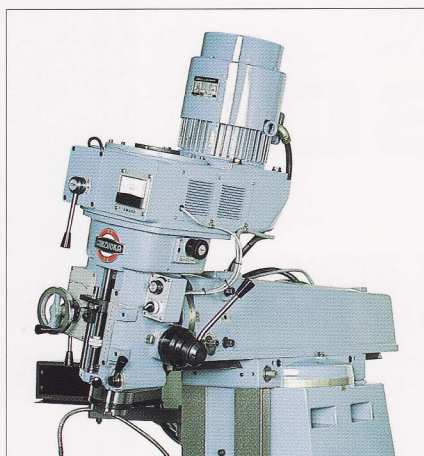
The overarm supporting the vertical head is sturdily designed and constructed.

Therefore, fine accuracy is maintained even when the head is moved to its maximum position from the column surface

Further, the overarm is located on a graduated swivel base and can be locked in any position within a 360degree rotation.

With its special construction, the machine has a large table traverse range, comparable to that of much large machines.

In addition : the table is capable of supporting workpieces which weigh up to 660lbs.



X & Y axis AC inverter motor

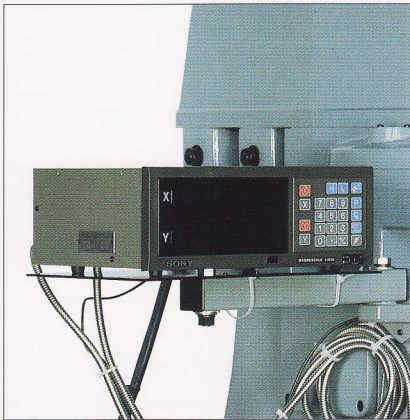
Standard accessories

- Digital Counter (X & Y) · · · 1 unit
- Coolant unit W/100W pump · 1 unit
- Slideway auto lub pump · · · 1 unit
- ~~X&Y axis fine adjusting handle~~
- Drawing bolt (5/8" or M16) · 1 unit

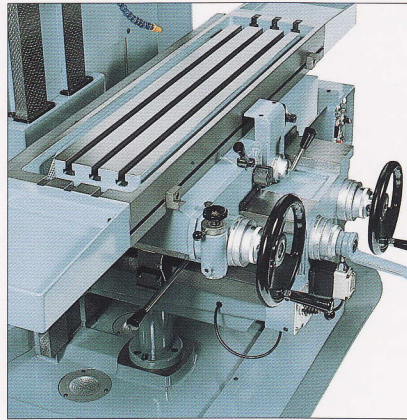
- Leveling bolts and pads · 4ps, ea
- Standard tool kit · · · · · 1 unit
- Standard guard & oil pan · 1 unit
- Operator's manual · · · · · 1 unit

Optional accessories

- Long table
(1,300×2 80mm stroke 1,000mm)
[51"×11" stroke 39.4"]
- Raised base
(1 unit type 100mm)
[3.94"]
- Face cutter arbors [3"/4"]
- Machine light
- Plane vice, swivel vice
- Universal indexing head, Rotary table
- Milling chuck
- Micro boring head



Digital counter



OP X&Y-axis fine adjusting handle

Accuracy The high performance spindle head and well balanced slideways assure high precision positioning and machining accuracy.

sample ①

Face Milling

sample ②

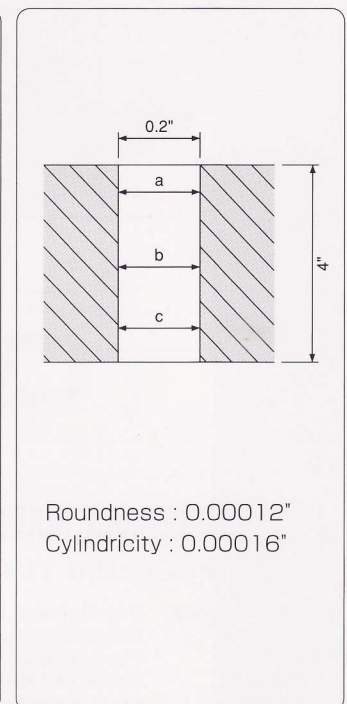
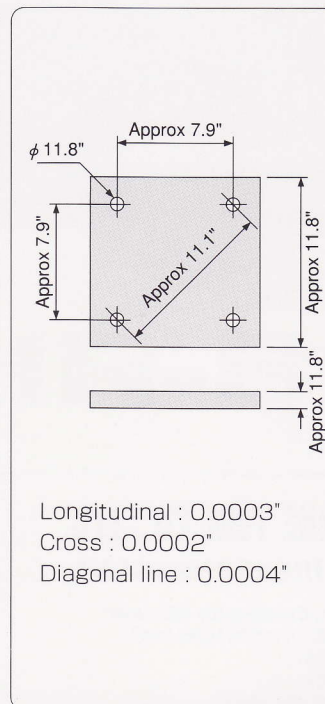
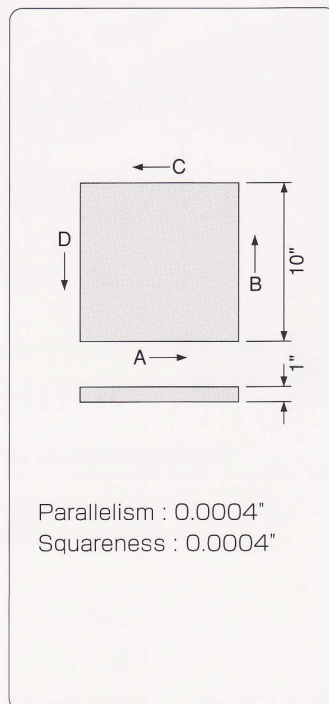
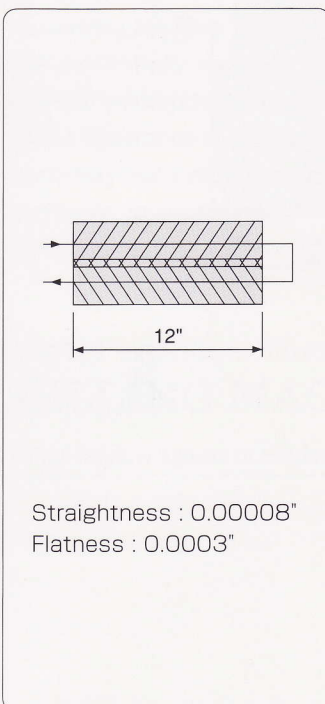
Side Milling

sample ③

Pitch Error

sample ④

Boring

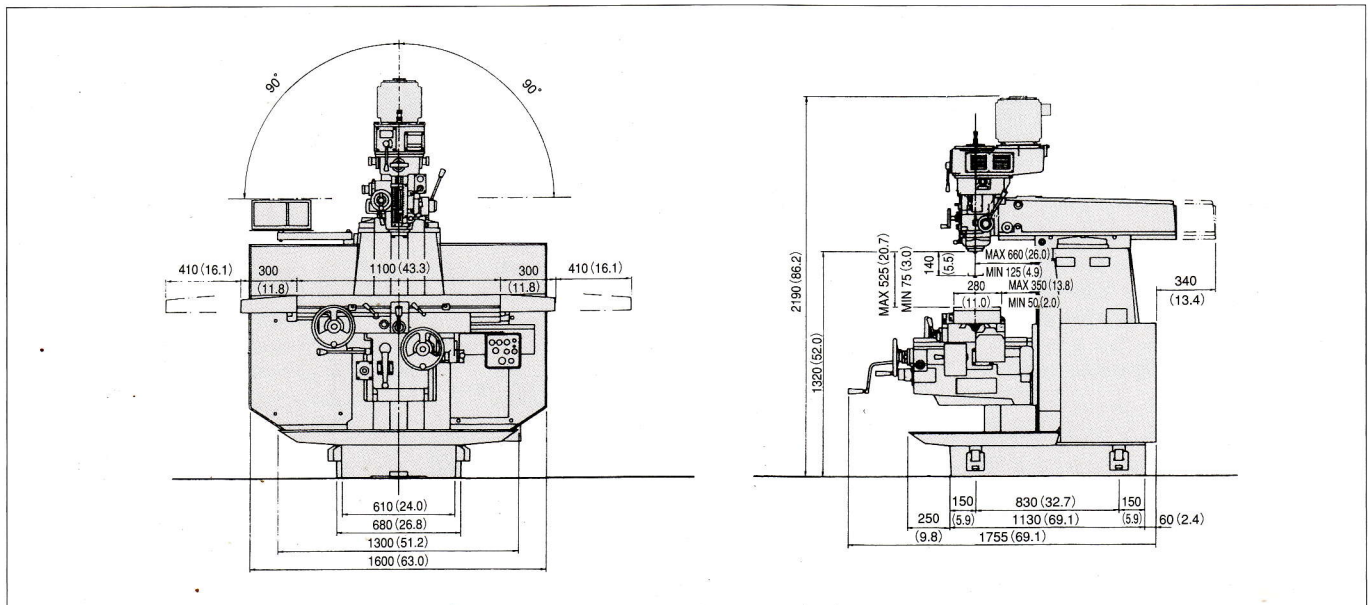


These measurements are based on ideal conditions.

Specification Unit : mm [inch]

Item		VHR-SD
■Table	Working surface (length×width)	1100×280 [43.3×11.02] (standard)
	T-slot (width×NO.×width)	16×3×60 [0.6×3×2.36]
■Travel	X-axis	820 [32.3]
	Y-axis	300 [11.8]
	Z-axis	450 [17.7]
■Feed rate	Cutting feed rate (X & Y)	10~1000mm/min [0.4~39.4ipm] (variable)
	Rapid feed (X & Y)	3000mm/min [118.1ipm]
	Rapid feed (Z)	665mm/min. [26.2ipm]
■Main spindle	Speed	20~4500mm/min ⁻¹ (variable)
	Spindle taper	NT40
	Quill Traverse	140 [5.5]
	Quill feed rate	0.035·0.07·0.14mm/rev [0.0014·0.0028·0.0056"/rev] (3steps)
	Tilting angle (L & R)	L & R 90°
	Ram travel	535 [21]
	Distance from table surface to spindle center	660
	Distance from table surface to spindle hose	75~525 [2.95~20.67]
Distance from column surface to spindle center	125~660 [4.9~25.98]	
■Motors	Main spindle	AC 2.2kw [3hp]
	X & Y feed	AC 0.6kw <i>0.9</i>
	Z-axis rapid feed	0.6kw [0.8hp]
	Coolant pump	100W [0.13hp]
■Weight		2100kg [4630lbs]

Dimension



※All specifications are subject to change without notice.



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