

CNC TURNING LATHE  
GANG STYLE PRODUCTION LATHE

# VT-8 VT-10 VT-11 VT-12

HIGH PRECISION

- ▶ 5 , 6 , 8-inch chuck
- ▶ 15° Slant Bed Design
- ▶ 5hp / 10hp / 15hp Moter



VT-SERIES

VT-8

VT-10

VT-11

VT-12

# VT-8

**Most suitable for optical instruments, VTR, OA, Clocks, watches, computers and other precision parts.**



- 1.44m×1.31m space-saving, compact dimension.
- Machine and computer are integrated as a whole. Its appearance and structure is state of the art.
- Spindle bearing made use of ultra-precision contact bearing; incorporated with special grease that prevents spindle from thermal displacement and ensures rigidity and durability.
- Tool alloy steel made bed was that enhances the life up to 10 years without re-work.
- Suitable for exclusive processing and production of few but variety products.

## DESIGN WITH YOU IN MIND

The bottom coolant tank is merged with machine. Large volume chip container plus chip conveyor help chip removal.

## SPECIAL BED DESIGN

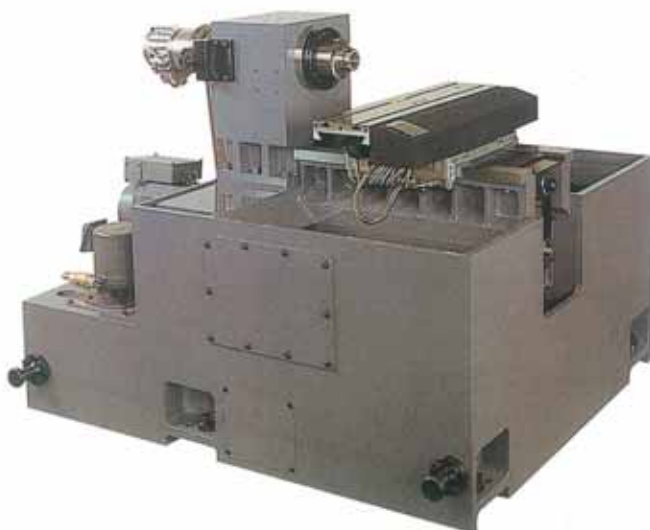
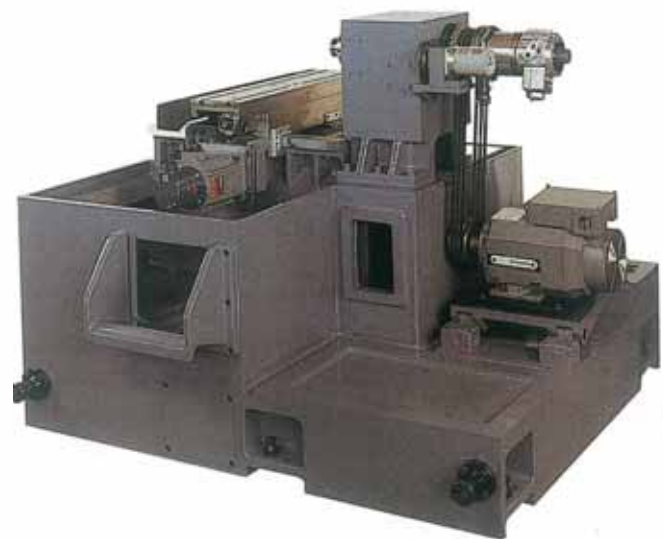
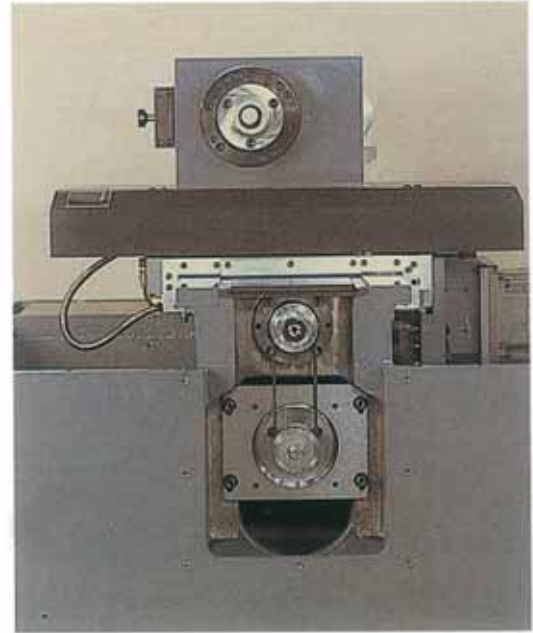
Hard bed was made of tool alloy steel, ensure the operation with consistent accuracy. The C1-class ballscrew for X axis and C3-class ballscrew for Z axis are adopted to achieve high precision of tool movement.

## CONCRETE STRUCTURE

Rigid body and components made use of high class cast iron that provide long operation life with high cutting accuracy.

## HUMAN ENGINEERING ACCOMODATION

All operation conforms to human engineering science. Artistic outlook over the easy maintaining machine structure.



# VT-10

Most suitable for optical apparatus, VTR, OA, measurement instruments, medical instruments, cars, aviation, clocks, watches, computers and other precision parts.



- 2.02m×1.35m space-saving outside dimension.
- 15° slant bed allows easy chip collection and good water drainage.
- extra-wide bed slide way gives great stability.
- suitable for exclusive processing and production of few but variety products.
- Auto bar feeder adaptable.

### **DESIGN WITH YOU IN MIND**

The bottom coolant tank is merged with machine. Large volume chip container plus chip conveyor help chip removal.

### **15° SLANT BED DESIGN**

Extra wide side way on 15° slant bed provides stable operation as well as high speed cutting precision. The C1-class ballscrew for X axis and C3-class ballscrew for Z axis are adopted, plus angular contact bearings, it achieves high repeatability & positioning accuracy. The compulsive cooling system prevents from thermal displacement and ensures the long life of ballscrews.

### **CONCRETE STRUCTURE**

Machine body & all components are made of high class cast iron. Bed ways and side ways are hardened and grounded to obtain high accuracy without compromising of machine's life.

### **HUMAN ENGINEERING ACCOMODATION**

All operation conforms to human engineering science. Artistic outlook over the easy maintaining machine structure.



# VT-10T

TURRET CUTTER DESIGN, SPECIALLY PROCESSED HIGH PERFORMANCE MACHINE TYPE

**Most suitable for optical apparatus, VTR, OA, measurement instruments, medical instruments, cars, aviation, clocks watches, computers and other precision parts.**



- 2.02m×1.35m space-saving outside dimension.
- 15° slant bed allows easy chip collection and good water drainage.
- extra-wide bed slide way gives great stability.
- suitable for exclusive processing and production of few but variety products.
- Auto bar feeder adaptable.

## DESIGN WITH YOU IN MIND

The bottom coolant tank is merged with machine. Large volume chip container plus chip conveyor help chip removal.

## 15° SLANT BED DESIGN

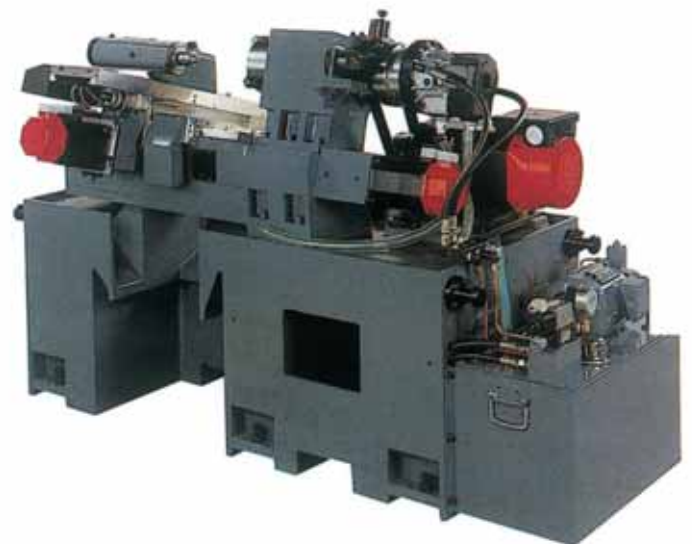
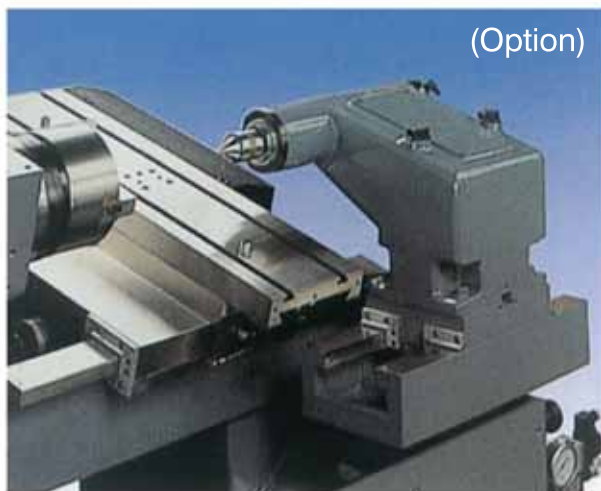
Extra wide slide way on 15° slant bed provides stable operation as well as high speed cutting precision. The C1-class ballscrew for X axis and C3-class ballscrew for Z axis are adopted, plus angular contact bearings, it achieves high repeatability & positioning accuracy. The compulsive cooling system prevents from thermal displacement and ensures the long life of ballscrews.

## CONCRETE STRUCTURE

Machine body & all components are made of high class cast iron. Bed ways and slide ways are hardened and grounded to obtain high accuracy without compromising of machine's life.

## HUMAN ENGINEERING ACCOMODATION

All operation conforms to human engineering science. Artistic outlook over the easy maintaining machine structure.



# VT-11

TURRET CUTTER DESIGN, HYDRAULIC TAILSTOCK AND QUILL MT-3,  
SPECIALLY PROCESSED HIGH PERFORMANCE MACHINE TYPE

**Most suitable for optical apparatus, VTR, OA, measurement instruments, medical instruments, cars, aviation, clocks watches, computers and other precision parts.**



- 2.02m×1.35m space-saving out side dimension.
- 15° slant bed allows easy chip collection and good water drainage.
- extra-wide bed slide way gives great stability.
- suitable for exclusive processing and production of few but variety products.
- Auto bar feeder adaptable.
- Equipped with gang tools can be the OPTION. (Max. turning dia. only can be 120mm)



## **DESIGN WITH YOU IN MIND**

The bottom coolant tank is merged with machine. Large volume chip container plus chip conveyor help chip removal.

## **15° SLANT BED DESIGN**

Extra wide slide way on 15° slant bed provides stable operation as well as high speed cutting precision. The C1-class ballscrew for X axis and C3-class ballscrew for Z axis are adopted, plus angular contact bearings, it achieves high repeatability & positioning accuracy. The compulsive cooling system prevents from thermal displacement and ensures the long life of ballscrews.

## **CONCRETE STRUCTURE**

Machine body & all components are made of high class cast iron. Bed ways and slide ways are hardened and grounded to obtain high accuracy without compromising of machine's life.

## **HUMAN ENGINEERING ACCOMODATION**

All operation conforms to human engineering science. Artistic outlook over the easy maintaining machine structure.



# VT-12

TURRET CUTTER DESIGN, SPECIALLY PROCESSED HIGH PERFORMANCE MACHINE TYPE

**Most suitable for optical apparatus, VTR, OA, measurement instruments, medical instruments, cars, aviation, clocks watches, computers and other precision parts.**



- 2.5m × 2.5m space-saving outside dimension.
- 15° slant bed allows easy chip collection and good water drainage.
- extra-wide bed slide way gives great stability.
- suitable for exclusive processing and production of few but variety products.
- Auto bar feeder adaptable.

## DESIGN WITH YOU IN MIND

The bottom coolant tank is merged with machine. Large volume chip container plus chip conveyor help chip removal.

## 15° SLANT BED DESIGN

Extra wide slide way on 15° slant bed provides stable operation as well as high speed cutting precision. The C1-class ballscrew for X axis and C3-class ballscrew for Z axis are adopted, plus angular contact bearings, it achieves high repeatability & positioning accuracy. The compulsive cooling system prevents from thermal displacement and ensures the long life of ballscrews.

## CONCRETE STRUCTURE

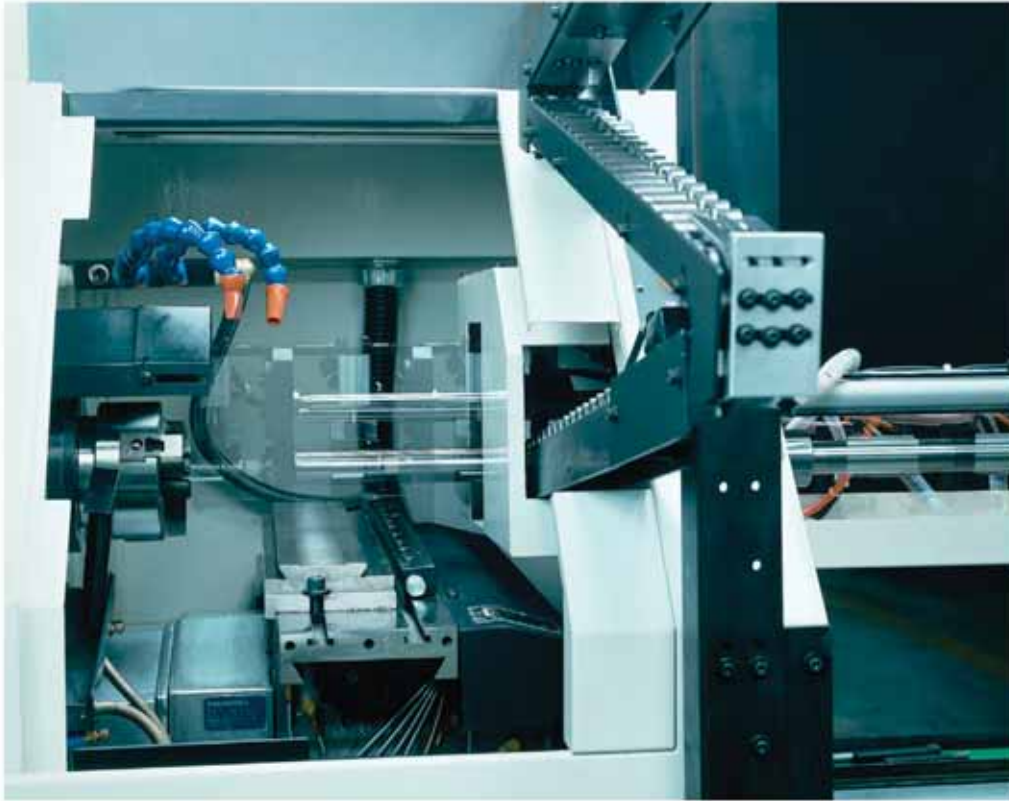
Machine body & all components are made of high class cast iron. Bed ways and slide ways are hardened and grounded to obtain high accuracy without compromising of machine's life.

## HUMAN ENGINEERING ACCOMODATION

All operation conforms to human engineering science. Artistic outlook over the easy maintaining machine structure.



■ Loading System



■ Robot





■ WORKPIECE FEEDER



■ PART CATCHER



■ DRILLING & MILLING DEVICE



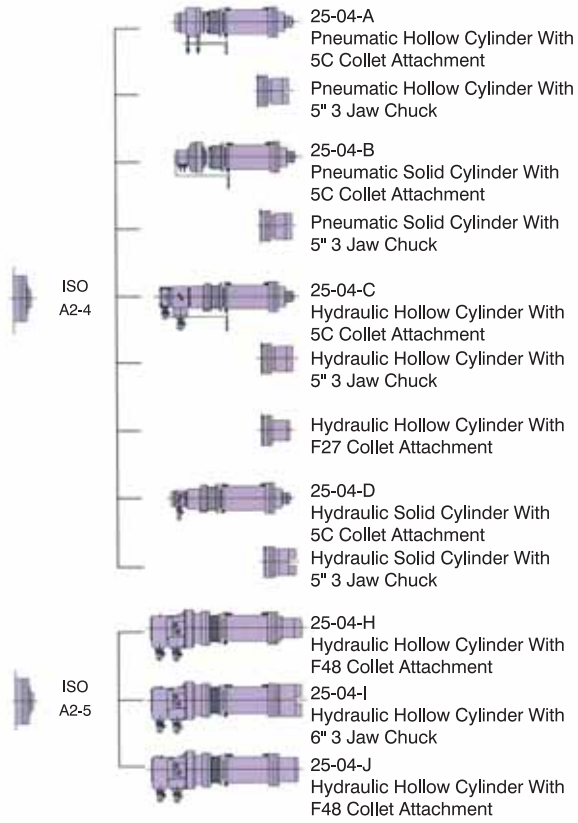
■ LOADING & UN-LOADING



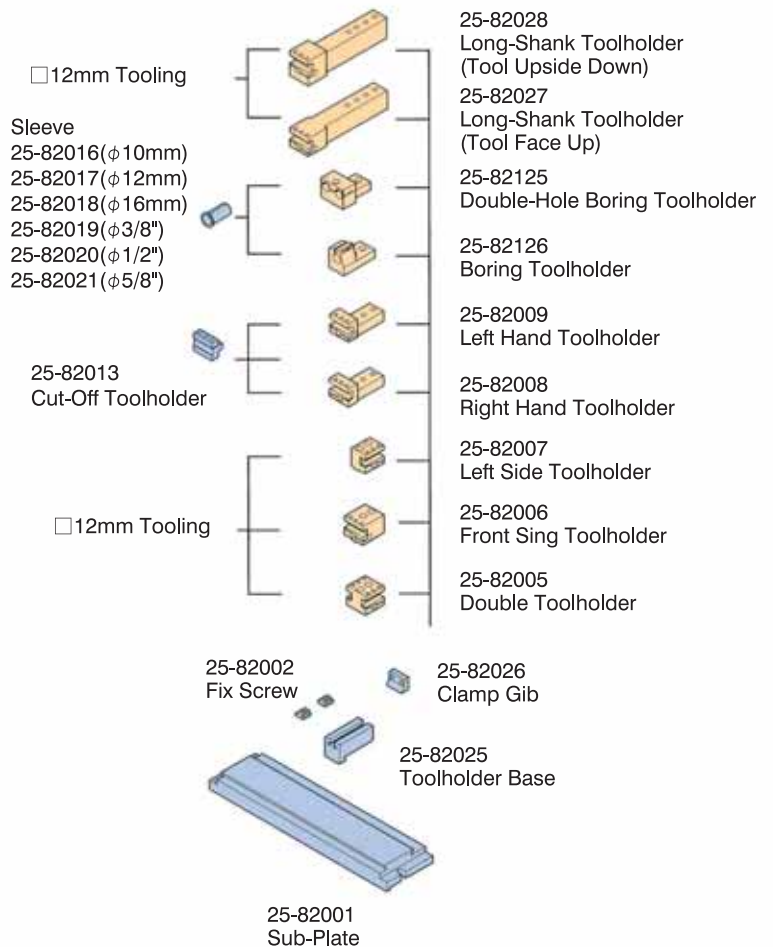
■ SAMPLE PARTS

## Tooling System

### ■ SPINDLE SYSTEM



### ■ □ 12mm VT-8 TOOLING SYSTEM



**16mm VT-10  
TOOLING SYSTEM**

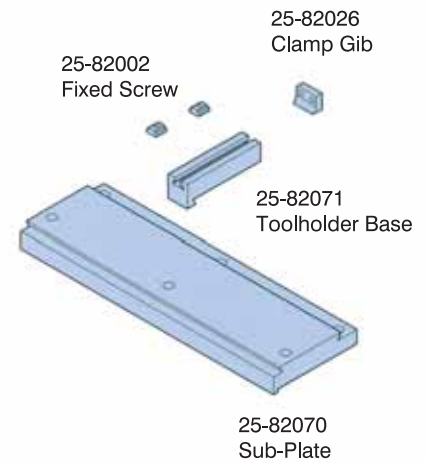
25-82076  
Left Side Toolholder

25-82075  
Right Side Toolholder

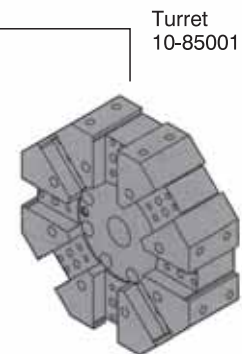
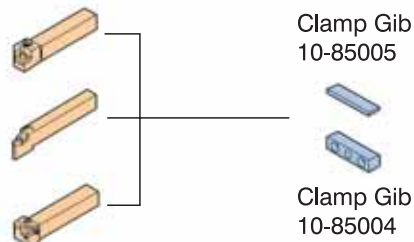
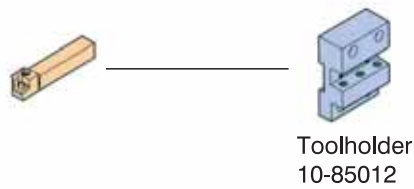
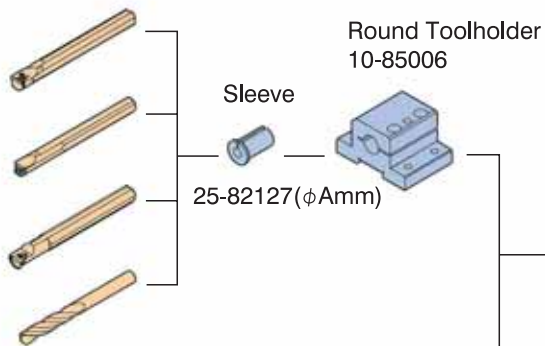
25-82074  
Long-Shank Double Toolholder

25-82073  
Double Toolholder

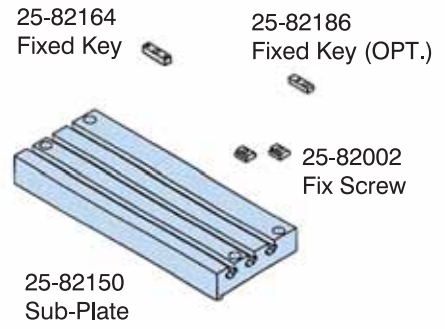
25-82072  
Front Toolholder



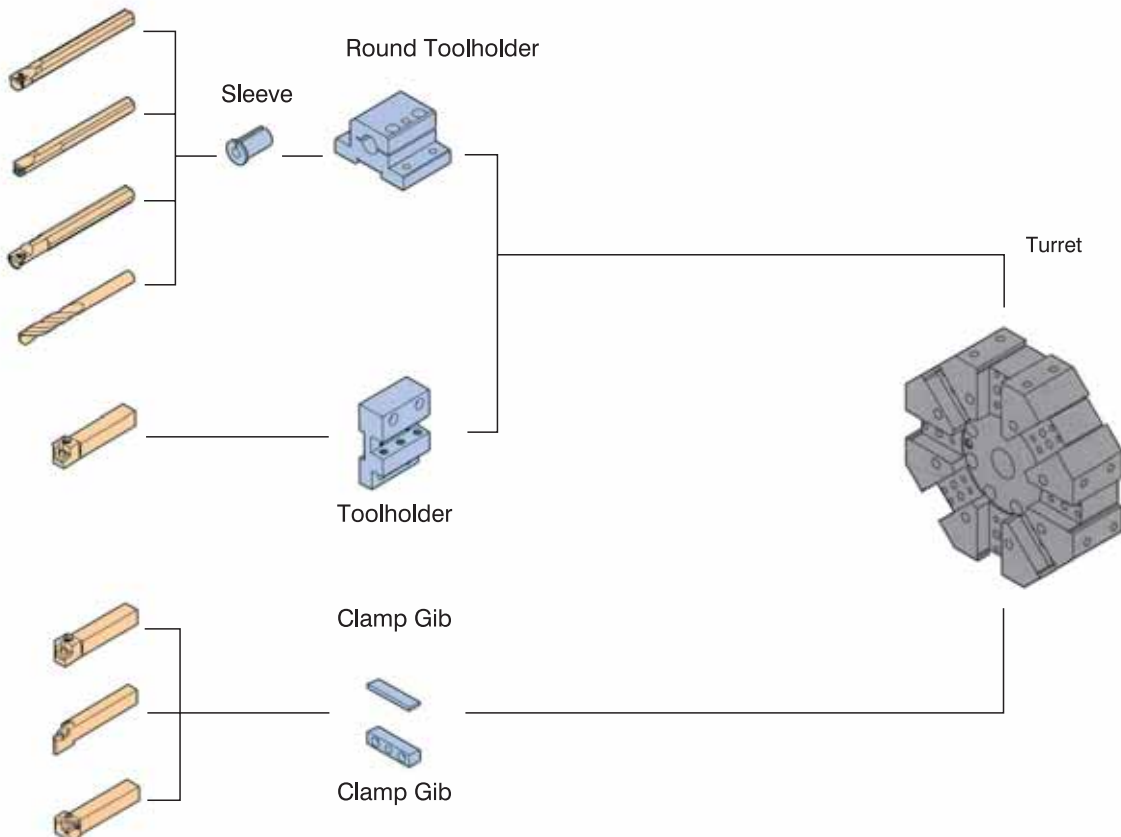
**20mm VT-10T/VT-11  
TURRET TOOLING SYSTEM**



## ■ □ 25mm VT-12 TOOLING SYSTEM



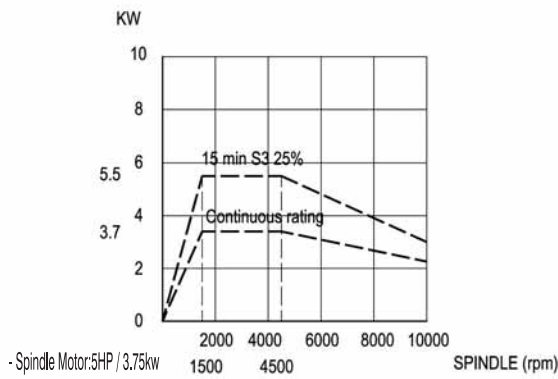
## ■ □ 25mm VT-12T TURRET TOOLING SYSTEM



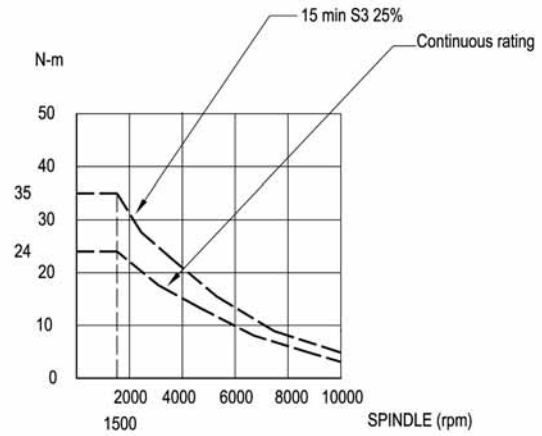


**VT-8**

Horsepower Chart

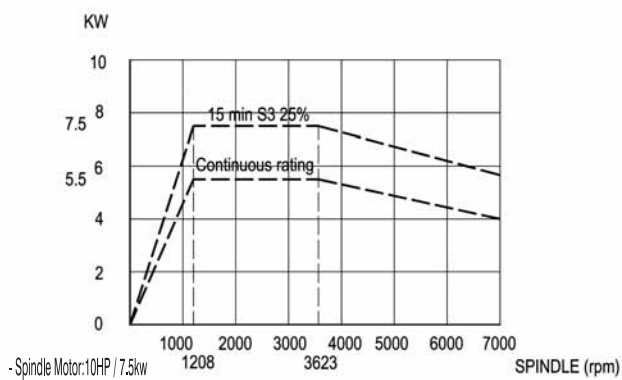


Torque Chart

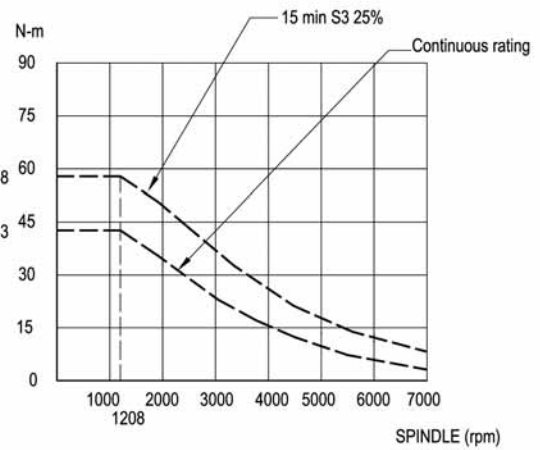


Horsepower Chart

**VT-10**

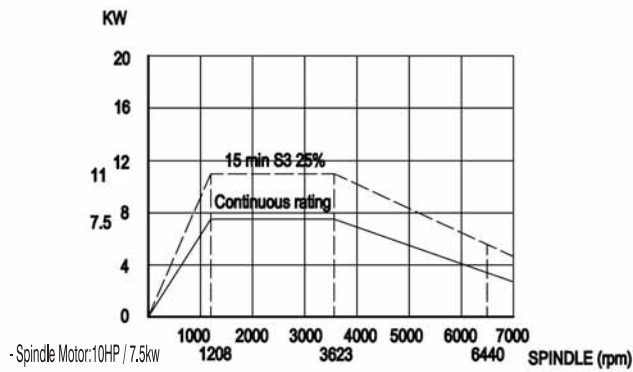


Torque Chart

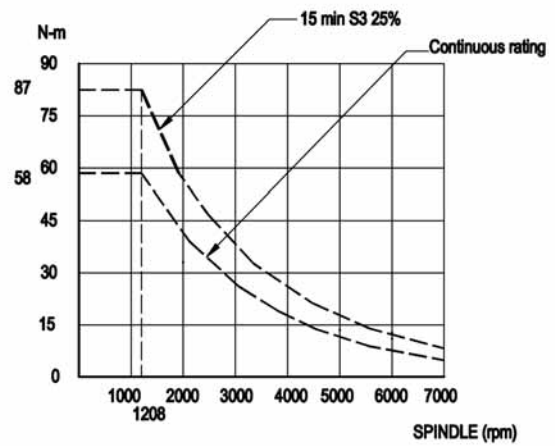


## VT-11

### Horsepower Chart



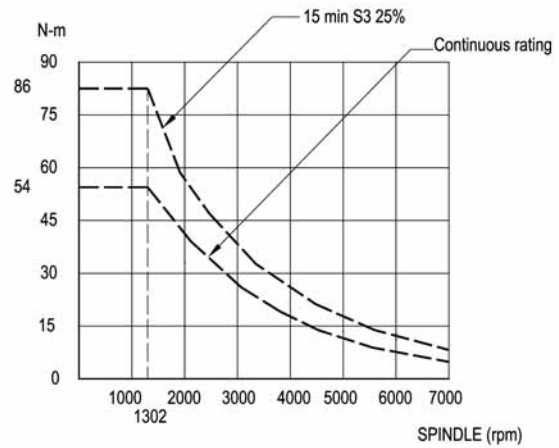
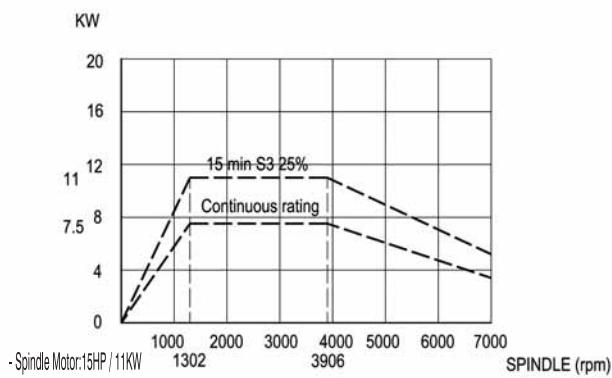
### Torque Chart



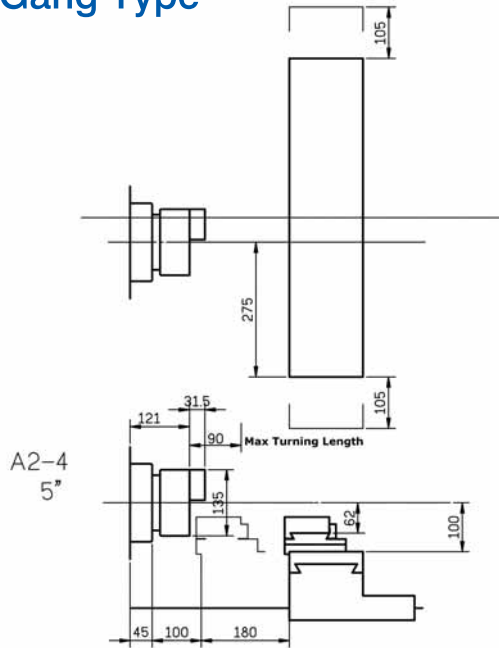
### Horsepower Chart

## VT-12

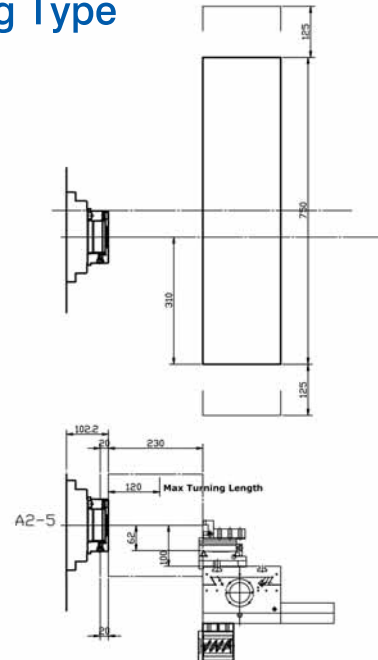
### Torque Chart



**VT-8**  
**TOOLING INTERFERENCE**  
 Gang Type

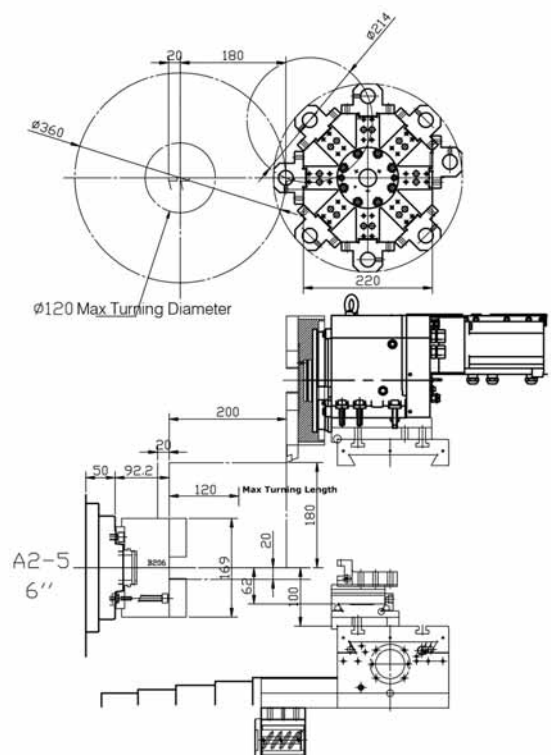


**VT-10**  
**TOOLING INTERFERENCE**  
 Gang Type



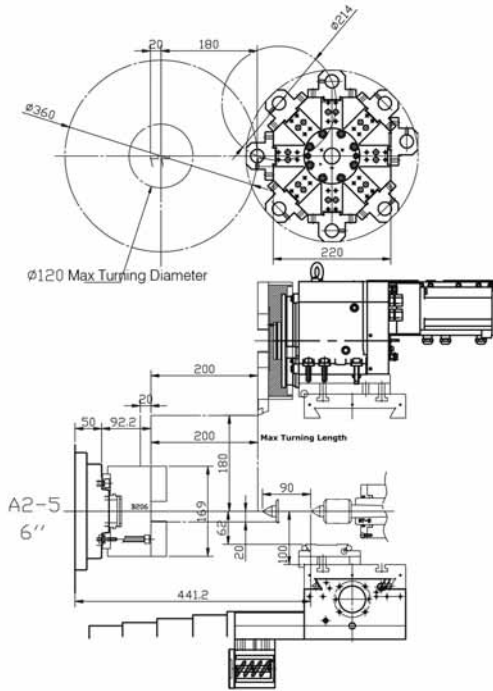
**VT-10T**  
**TOOLING INTERFERENCE**

SAUTER  
 0.5.440.212/8 center height of turret 63

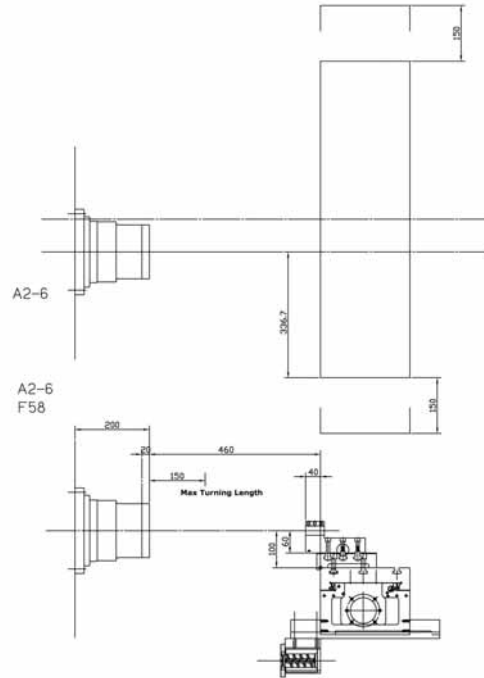


**VT-10TT**  
**TOOLING INTERFERENCE**

SAUTER  
 0.5.440.212/8 center height of turret 63

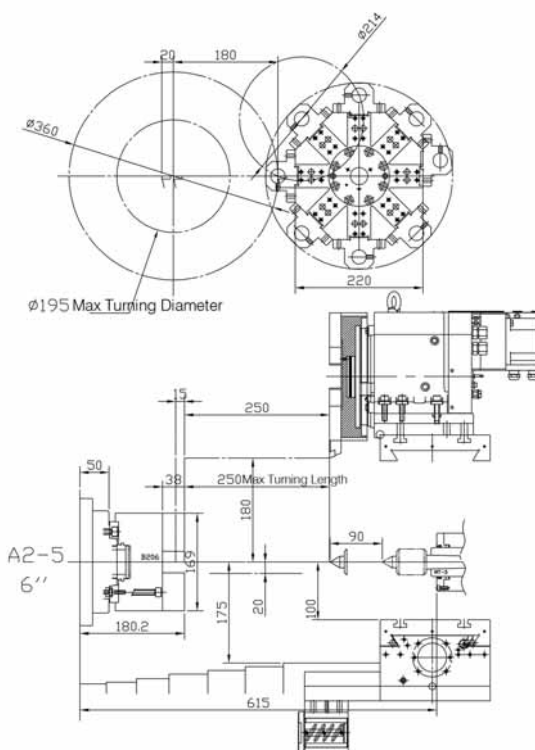


**VT-12**  
**TOOLING INTERFERENCE**  
**Gang Type**



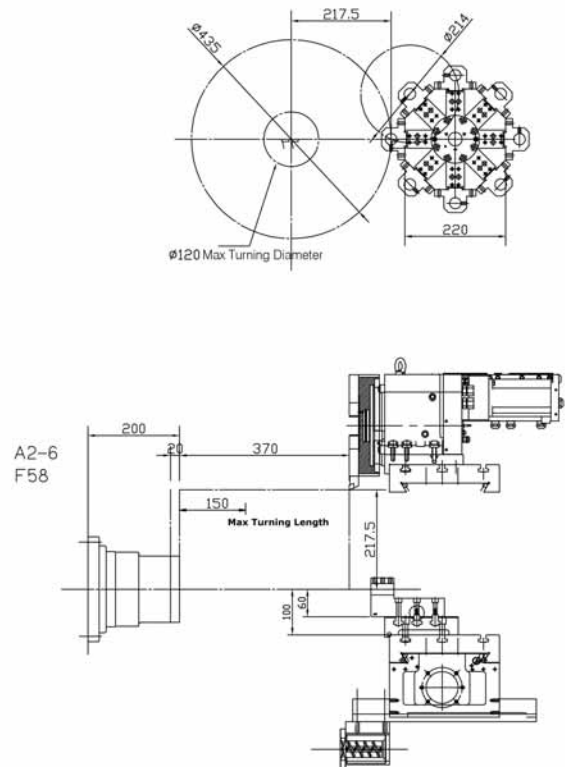
**VT-11**  
**TOOLING INTERFERENCE**

0.5.440.212/8 center height of turret 63  
 SAUTER



**VT-12T**  
**TOOLING INTERFERENCE**

0.5.440.212/8 center height of turret 63  
 SAUTER



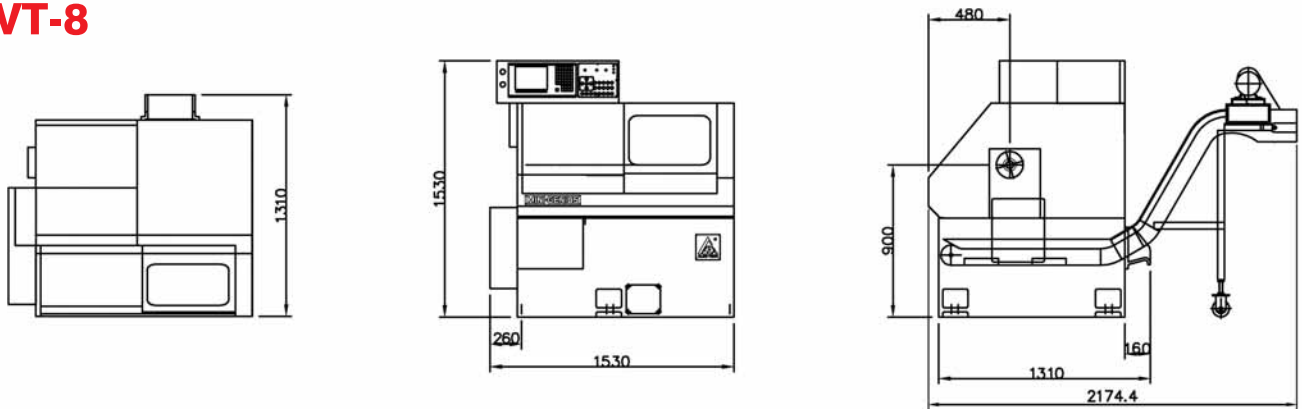
# SPECIFICATIONS

SPECIFICATIONS	Unit	VT-8	VT-10	VT-10T	VT-10TT	VT-11	VT-12	VT-12T
<b>CAPACITY</b>								
Swing over Z way cover	mm(inch)	320(12.6")	350(13.77")	350(13.77")	350(13.77")	350(13.77")	400(15.75")	400(15.75")
Max. turning diameter	mm(inch)	120 (4.72")	120 (4.72")	120 (4.72")	120 (4.72")	195 (7.67")	180 (7.08")	180 (7.08")
Swing over cross slide	mm(inch)	120 (4.72")	120 (4.72")	120 (4.72")	120 (4.72")	120 (4.72")	120 (4.72")	120 (4.72")
Max. turning length	mm(inch)	90(3.54")	120 (4.72")	120 (4.72")	200 (7.87")	250 (9.84")	150 (5.9")	150 (5.9")
<b>TRAVEL</b>								
X-axis travel	mm(inch)	210(8.26")	250(9.84")	180+20(7.08"+0.78")	180+20(7.08"+0.78")	180+20(7.08"+0.78")	300(11.8")	217(8.54")
Z-axis travel	mm(inch)	180(7.08")	250(9.84")	200+20(7.87"+0.78")	200+20(7.87"+0.78")	250+15(9.84"+0.59")	460+20(18.1"+0.78")	370+20(14.5"+0.78")
<b>SPINDLE</b>								
Type of spindle nose	ISO	A2-4		A2-5		A2-5		A2-6
Chuck diameter	mm(inch)	125(5")		150(6")		150(6")		204(8")
Spindle bearing inner diameter	mm(inch)	65 (2.6")		90 (3.54")		90 (3.54")		110 (4.33")
Through spindle hole diameter	mm(inch)	35 (1.4")		52 (2")		52 (2")		62 (2.44")
Through bar capacity	mm(inch)	26 (1")		42 (1.65")		42 (1.65")		52 (2")
Spindle drive motor(cont./30min)	KW (Hp)	3.75 (5)		7.5 (10)		7.5 (10)		11(15)
Spindle speed range	rpm	6000		5000		5000		5000
<b>TURRET</b>								
Number of tool stations				8 (SW=220)	8 (SW=220)	8 (SW=220)		8 (SW=220)
Turret type		GANG TYPE	GANG TYPE	STATIC	STATIC	STATIC	GANG TYPE	STATIC
Turret indexing time	sec			0.9	0.9	0.9		0.9
Shank height of square tool	mm(inch)	12 (1/2")	16 (0.6")	20 (0.78")	20 (0.78")	20 (0.78")		20 (0.78")
Shank diameter for boring bar	mm(inch)	20 (3/4")	20 (0.78")	20 (0.78")	20 (0.78")	20 (0.78")		25 (1")
<b>FEEDRATE</b>								
Rapid traverse rate X-axis	mm/min	15000		15000		15000		15000
Rapid traverse rate Z-axis	mm/min	15000		15000		15000		15000
Ballscrew diameter of X-axis	mm(inch)	20*P5		25*P5		25*P5		28*P6
Ballscrew diameter of Z-axis	mm(inch)	25*P5		25*P5		25*P5		28*P6
<b>TAILSTOCK</b>								
Tailstock travel	mm(inch)				290 (11.4")	270 (10.6")		
Tailstock spindle diameter	mm(inch)				50(2")	50(2")		
Tailstock spindle travel	mm(inch)				90 (3.54")	90 (3.54")		
Taper hole of tailstock spindle					MT-3	MT-3		
<b>REMARKS</b>								
Coolant pump motor	Kw (Hp)	0.2 (1/4)	0.2 (1/4)	0.2 (1/4)	0.2 (1/4)	0.2 (1/4)	0.6(3/4)	0.6(3/4)
Coolant tank capacity	L	160	139	139	139	139	200	200
Floor space	mm(inch)	1530*1310 (60.2"*52")	2034*1395 (80"*54.9")	2034*1395 (80"*54.9")	2034*1395 (80"*54.9")	2020*1350 (79.5"*53.1")	2468*2213 (97.1"*87.1")	2468*2213 (97.1"*87.1")
Machine weight	Kg (lb)	1850 (4070)	1950(4300)	2150(4740)	2150(4740)	2090(4607)	2400(5280)	2550(5610)

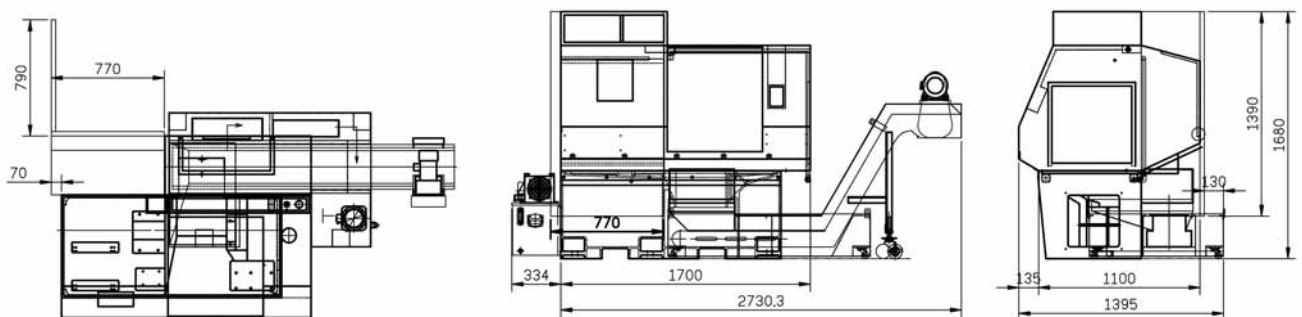
\*Specifications are subject to change without notice.

# DIMENSIONS

## VT-8

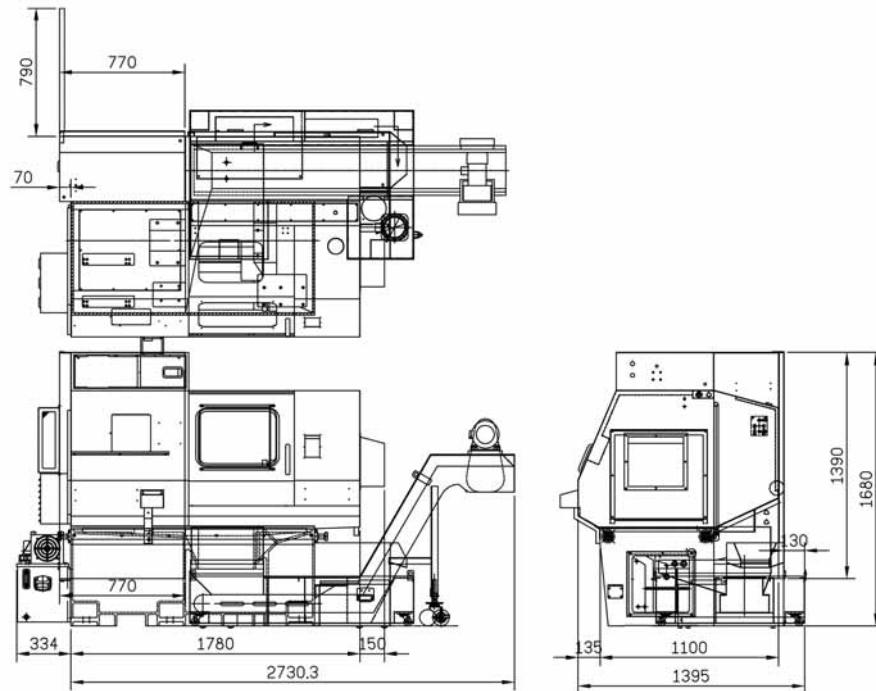


## VT-10/10T/10TT

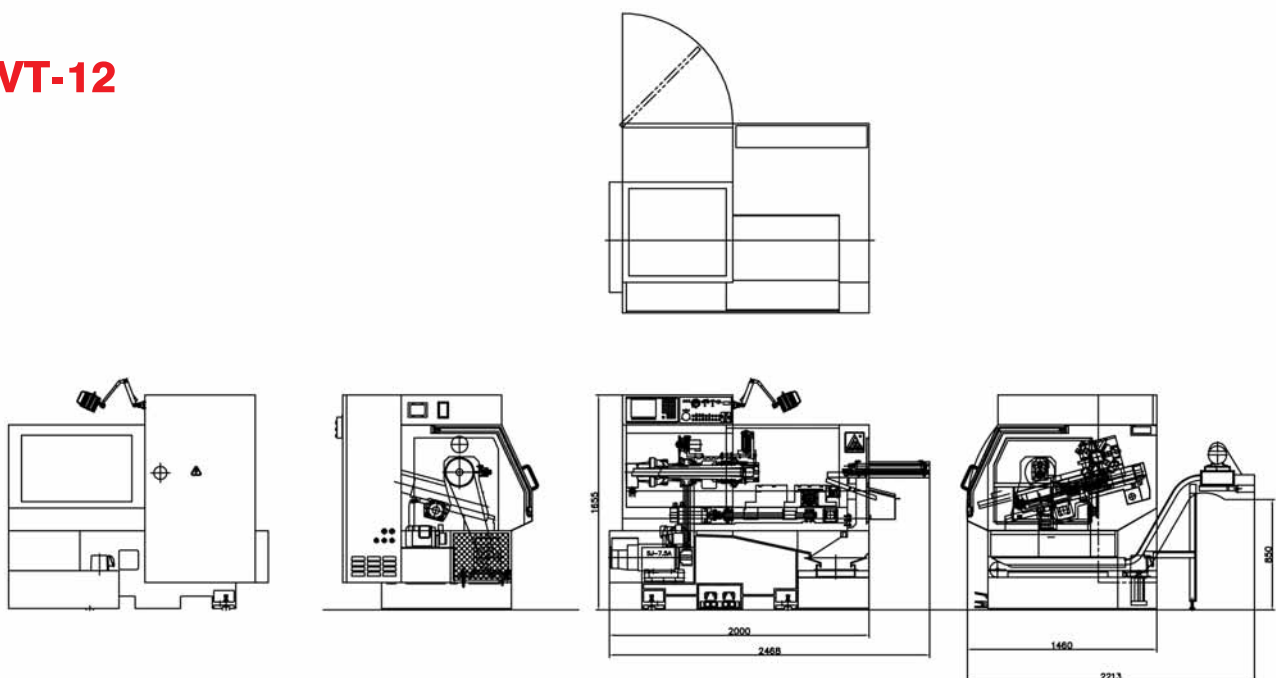


# DIMENSIONS

## VT-11



## VT-12





**MIGHTY USA, INC.**

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