

■ NC Unit Specifications / FANUC Series

Item	Specification	FANUC Series
Controlled axis	Max. feed axes	2 AXIS
	Feed axes	X/Z/(Cs)
	Max. simultaneously controlled axis	4
	Least command increment	0.001mm / 0.0001"
Operation functions	Pulse handle feed	X1, X10, X100
	Feedrate per minute	G98
	Feedrate per revolution	G99
Interpolation functions	Linear interpolation	G01
	Circular interpolation	G02, G03
	Dwell	G04
	Polar coordinate interpolation	G12.1, G13.1
	Cylindrical interpolation	G70.1
	Variable lead thread cutting	G34
	Continuous threading	
	Reference position return	G28
	Reference position return check	G27
	Feed function	Rapid traverse rate override
Spindle function	Feedrate override	0~150%
	Spindle orientation	
Tool functions	Rigid tapping	
	Tool number command	T4-Digt / T2-Digt
	Tool nose radius compensation	G40 ~ G42
	Tool offset pairs	
	Tool geometry/wear offset	GEOMETRY & WEAR DATA
	Tool life management	
	Tool path graphic display	
	Automatic tool offset	G36, G37
Program input	Direct input of tool offset value measured B	
	Absolute/incremental programming	
	Multiple repetitive cycle	G70 ~ G76
	Canned cycles	G90, G92, G94
	Inch/metric conversion	G20 / G21
	Program restart	
	Retraction for rigid tapping	
	Max. programmable dimension	±99999.999mm/±9999.9999"
	M function	M3 digit
	Custom macro	
	Canned cycle for drilling	
	Direct drawing dimension programming	
	Programmable data input	G10
	Optional block skip	
	Workpiece coordinate system	G52 ~ G59
Setting and display	Number of registerable programs	
	Alarm & Operator history display	ALARM & OPERATION DISPLAY
	Run hour and parts count display	RUNNING TIME & PART NO. DISPLAY
	Display spindle & servo overload	SPINDLE & SERVO LOAD DISPLAY
	Self-diagnosis function	
Data input/output	Extended part program editing	COPY, MOVE, CHANGE OF NC PROGRAM
	Display screen	10.4" color
Editing operation	Memory card input/output	
	USB memory input/output	
Manual guide i	Part program storage size	512Kbyte(1280m)
	Manual Guide i	Option

SMEC

SLV 800(M) / 1000(M)

VERTICAL TURNING CENTER



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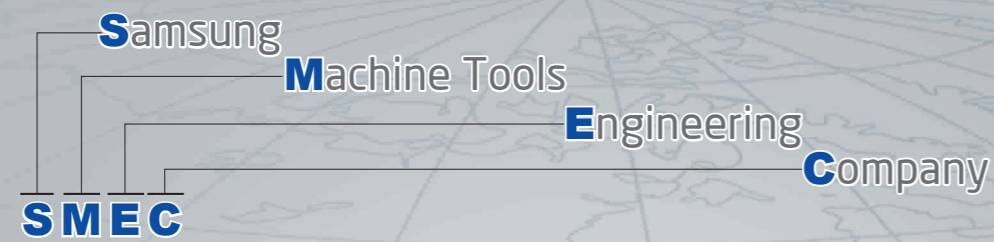


◆ Design and specifications subject to change without notice.

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SMEC
SMEC America Corp.

SMEC



Company History

- 1988 - Started as **Samsung Heavy Industries** Machine Tools Business
- 1989 - Horizontal and vertical machining center technology partnership with **OKK Japan**
- 1991 - Turning center and vertical machining center technology partnership with **Mori Seiki**
- 1996 - 5-sided processing center technology partnership with **Toshiba**
- 1999 - Spun out from **Samsung Aerospace Industries** and established **SMEC Co., Ltd**
- 2018 - **SMEC America Corp** established to provide factory support to the distributor network and customers

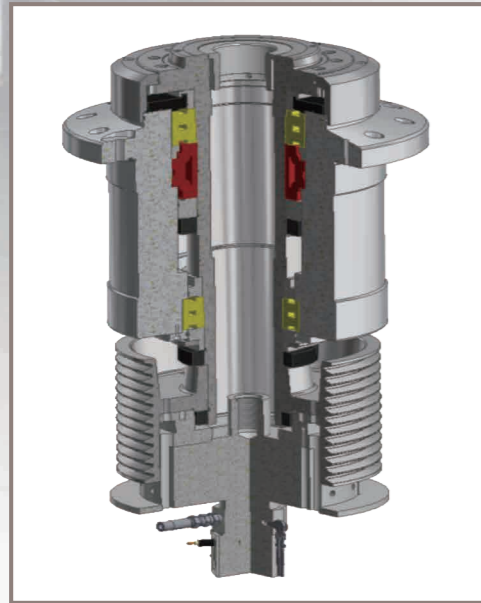
SLV 800/800M SLV 1000/1000M

SMEC'S Advanced Engineering and Machine Design

- High speed, precision and high rigidity spindle
- One piece meehanite casting bed
- Hardened and ground box-way construction



High Accuracy, High Rigidity Spindle



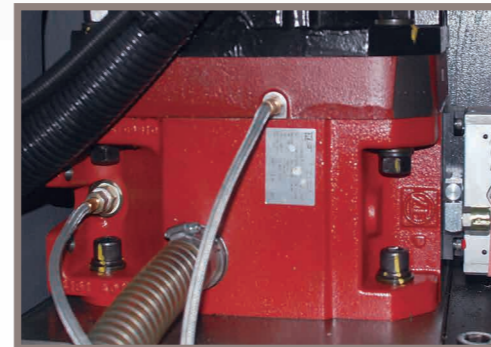
2 Step Gear Box

Main Spindle Structure

High torque main spindle motor is supported by strong Double Cylindrical Roller bearings and Angular Thrust bearings which allow heavy duty cutting and minimize acceleration/deceleration times.

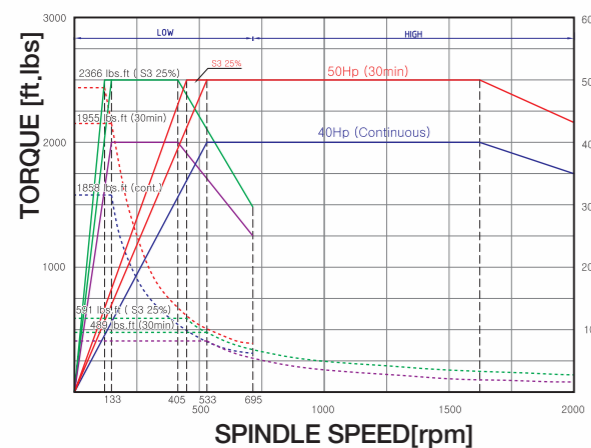
SLV 800(M): **A2-11, 15"~24" chuck available**

SLV 1000(M): **A2-15, 24"~32" chuck available**

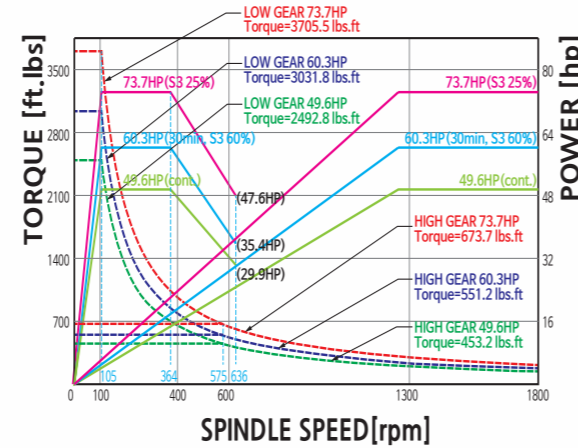


Spindle Power & Torque Diagram

SLV 800 Main spindle with 2 step Gear box

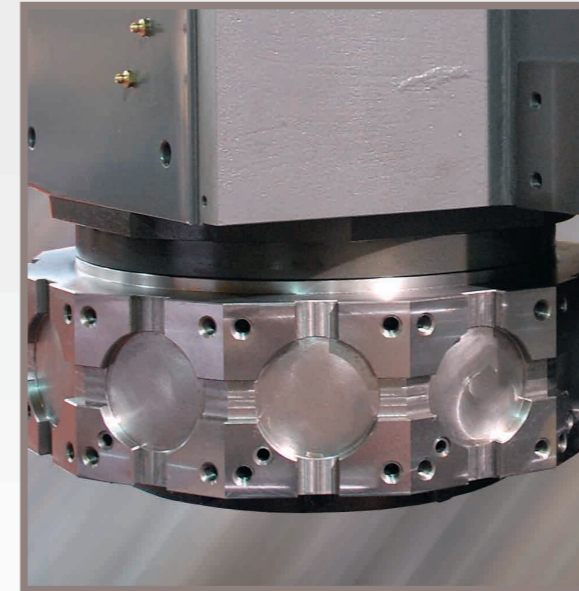


SLV 1000 Main spindle with 2 step Gear box



Machine Structure

SLV Standard Turret Design



SLV Mill Turret Design



SLV 800M : BMT75, SLV 1000M : BMT85

Indexing time
0.3 sec.

Number of tool positions
12 stations

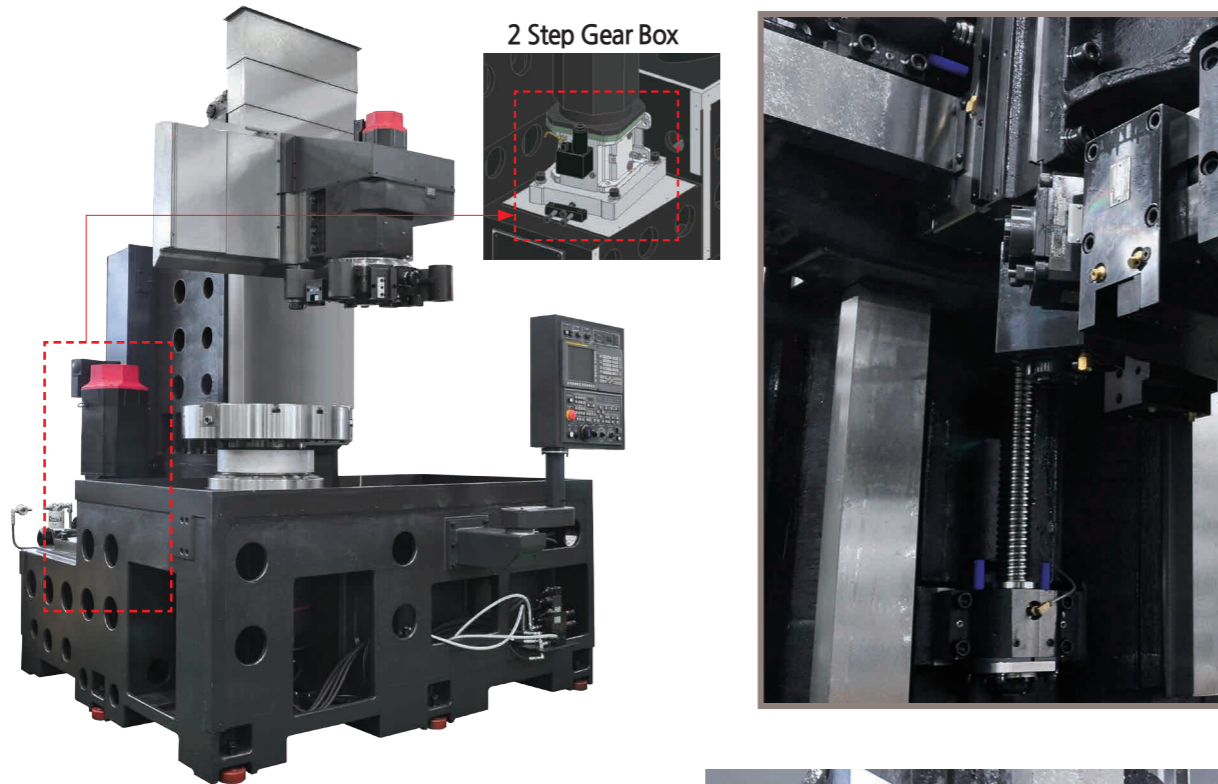
High Speed, Heavy Duty Servo Turret

Driven by a reliable high torque servo motor, the 12-station heavy-duty turret indexes nonstop, bi-directionally with a fast 0.3 second from station to station. Large diameter 3 pieces precision Curvic coupling with 16,484 lbs(SLV 800) and 33,484lbs(SLV 1000) of turret clamping force enables precision as well as heavy-duty cutting.

SLV series is equipped with standard 12-station BMT type turret(SLV 800M:BMT75, SLV 1000M:BMT85), capable of accepting rotary tools at any station.



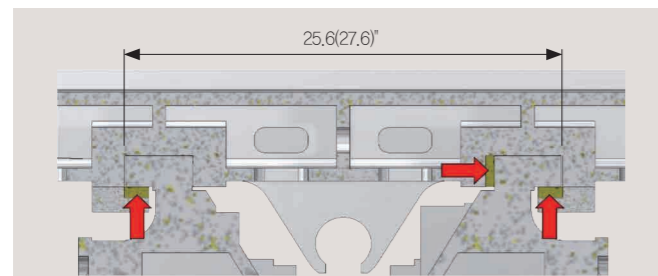
Machine Structure



2 Step Gear Box

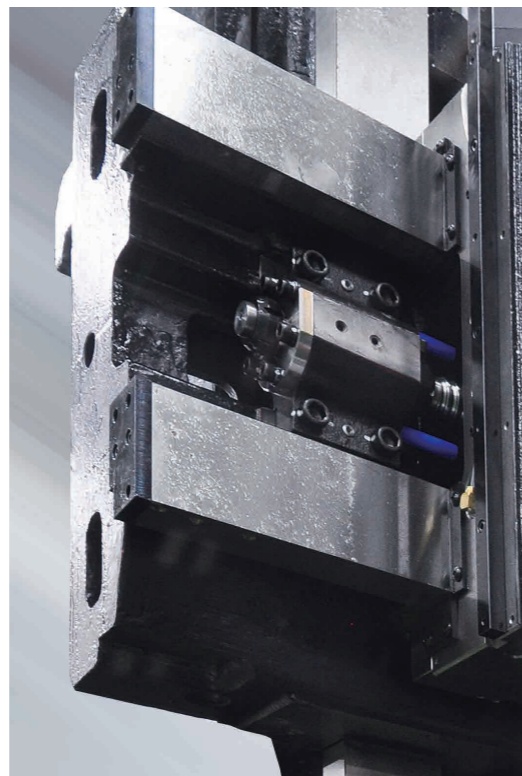
Main Body Construction

The main body of SLV 800M(1000M) is consisted of one piece meehanite cast iron bed, wide column, anti-heat displacement spindle and headstock, and integral Box way construction with anti-friction mating way surfaces that ensure unsurpassed long term rigidity and superior accuracy.



Three(3) adjustable Gibs on X and Z axis provide easier maintenance as well as long term rigidity and accuracy

Column Span : The largest in its class
25.6(27.6) inch

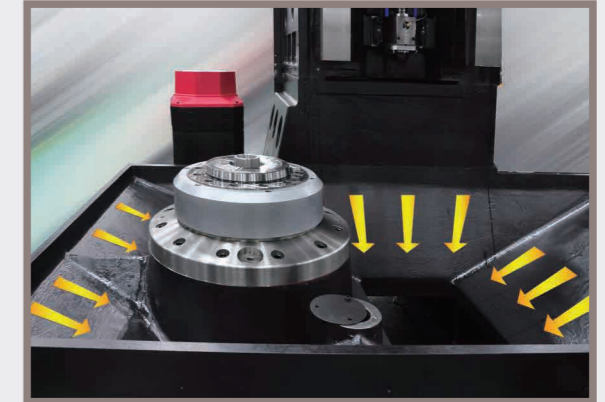


Machine Structure

Easy Chip Removal and High Volume Coolant System.

Large volume of flushing coolant allows minimal chip build-up, and slanted splash guard design effectively removes the chip out from the machine.

·Motor **1.5 Hp** ·Discharge Capacity **43.6 gal/min**

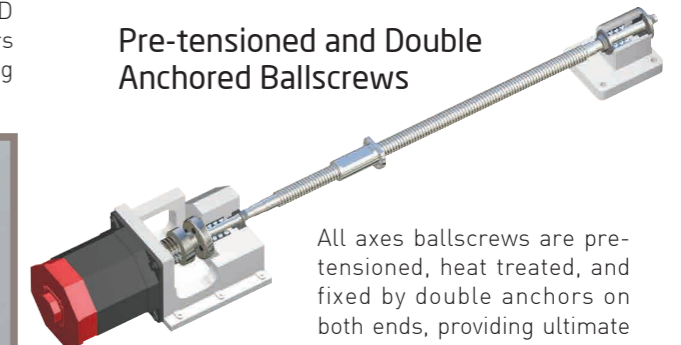


Swivel Operation Panel

Swivel operation panel of 10.4 inch color TFT LCD monitor can turn to 90 degree, providing operators with easy access to the control panel while working on the machine.



Pre-tensioned and Double Anchored Ballscrews



All axes ballscrews are pre-tensioned, heat treated, and fixed by double anchors on both ends, providing ultimate rigidity and minimal thermal growth.

Lubrication Unit

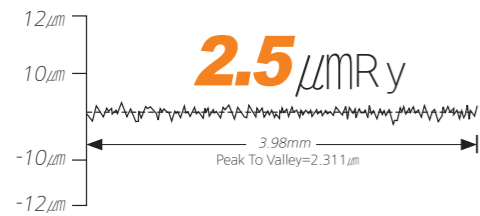
Maintenance free piston distributors automatically lubricate a precise quantity of oil to each lubrication point

·Capacity : **0.8 Gal**
·Pressure : **213 psi**

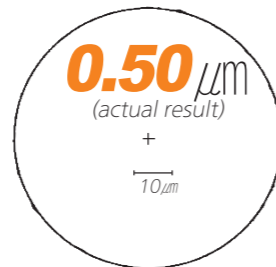


■ High Precision

Surface Roughness <O.D. cutting>



Roundness

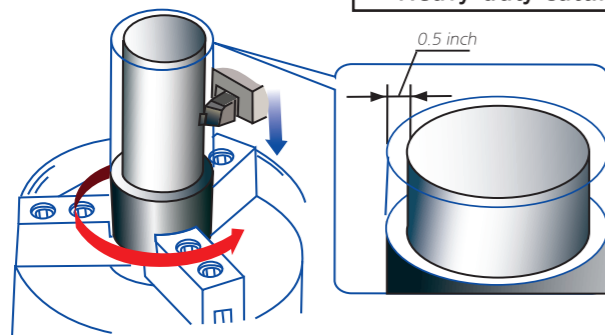


Cutting condition	
Tool	Diamond tool (nose radius 0.020 inch)
Material	AL150(Aluminum)
Cutting speed	650 fpm
Feedrate	0.0020 ipr
Depth of cut	0.005 inch
Outer diameter	7.9 inch
Filter	1-50

■ Processing Speed

Turning Performance (material:SM45C) SLV 800(SLV 1000)

Heavy-duty cutting (O.D) <1 1/4 inch x 1 1/4 inch qualified tool>

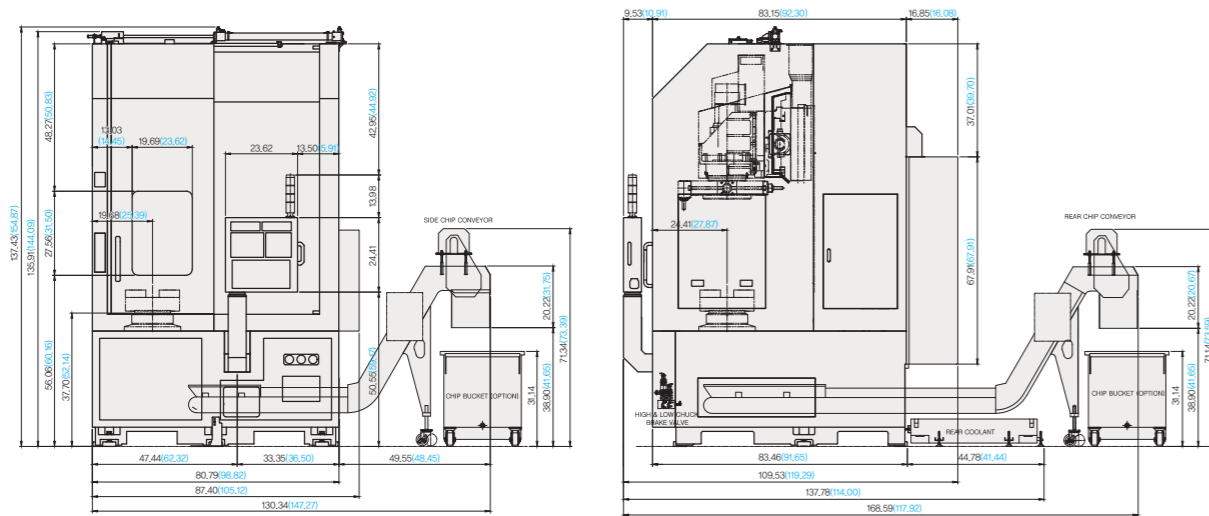


Spindle Speed
357 rpm
Cutting Speed
465 fpm
Depth Of cut
0.5 inch <Spindle Load 65%>
Feedrate
0.11 inch per rev

■ Machine Dimensions

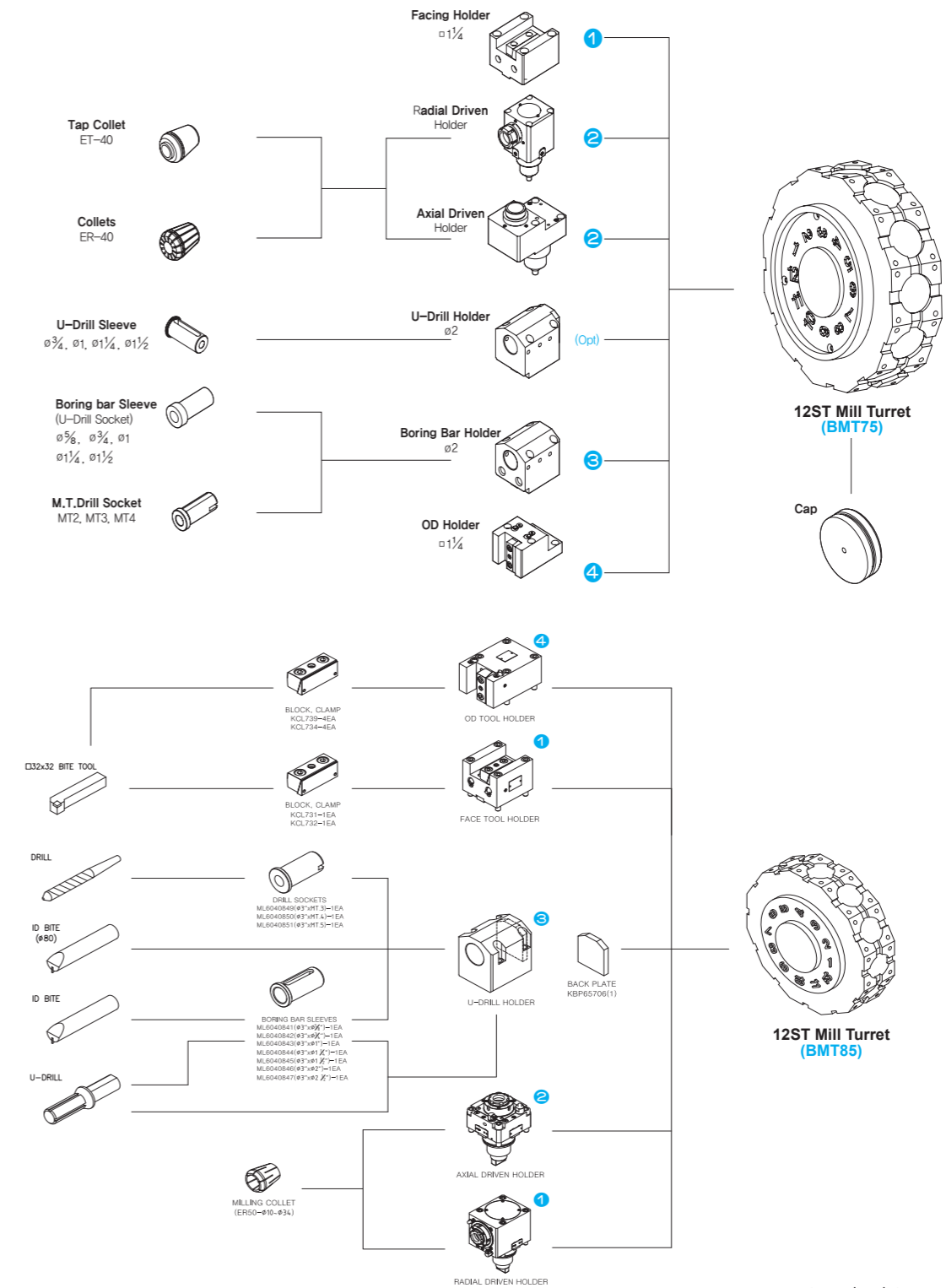
SLV 800(M) [1000(M)]

Unit : inch



■ Tool Holders & Sleeves

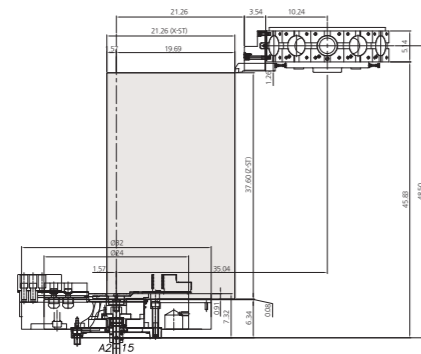
Unit : inch



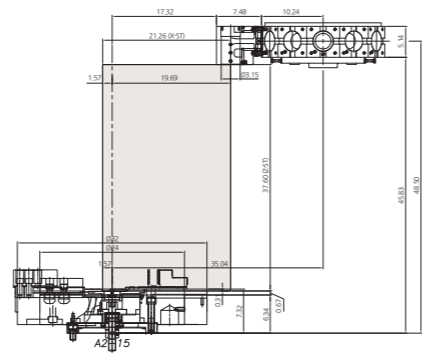
■ Working Ranges

Unit : inch

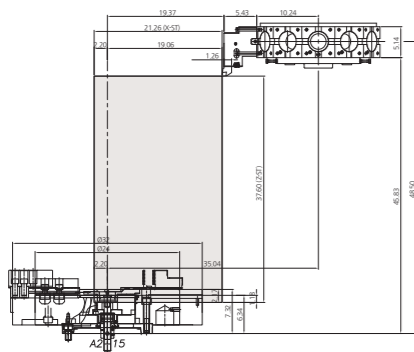
SLV 1000M



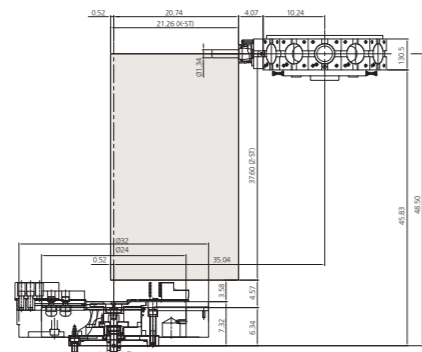
O.D. HOLDER



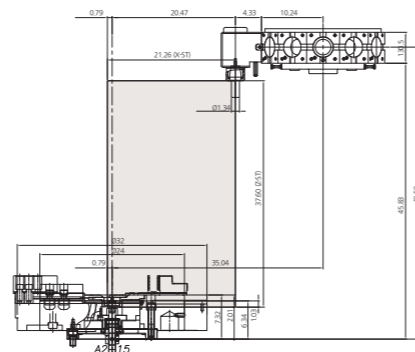
I.D. HOLDER



FACE HOLDER



STRAIGHT MILLING HOLDER

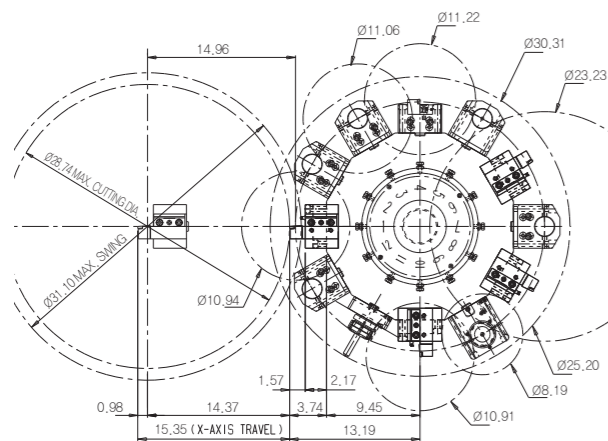


ANGULAR MILLING HOLDER

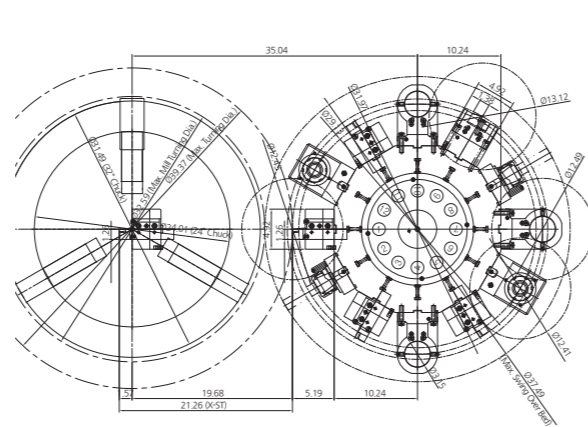
■ Tool Interference Diagram

Unit : inch

SLV 800M



SLV 1000M



■ Major Specifications

DESCRIPTION		SLV 800 RH/LH	SLV 800M RH/LH	SLV 1000 RH/LH	SLV 1000M RH/LH
Chuck	Chuck size	inch A Type:18[15] B Type:21 C Type:24		inch A Type:24 B Type:32	
Capacity	Swing over bed	inch	35	35	43.3
	Swing over cross slide(with Tailstock)	inch	29.1	29.1	31.3
	Max. turning diameter	inch	32.7	32.7	39.4
	Max. milling diameter	inch	-	24.6	-
	Max. machining length	inch	31.5	30.5	37.6
Main spindle	Spindle speed	rpm	A Type:2,000 B Type:1,800 C Type:1,500		A Type:1,800 B Type:800
	Spindle nose	ASA	A2-11	A2-11	A2-15
	Draw tube ID	inch	-	-	-
	Spindle bore diameter	inch	4.1	4.1	3.9
	Motor (Cont/Max)	hp	29.3/40[40/49.3]	29.3/40[40/49.3]	49.6/73.7
Travels	X-axis travel	inch	17.3	17.3	21.3
	Z-axis travel	inch	31.5	31.5	37.6
	X-axis Rapid traverse rate	ipm	787	787	787
	Z-axis Rapid traverse rate	ipm	787	787	787
Turret	number of tool stations	ea	12	12(BMT75)	12
	Turning tool shank size	inch	1.3	1.3	1.3
	Boring bar diameter	inch	2.5	2.5	3.15
	indexing time	sec	0.3	0.3	0.3
	rotary tool spindle speed	rpm	-	4,000	-
	rotary tool motor(Cont/Max)	hp	-	7.3/14.6	-
Tailstock	quill diameter	inch	-	-	-
	quill stroke	inch	-	-	-
	spindle taper	MT	-	-	-
Machine	Size(with Side Chip conveyor)LxWxH	inch	80.7(130.3)x109.5x137.4		98.8(147.2)x119.2x154.8
	Size(with Rear Chip conveyor)LxWxH	inch	80.7x109.5(168.5)x137.4		98.8x119.2(177.9)x154.8
	weight	lbs	24,250	24,691	37,478
	Coolant tank capacity	Liter	300	300	350
Electric power supply	kVA/V	53/220	61/220	75/220	80/220
Controller		FANUC			

• Figures in inches are converted from metric measurements.
• Design and specifications are subject to change without notice.

• []:Option

■ Standard Accessories

- HYDRAULIC CHUCK(18")
- SOFT JAW
- SPLASH GUARD
- COOLANT SYSTEM
- TOOL HOLDER
- SPINDLE GEAR BOX(2STEP)
- FOOT SWITCH
- TOOL AND TOOL BOX
- LEVELING BLOCKS

■ Optional Accessories

- CHIP CONVEYOR(REAR,SIDE)
- CHIP BUCKET
- DUAL CHUCKING PRESSURE
- AIR BLOW
- TRANSFORMER
- HIGH-PRESSURE COOLANT(20BAR)
- TOOL PRESETTER
- AUTO DOOR
- AUTO POWER OFF
- PATROL LIGHT