

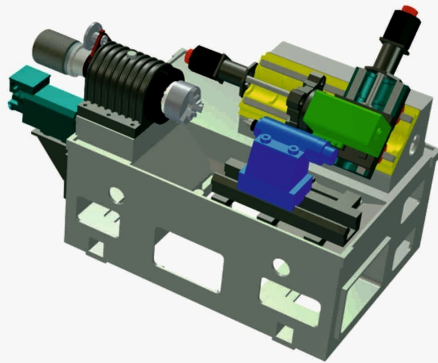


## History



Sands Precision Pvt. Ltd. is well established in manufacture of precision CNC machinery since 1992. The organization is well known for its high precision, economical & reliable turning centers and machining centers. The company has two manufacturing plants in Bangalore.

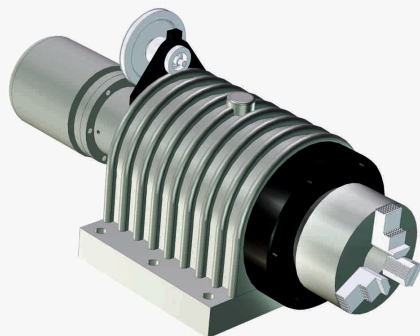
The core strength of the company remains in design of innovative machine tools. Having started in a small way manufacturing EDMs' and ECMs' and SPMs', today we have a wide variety of the CNC Turning centers, CNC machining centers, Turn Mill Centers, Economy lathes (Flat Bed Lathes), Multi spindle VMCs' and multi spindle CNC lathes.



## Head Stock



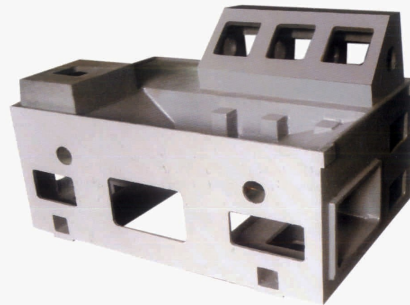
SANDS turning centers are equipped with a massive head stock housing in cast iron. The special heat dissipation fin design on head stock eliminates heat from spindle bearings and increases bearing life, spindle accuracy. Also these fins act as mechanical ribbing increasing rigidity.



## Rigid Foundation



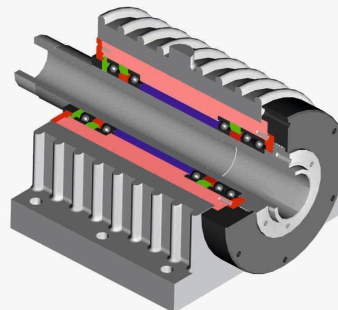
Machine is built on a single piece 45 degree slant bed casting. The base design is optimized using Finite Element Analysis (FEA) to provide best machining capability. The cast components are duly stress relieved and artificially seasoned. The single piece structure provides improved and uniform thermal stability, while the FG 260 grade casting provides nearly 10 times better dampening capacity than fabricated structure. The single piece cast base gives more rigidity, good surface finish, high accuracy and precise repeatability for many years. Due to the guide ways being closer to the spindle centerline, the guide ways experience much lesser reaction force than competitor's models for the same cutting force resulting in better rigidity and longer guide way life and lesser damage in the event of accidents.



## Spindle



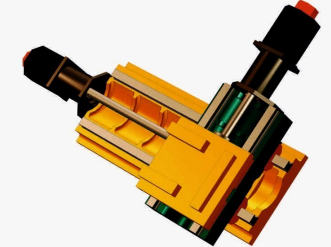
Spindle is precision machined from high quality alloy steel. Spindle is case hardened & stabilized to get maximum wear resistance, life time accuracy & zero deformation. Spindle assembly has five large P4 class angular contact match paired imported bearings (3nos on front & 2 nos on rear) to achieve maximum rigidity & precision. All bearings are of same size which results in better rigidity.



## Motion Control



SANDS CNC machines are equipped with large diameter imported ball screws and imported re-circulating ball type Linear motion guide ways (L.M. guide ways) for both X & Z axes. Ball screws are preloaded and inspected for 100% parallelism to axis guide. Premium quality German / Japanese makes of ball screws / LM guide ways from world's top manufacturer's are only used on our machines to achieve high accuracy & longer life. The company also has in-house facilities for repair and refurbishment to increase life and postpone replacement of these elements. This is provided as a service to our customers.



## Turret

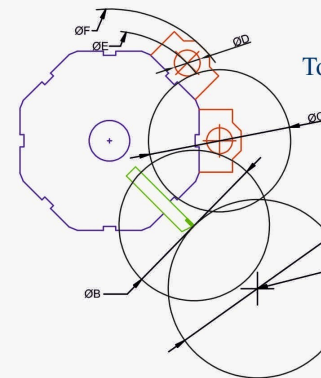
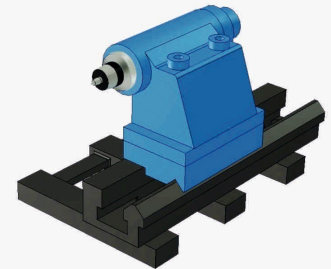
SANDS turning centers are equipped with Pragathi make Electro mechanical 8 station bi-directional tool turret as standard. It takes shortest path to save indexing time. We can also provide other makes and types of turrets (hydraulic / electromechanical / servo) like Golden Sun / Baruffaldi / Duplomatic / Sauter as optional.

\* Linear tooling optional with SLT-135.

## Tailstock

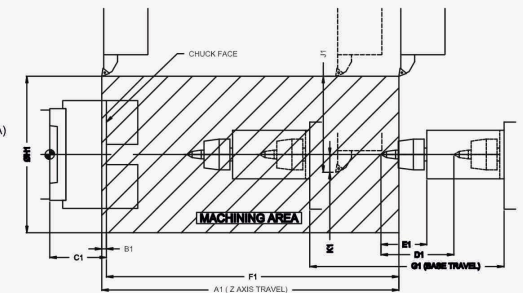


The hydraulically operated tailstock is mounted on V & flat guide ways. The tailstock quill is Hard chrome plated to prevent corrosion due to prolonged exposure to coolant. Quill is actuated through a hydraulic cylinder. The whole tailstock assembly is manually movable for positioning.



Tool Interference Diagram

Machining Zone



MODEL	ØA	ØB	ØC	ØD	ØE	ØF
SLT 135	220	184	174	32	270	312
SPECTRATURN	250	200	200	40	316	375
SUPERTURN	260	228	220	40	340	392
SLT 200H	290	228	220	40	340	392
SLT 200-EX	390	228	220	40	340	392

ALL DIMENSIONS IN MM

MODEL	A1	B1	C1	D1	E1	F1	G1	ØH1	J1	K1
SLT 135	275	5	76	90	103	270	160	220	140	30
SPECTRATURN	305	5	106	100	122	300	310	250	170	35
SUPERTURN	440	50	106	120	122	390	350	260	170	50
SLT 200H	540	10	115	130	122	530	400	290	180	35
SLT 200-EX	540	10	115	130	122	530	400	390	230	35

ALL DIMENSIONS ARE IN MM