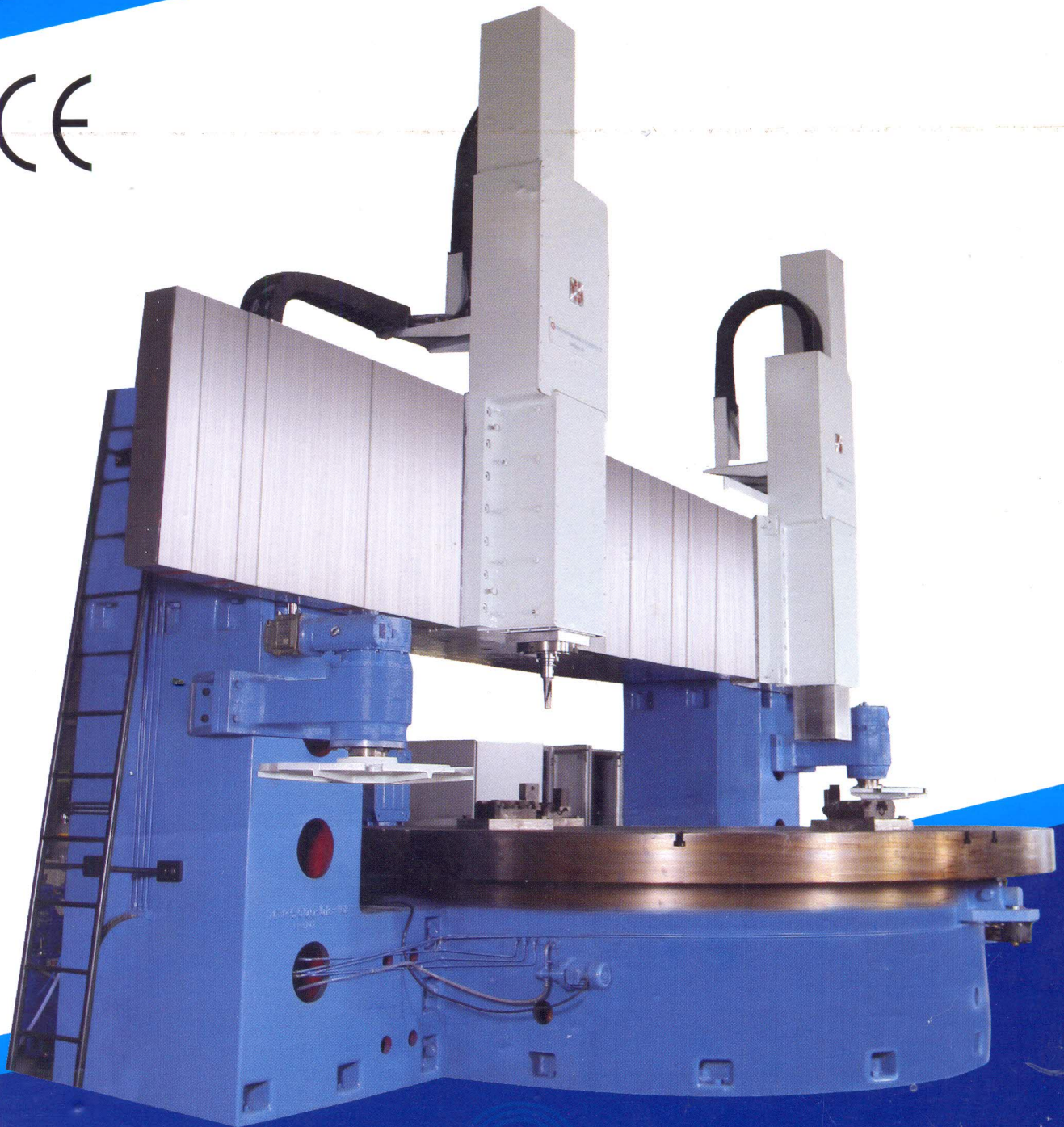
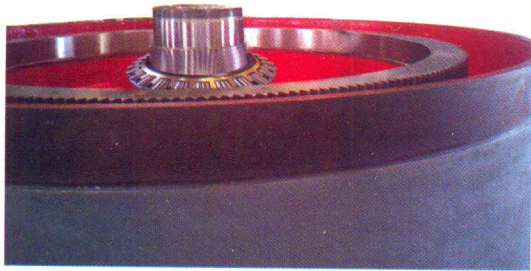


**DOUBLE COLUMN CNC VTL
DCV / DTCV**



PRASAD NC MACHINE SYSTEMS (P) LTD.,

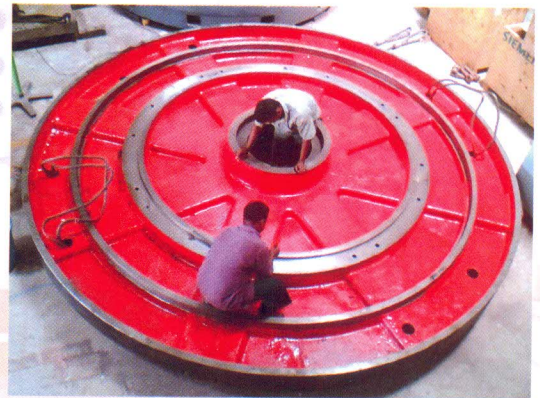


Base with Spindle and Bearing

Heavily ribbed grey cast iron base for FG 260 grade, stress relieved after rough machining. Fixed spindle for the table with 2nos spherical roller thrust bearings at the centre duly preloaded. Hydrostatic guide way at the periphery is BIPLAST pasted and matched. Pressure of hydraulic oil is adjusted independently at 3 zones of the guideway.

Table

FG 260 Grade cast iron table is fitted with 4 heavy duty Jaws. The base Jaw can be fitted with hard or soft jaws. A ring gear is fitted under the table, the face of which is seated to the BIPLAST coated hydrostatic guide way.

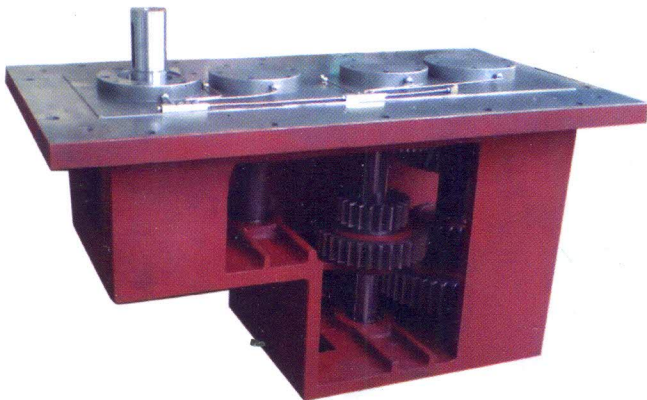


Cross rail with slides

Heavily ribbed cast iron cross rail has two prismatic guide ways accurately scraped and matched with BIPLAST coated cross slide. Rexroth German make ball screws and preloaded double nuts are used for the movement of the slide.

Live spindle for RAM

The Live tool motorized spindle is fitted with Rexroth make water cooled stator and permanent magnet rotor controlled by a Rexroth servo drive for delivering 37 Kw at 1700 rpm. The spindle is fitted with an Encoder for orientation and rigid tapping. The spindle speed is infinitely variable up to 2500 rpm and delivers a torque of 210 Nm. Siemens and Fanuc spindles are also offered as an option.

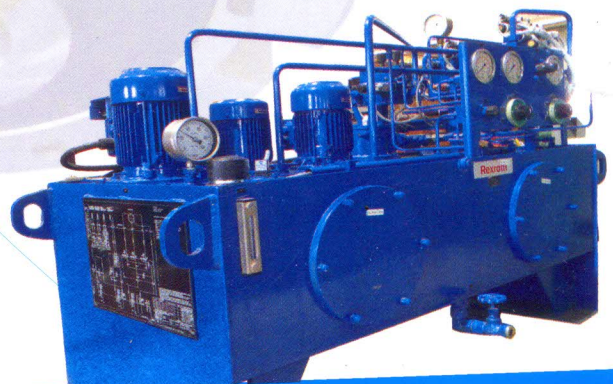


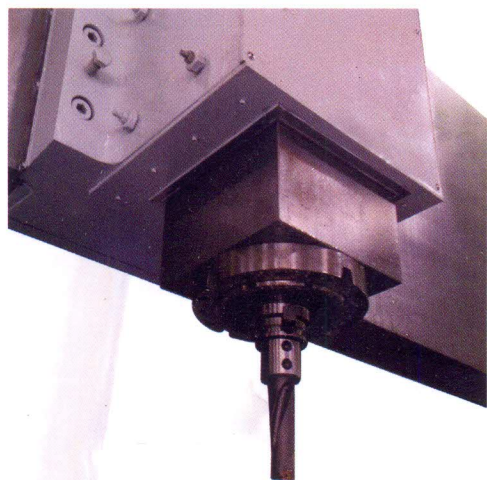
Gear box

The gear box has two speed gear shifting by hydraulic cylinder and is driven by a servo spindle motor, which can also function as 'C' axis for indexing. The drive from motor to gear box is through poly 'V' pulleys and belt. All gears are hardened, profile ground and lubricated by a separate pump.

Hydrostatic System

Rexroth make power pack is offered with the machine which delivers hydro static oil to three segments at 120° each for uniform lifting of table during turning. The system reduces the pressure automatically when 'C' axis is selected and actuates table braking cylinders after indexing of the table for drilling.



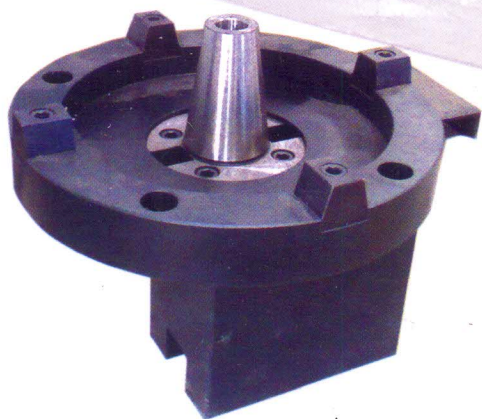
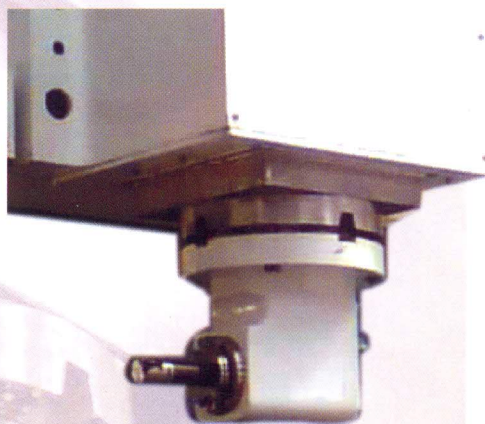


RAM slide with live spindle

The RAM has a cross section of 250 x 250mm square for turning application and for built in live spindle the RAM size is increased to 340 x 340mm square. An ISO 50/BT 50 nose spindle with tool clamping pressure of 2500 kg, with 37 kw built in motor and through tool coolant are offered. HSK taper nose can be offered as option.

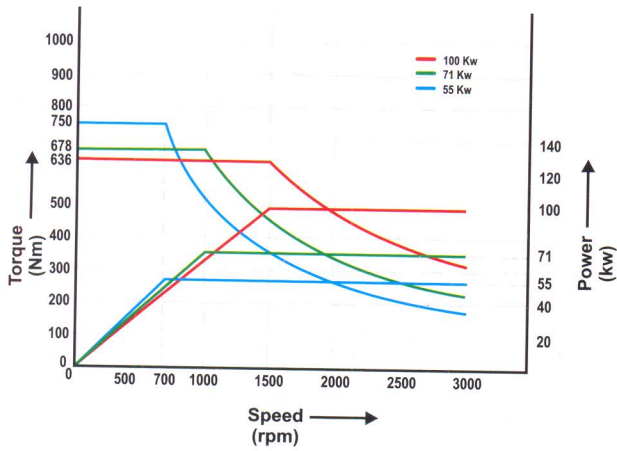
Right angle drilling head

We can provide a Right angle drilling head with ISO 50/BT 50 nose which can be mounted on to the RAM, manually. The spindle speed and torque are the same as the built-in spindle. The tool clamping is also carried out manually.



Tool holders

Various tool holders can be supplied for turning OD, ID, face and boring small bore etc. The rotating tool holders are standard and are available from Sandvik, Kennametal

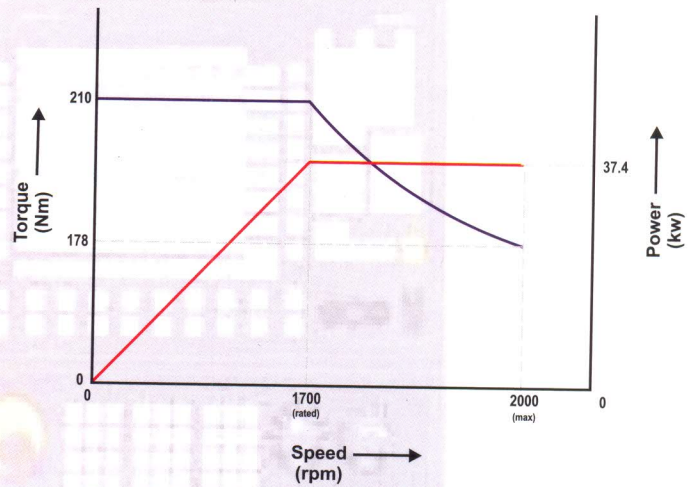
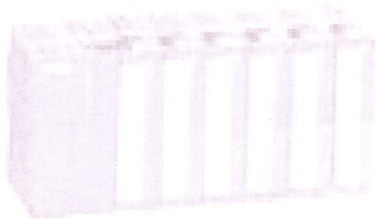


Power/Torque diagram for 55 kw/71 kw/100 kw

The main motors offered are from Siemens / Fanuc which can also function as 'C' axis. These motors can deliver higher power for a short duration of 30 minutes.

Power torque diagram for 37 kw live spindle

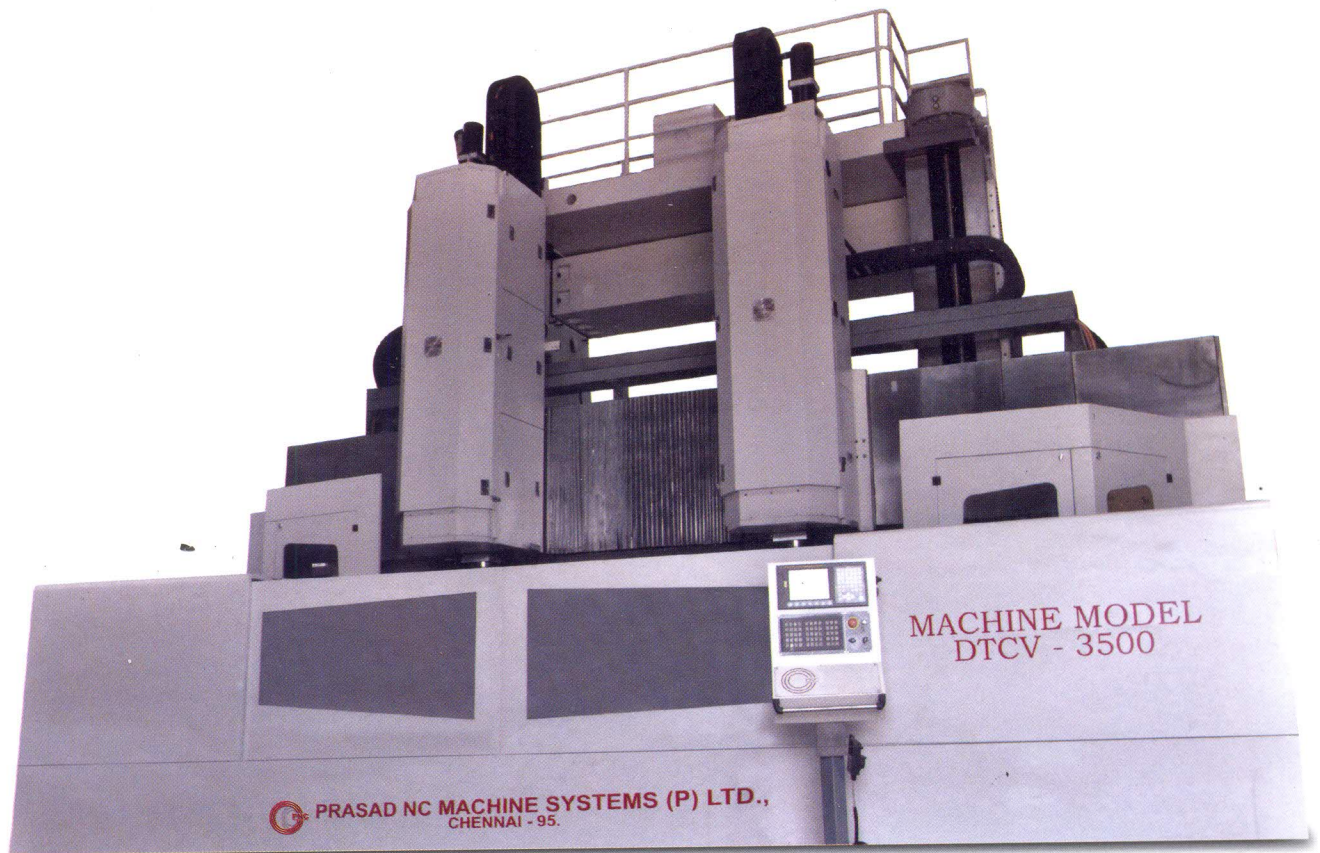
The built-in motor used for rotating spindle can deliver 37 kw power and a torque of 210 Nm at 1700 rpm.



CNC Controller

The systems offered are from Siemens, 802 D solution line for 2 or 3 axis application and 840 D for 4 axis and above. Fanuc Di controller with Fanuc motors and drives are offered as an option. The built - in spindle motors are offered from Siemens, Fanuc or Rexroth

DTCV - 2500 / 3000 / 4000 / 5000 / 6000



CE



CNC DOUBLE COLUMN VTL

Specification DCV /DTCV	2500	3000	4000	5000	6000
Dist between Columns	2500mm	3000 mm	4000 mm	5000 mm	6000 mm
Maximum swing	2500 mm	3100 mm	4100 mm	5100 mm	6100 mm
Dia of face plate	2000 mm	2500 mm	3500 mm	4500 mm	5500 mm
Maximum dia of turning	2500 mm	3100 mm	4100 mm	5100 mm	6000 mm
Power of table drive	50kw	55kw	71kw	100kw	100Kw
Table speed inf. Vari	5-150RPM	5-80RPM	5-60RPM	5-50RPM	5 - 40 RPM
No of steps	2	2	2	2	2
Maximum weight job	20 T	30 T	50 T	60 T	100 T
Maximum distance from DTCV Ram face to Table DCV	2000 mm 1600 mm	2500 mm 1600 mm	3000 mm 1600 mm	3000 mm 1600 mm	3000 mm 1600 mm
Cross rail Travel	1300 mm	1800 mm	2300 mm	2300 mm	2300 mm
Ram travel Z,Z1axis Optional	1000 mm 1400 mm	1000 mm 1400 mm	1000 mm 1400 mm	1000 mm 1400 mm	1000 mm 1400 mm
Ram size Standard Optional	250mmSQ 340mmSQ	250mmSQ 340mmSQ	250mmSQ 340mmSQ	250mmSQ 340mmSQ	250 mm Sq 340 mm Sq
X,X1 axis travel	1200 mm	1700 mm	2200 mm	2700 mm	3200 mm
Feed rate of axis	1-5000 mm/min	1-5000 mm/min	1-5000 mm/min	1-5000 mm/min	1-5000 mm/min
Rapid travel	7500 mm/min	7500 mm/min	7500 mm/min	7500 mm/min	7500 mm/min
No of tools is ATC	8	8	8	8	8
Tool clamping force	2500kg	2500kg	2500kg	2500kg	2500kg
Maximum tool weight	50kg	50kg	50kg	50kg	50kg
Control System	Siemens / FANUC	Siemens / FANUC	Siemens / FANUC	Siemens / FANUC	Siemens / FANUC
Axis motors	36NM	36NM	50NM	50NM	50NM
Weight of machines	40T	65T	85T	100T	120 T

