



Citius

**+ OUTPERFORMS
ALL IMPORTED MACHINES IN ITS CLASS**



Performance **+**

FEATURES+INTELLIGENT TECHNOLOGY = UNMATCHED PERFORMANCE!

COMPARISON OF SPECIFICATIONS WITH COMPETITORS

Specifications	Citius 2540 +	Mazak-Quick turn100	HYUNDAI- E160 A	Citius + Advantages
Spindle Nose	A2-5	A2-5	A2-5	
Max. Spindle RPM	5500	6000	6000	
Bar capacity	42	52	42	
Max. Turning dia.	250	280	280	
Max. Turning length	400	310	300	Longest Jobs accomodated
Rapids X/Z (m/min.)	30/36	30/36	30/30	Fastest Rapids for lowest Non cutting time
Spindle power (Kw)	7.5/11	7.5/11	7.5/11	
STRUCTURE DESIGN	Single pieced Casting with 'Harcrete' filling	Two piece casting. Straight with 30 Deg Slant Saddle	Single Piece Casting	Most rigid structure with vibration damping ensures highest rate of metal removal with best surface finish & insert life
Turret & stations	Servo (Baruffaldi. Italy) 8 station	Servo, 12 stations	Servo, 12 stations	We use world's best quality servo turret and Competitors use own make turret
High Pressure Coolant through Turret (70 Bar)	Yes	No	No	1. Ensures chip breaking. 2. Allows higher cutting speeds. 3. Increases insert life
Tool shank	25x25	20 x 20	20 x 20	Strongest Shank allows heavy duty turning
Max. Boring Bar	40	32	32	Most rigid boring for larger bores
LxWxH (mm)	1870 x 1623 x 1700	2200 x1650	1940 x 1860 x 1600	Smallest Footprint

COMPARISON OF FEATURES



1. TURRET

CITIUS PLUS

Best in Class BARUFFALDI Servo Turret make Hydraulic & 70 Bar Pressure through Turret

ADVANTAGES:

1. Highest Load taking capacity in its class
2. Lowest Indexing time
3. Capable of high pressure coolant through the Turret
4. Most compact turret in its class.

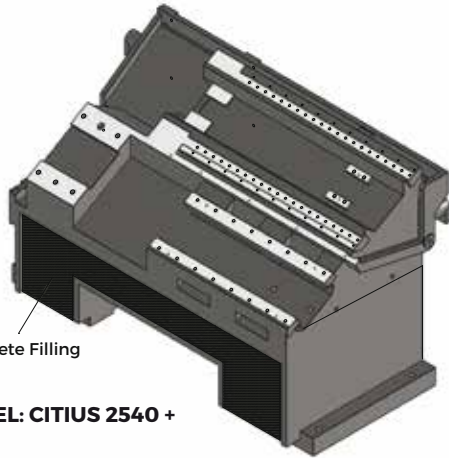


COMPETITOR (OWN MAKE TURRETS)

Long Chips in the absence of high pressure coolant through turret



2. VIBRATION DAMPING TECHNOLOGY



The Single piece machine structure is filled with an epoxy mixture 'Harcrete' for getting the following benefits;

1. Vibration damping
2. Hard Turning capability
3. Longer Insert life
4. Better surface finish
5. Lower center of gravity leads to better stability of machine

THIS TECHNOLOGY IS NOT AVAILABLE WITH COMPETITORS

3. HIGH PRESSURE (70 BARS) COOLANT SYSTEM WITH FILTRATION SYSTEM



HIGH PRESSURE COOLANT



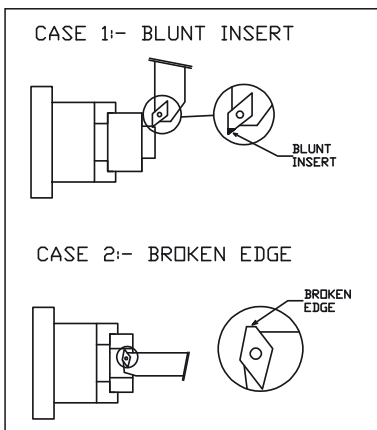
**IMPORTED 3 PISTON PUMP WITH
INTAKE THROUGH 5 MICRON FILTER**

+ Option of CLAP: (Closed Loop Automated Production) with *SmartCorrect* Gauging Station



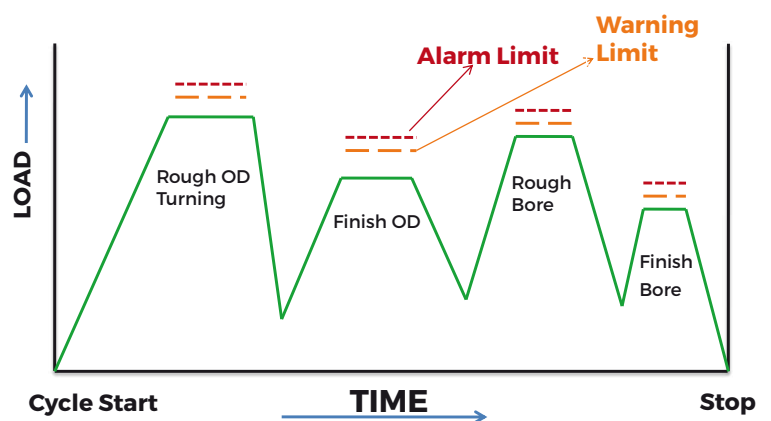
Two CITIUS PLUS Machine doing identical jobs, can be connected to one SmartCorrect Gauging Station. Resulting in:
ZERO defect production & shift from OBQ (Operator based quality) to SBQ (System based quality).

+ Option of CLAMP: (Cutting Load Analysis based Machine Protection)



This Technology ensures protection to the machine from blunt or broken inserts. This is VERY important because the variation in input to CNC Turning Centres (dimensional variations or excessive hardness or inclusions) cause sudden, rapid wear/fracture of tool inserts which causes frequent accidents. Accidents result in losses due to physical damage to tools & machines and down time of the machines.

CLAMP: HOW IT WORKS



1. Machine is set in 'Teach Mode' and job is turned. On all turning operations CLAMP monitors 'NORMAL' load with OK inserts & makes Load Diagram. It checks 10 consecutive jobs to take into account the job to job variations.

2. Machine automatically selects 'WARNING' & 'ALARM' limits for all Operations and switches to 'RUN Mode'



Head Office & Works

C 86, Phase-V, Focal Point, Ludhiana 141 010 India | Phone: +91 161 5012406, 5012407, 5019648

National Sales, Services & Technology Center

75-B, Sector 5, IMT Manesar, Distt. Gurgaon | Phone: +91-0124-4241813,14,15 | Cell: +91-96502 93942

Automated Solutions Division (Unit II)

D-116A, Phase-V, Focal Point, Ludhiana-141010. INDIA

headoffice@marshallcnc.com
cncsales@marshallcnc.com

marshallcnc.com
marshallcnc.in
marshallautomation.in