



Citius

THE FASTEST & MOST ACCURATE
COMPACT CNC TURNING CENTRE IN INDIA



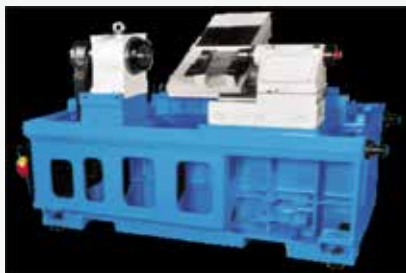
Higher:

SPEED + ACCURACY + RIGIDITY = INCREASE IN PROFITS!

COMPARISON OF SPECIFICATIONS WITH COMPETITORS

Specifications	Citius 2540	ACE- Jobber XL	LMW- Smart turn	CITIUS ADVANTAGES
Spindle Nose	A2-5	A2-5	Flat-140 mm dia	
Front Bearing Bore	85	80	80	Most Rigid Spindle for heavy turning
Max. Spindle RPM	5000	4000	4500	Much higher productivity & better chip breaking
Max. Turning dia	250	270	200	
Max. Turning length	400	400	262	
Rapids X/Z (M/min)	30/30	20/20	20/20	Lowest non-cutting time for higher productivity
Spindle power (Kw)	7.5/11	5.5/7.5	5.5/7.5	Higher rate of metal removal & highest acceleration for non-cutting time reduction
STRUCTURE DESIGN	SINGLE PIECE 'Monoblock' Casting, 30 deg. TRUE Slant	3 Pieces bolted together. Straight Bed with 30 deg. Slant Saddle	3 Pieces bolted together. Straight Bed with 30 deg. Slant Saddle	Highest Rigidity & Vibration Damping allows heavy cutting at optimum speeds for highest productivity, best surface finish & longest tool life
Tool shank	25x25	25x25	20x20	Standard 25x25 shank size tools
LxWxH (mm)	1870 x 1623 x 1700	2200x1700x1775	2275 x1640 x 1700	Smallest Footprint for saving in shopfloor space

COMPARISON OF FEATURES



1. STRUCTURE

CITIUS

The single piece structure (Bed + Base + Tailstock Guideways) has 30 degrees slant angle and is made of high grade cast iron for highest rigidity. It is filled with a special epoxy 'Harcrete' for vibration damping to enable heavy cuts with best surface finish & tool life.

COMPETITOR

3 Piece Structure (Bed, Base & Tailstock Guideways) Bolted Together

CITIUS ADVANTAGES

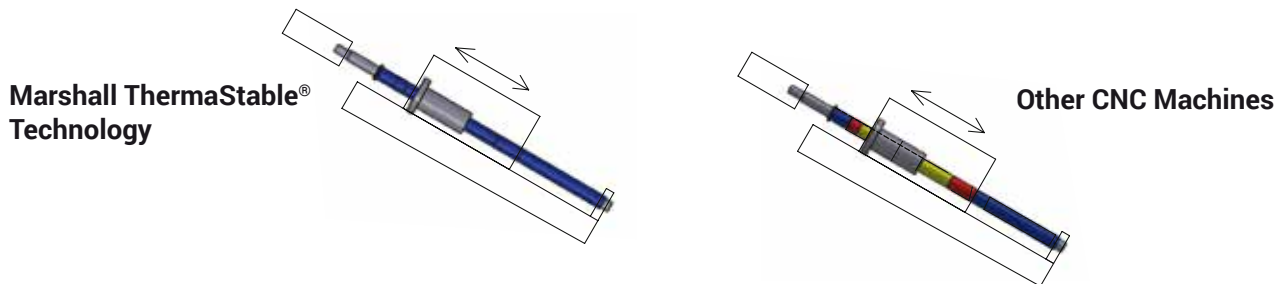
1. Much better rigidity & vibration damping
2. Can take much heavier cuts to reduce cycle time
3. Longer machine life
4. Better alignments leading to higher accuracy.



2. THERMASTABLE® TECHNOLOGY

One of the major problems in almost all CNC Lathes in the market is variation in size when machine is re-started after stoppage (e.g. Lunch Break). The shift in size before and after stoppage can be between 10-20 microns. This is because the movement of the preloaded nut on the ball screw cause temperature rise which leads to expansion of the ballscrew (Thermal growth). If operator is not experienced and alert, it can result in many jobs being rejected.

Marshall's "ThermaStable®" technology (introduced for the 1st time in India) results in Zero Thermal Growth of Ballscrew. This is ensure no variation in size after machine is re-started after stoppage.



THIS TECHNOLOGY IS NOT AVAILABLE WITH COMPETITORS

3. TAILSTOCK GUIDEWAYS

Tailstock guideways of most CNC turning centres are of unhardened materials (cast iron or steel). These are easily damaged by denting & wear and lose accuracy. Operators have to struggle to produce jobs within tolerances. For the first time in India, Marshall introduces INDUCTION HARDENED & GROUND Alloy Steel tailstock guideways for very long life & highest accuracy.



CITIUS



COMPETITOR'S MACHINES

COMPARISON OF PERFORMANCE



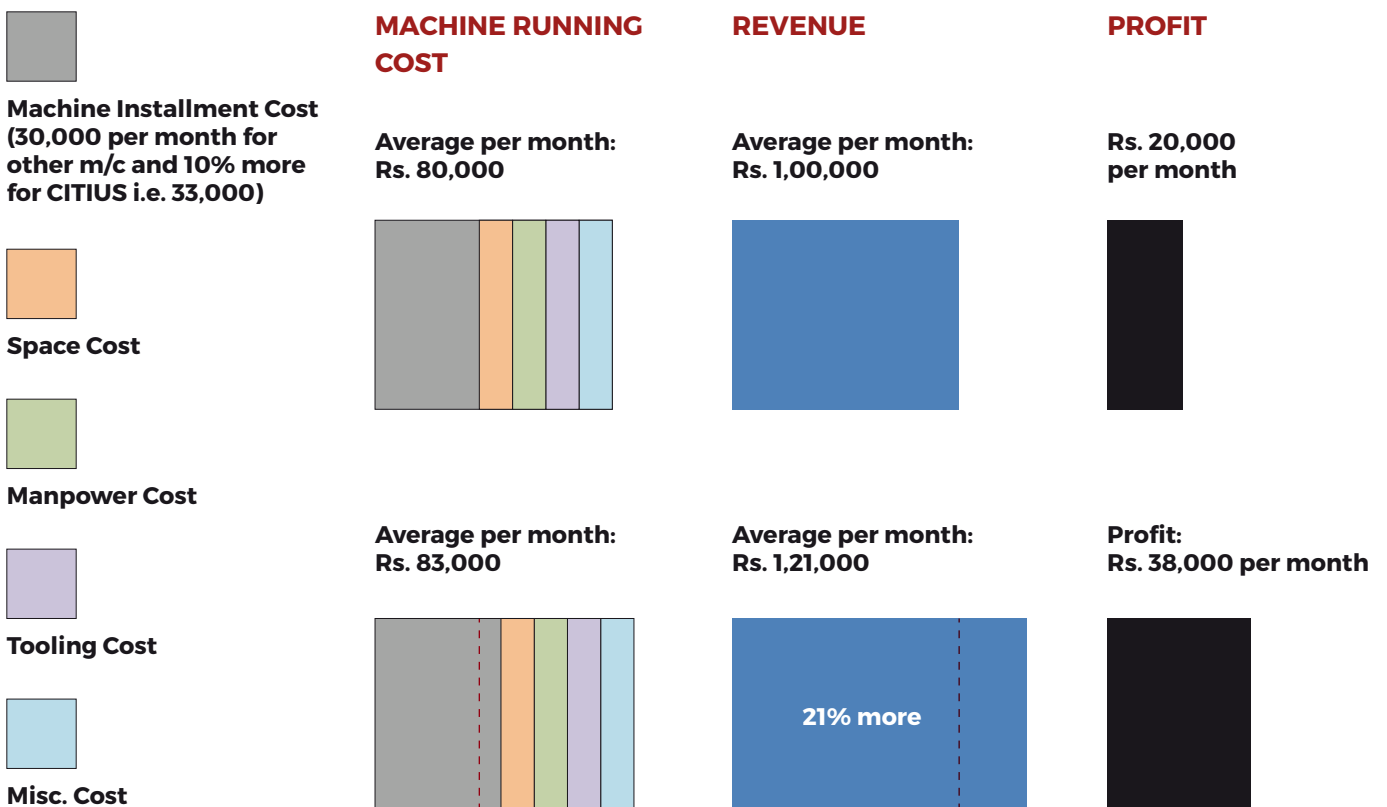
CASE STUDY:

JOB: HONDA ACTIVA CRANKSHAFT

CITIUS MACHINING TIME	91 SEC.
COMPETITOR'S MACHINING TIME	110 SEC.
EXTRA PRODUCTIVITY	$110/91 = 1.21 = 21\% \text{ EXTRA}$

EXTRA PRODUCTIVITY = EXTRA PROFITS!

21% extra productivity = 21% extra jobs in same time = 21% extra REVENUE!



Profit per CITIUS is 1.9 times, i.e. 90% more than other India Single Spindle Machines



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