



ETHEREAL MACHINES

Ethereal HALO

SIMULTANEOUS 5 AXIS CNC MACHINE



#startupindia



Ethereal HALO

SIMULTANEOUS 5 AXIS CNC MACHINE



ETHEREAL MACHINES

Ethereal Machines brings to you the world's first desktop sized 5 axis Simultaneous milling machine. The Ethereal Halo has been built to be pocket friendly and easy to use, while maintaining industrial level accuracies. The Halo can equip a whole range of innovators ranging from specialists to full-fledged industries, with brisk prototyping and manufacturing capabilities. The machine is ideal for MSMEs and SMBs who are looking to upgrade their capability from 3 axis and 4 axis to 5 axis operations which include both indexing and simultaneous functionalities. Advanced technology combined with affordability can provide you with economic solutions for the complex geometries that engineering jobs command.



FEATURES

MANUFACTURING

Built to machine complex geometries at industrial speeds

COMPACT DESIGN

Designed and engineered to occupy minimal floor space

5-AXIS SIMULTANEOUS KINEMATICS

5 axis simultaneous movement to help reduce machining time

HIGH ACCURACY DRIVE MECHANISM

Achieved through utilization of high accuracy ball screws and linear guide rails

PC-BASED CONTROLLER

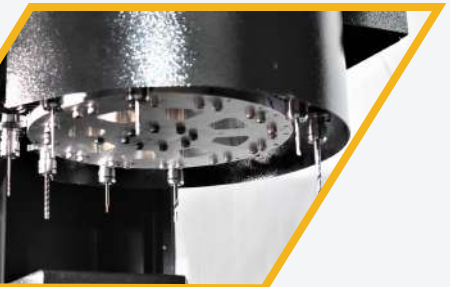
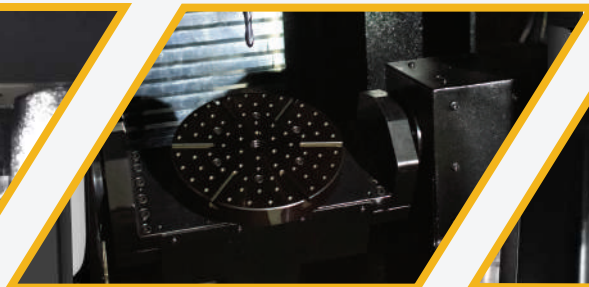
Real time monitoring and control of the machining job in progress

COOLANT

Mist coolant in order to aid milling process of metals

DYNAMIC WORK OFFSETS + TOOL CENTER POINT CONTROL

To reduce setup time and increase productivity



TECHNICAL SPECIFICATIONS



OVERVIEW OF THE MACHINE

The Halo is built to handle full scale production machining. Small complex parts that are difficult to machine in aerospace, tool & die, dental, electrode and micromechanics industries can be achieved on the Halo.

ACCESSIBILITY – Unfettered accessibility to the work piece and work area in order to load/unload parts.

PROTECTION – Optimally designed bellows to protect the inner components of the machine from chips and dust generated during machining process.

COMPACT – Minimal occupation of floor space amounting to 2.8 Sq meter

SPINDLE– Precision spindle with ISO 20 tool holding fixture

ENERGY CONSUMPTION – Low energy consumption of 2.2KW leading to more savings during operations.

MULTI-MATERIAL MACHINING – Capabilities of machining materials such as aluminium, brass, titanium, copper, cobalt chromium, zirconium, wax, engineering plastics (Eg: PEEK, delrin), wood and composites.

POWER – Single phase power operation of the entire machine

TABLE

Size	ø230mm
Mounting Screw	M6
Max Weight	10 Kgs

TRAVEL

X AXIS	220 mm
Y AXIS	365 mm
Z AXIS	260 mm
A AXIS	-30 deg to +110 deg
C AXIS	360 deg

SPINDLE

Max Rating	2.2 kW
Max Speed	30,000 rpm
Taper	ISO 20
Cooling	Water Cooled

FEED RATE

Rapid on X	10 m/mim
Rapid on Y	10 m/min
Rapid on Z	10 m/min
Max Cutting	5 m/min

TOOL CHANGER

Type	Carousel
Capacity	12 Tools
Max Tool Diameter	12 mm
Max Tool Weight	1 kgs

MISCELLANEOUS FEATURES

Coolant	SystemDry / Mist Cooling
Lubrication	Auto Centralizat-ion Lubrication
Work Light	LED

AIR REQUIREMENT

Air Required	5 bar - 7 bar
Inline Air Hose	10 mm dia

FOOTPRINT

Machine Length (max)	2 Meter
Machine Width (max)	1.4 Meter
Machine Height (max)	2.4 Meter
Weight	3500 Kgs

ELECTRICAL SPECIFICATION

Input AC Voltage	220 V
Full Load Amps	40A

STANDARD ACCESSORIES

Pen Drive	
Machines Feet	

OPTIONAL ACCESSORIES

MPG	
Air Blow Gun	
Tools & Holders	
Chiller	
Self centering vice	



ETHEREAL MACHINES

www.etherealmachines.com



info@etherealmachines.com
sales@etherealmachines.com



No.202, 12th Main Road, 3rd Phase, Peenya
Industrial Area, Laxmi Devi Nagar,
Bangalore, India