

September 23, 2020

ELITE MACHINE SHOP

3782 Turner Road
Windsor, Ontario
N8W 3N3

Attention: Mr. Matthew Macovei

LEADWELL V-40iT 5-AXIS MACHINING CENTRE

Dear Matthew,

Thank you for the opportunity to quote the **LEADWELL V-40iT 5-AXIS MACHINING CENTRE** for your facilities in Windsor, Ontario.



THE ADVANTAGES OF 5-AXIS MACHINING

- reduced machining time by using a flat bottom end mill and maintaining perpendicularity to the complex surface you can step-over with the full cutter diameter – thereby substantially reducing the required number of passes across the full surface (which also applies to side milling angled surfaces)
- better surface finish by using a flat bottom end mill to maintain perpendicularity to the complex surface which can also eliminate ribbing caused by ball nose end mills
- eliminate multiple set-ups required to reposition the work piece for complex angles + surfaces (and eliminate multiple set-up errors)
- eliminate costly tooling and fixtures required to hold the work piece
- eliminate manual mill work and hand work required to clean up and polish rough surfaces
- machine complex part geometries that are otherwise possible - including holes required to be normal to a complex surface

MACHINE FEATURES

- the Leadwell V-40iT optimally concentrates the machining process for multi-face, intricately shaped work pieces and some difficult work piece positions where 3-axis machines cannot reach such as undercutting
- for depth mould the Leadwell V-40iT can still keep high efficiency machining by setting a suitable angle of tool, thereby shortening the tool holding length
- avoiding accumulative error from series machining procedure decreasing total cutting time while achieving required high speed high accuracy high efficiency
- 3-axis programs can still be run under constant position set-up for A/C axis without any cutting interference
- high rigid cast iron construction with closed type design
- stable machine design supported by big span saddle and foundation
- without counter weight enhance the machine accuracy on mould making as well as avoid vibration
- Z-axis transmission end fixed as well as ball screw pretension which enables to reduce operating temperature

MACHINE SPECIFICATIONS

TRAVEL

X-axis	846mm (33")
Y-axis	635mm (25")
Z-axis	488mm (19.2")
X/Y/Z axis feed motor	4kW (5.4 hp)
Distance from table to spindle nose	from 50 to 538mm (1.9"-21")
Distance from column front to spindle centre	635mm (25")
Axis guide ways	linear roller for high speed + high accuracy + high torque machining

TABLE

Table diameter	350mm (13.8")
Table fixture plate	400 x 600mm (15.75" x 19.68")
Maximum load capacity	200kg from 0 to 45 degrees 100kg from 60 to 90 degrees
Tilting angle range	from +40 to -120 degrees
T-slot width	12mm
Height from floor to table top	1220mm (48")
Brake torque	35kg/cm ²

SPINDLE

Spindle nose	BT/CAT#40
Spindle bearing inner diameter	70mm (2.75")
Spindle power S1-100% (S6-40%)	15kW (20.1 hp)
Spindle torque	70Nm (51.7 ft-lbs)
Maximum speed	12000 rpm
Transmission	H.T.D. belt
Tool clamping force	850kg (1870 lbs.)

FEED RATE

X/Y axis rapid feed rate	36m per minute (1417" per minute)
Z axis rapid feed rate	20m per minute (792" per minute)
X/Y/Z axis maximum cutting feed rate	10m/minute (394" per minute)
A/C-axis rapid feed rate	25 rpm

AUTOMATIC TOOL CHANGER

Type	arm
Tool shank	BT/CAT#40
Number of tool pockets	30
Maximum tool diameter with adjacent tool	80mm (3.15")
Maximum tool diameter with adjacent empty pockets	110mm (4.3")
Maximum tool length	250mm (9.8")
Maximum tool weight	7kg (15.4 lbs.)
Tool-to-tool change time	1.8 seconds

GENERAL

Machine dimensions (length x width x height)	3840 x 2200 x 2721mm (151.2" x 86.6" x 107")
Machine weight	7000kg (15432 lbs.)
Electrical requirements	400 volt

STANDARD & INCLUDED EQUIPMENT

- Fagor 8065 5-axis simultaneous control with 3D graphics and fully conversational + standard EIA (G-code) programming
- linear + rotary scales for high accuracy
- full enclosure
- belt type chip conveyor with built-in auger type chip conveyor
- work light
- alarm light
- heat exchanger
- rigid tapping
- auto counter for work piece
- remote manual pulse generator (MPG = electronic hand wheel)
- through tool air blast
- surrounding coolant system (coolant ring)
- 300 psi coolant through the spindle
- wash down system
- spindle oil cooler
- spindle air purge
- Renishaw TS-27 tool measuring probe
- 30 pull studs
- transformer

PACKAGE PRICE: US \$169,900

TERMS AND CONDITIONS

The pricing

Pricing shown is in US funds.

The above pricing is F.O.B. Masteel in Oakville, Ontario.

Applicable taxes are extra.

CSA approval is included in the pricing.

The payment terms

30% with order, 60% on delivery, 10% 30 days after delivery.

Warranty

Two (2) years on parts & labour.

Delivery

From stock for immediate delivery, subject to prior sale.

***CUSTOMER'S RESPONSIBILITY**

- Pick-up the machine at Masteel in Oakville, Ontario.
- Off load the machine from the truck at the customer's site.
- Provide all lifting equipment to move the machine into place for assembly.
- Foundation per requirements.
- Power to the machine.
- Hydraulic + way lube oil plus coolant fluid for the machine.

***MASTEEL'S RESPONSIBILITY**

- Assemble / level the machine on the customer's shop floor and anchor the machine to the customer supplied foundation.
- Complete the machine installation and accuracy test.
- One day of basic machine operator training.

Pre-Start Health and Safety Review (PHSR) is the responsibility of the customer and is not included in the above pricing.

This proposal is valid for thirty (30) days.

We look forward to working with you on this project.

Sincerely,

MASTEEL AMERICA CORPORATION

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