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PRECISION CNC GRINDING MACHINES

ITM HOLDS OVER 30 PATENTED MACHINE DESIGNS.

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ITM Design & Manufacturing Facility

5 Industry Drive

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Tel.: 386-446-0500

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ITM Machines for your consideration:



FLUTE SERIES | PEEL SERIES | ROTARY SERIES | THREAD SERIES | FILTER SYSTEMS

FLUTE SERIES

Universal Flute Grinder

- UFG-12, UFG-25, UFG-50

UFG

4 CNC AXIS
FLUTE GRINDING WITH
CONVENTIONAL OR
SUPERABRASIVE WHEELS



Universal Flute & Gunnose Grinder

- UFGG

UFGG

UP TO 7 CNC AXIS
STRAIGHT FLUTES, RIGHT AND
LEFT HAND FLUTES, GUNNOSE
& CHAMFER



PEEL SERIES

Chamfer Grinder

CG

4 CNC AXES
TAPS: CHAMFER WITH OR
W/O RELIEF, COUNTERSINKS
& ROUTERBITS

Form Grinder

FPG

MOTORSPINDLES UP TO 30HP
2 CHUCKS FOR GRINDING
BOTH PART ENDS MAINTAINS
0.01MM CONCENTRICITY

Peel & Plunge Grinder

- PPG-250 & PPG-500

PPG

GRIND BETWEEN CENTERS
HSS, CARBIDE & STAINLESS
BLANKS GROUND TO
HIGH TOLERANCE



ROTARY SERIES

Rotary Transfer Grinder - Multi Station

COMPLETE PRODUCTION OF TOOLS & PARTS IN UP TO 6 STATIONS

- RTG Mini (Production of small tools)
- RTG-3/2 & RTG-3/3 (Index Table with 3 Collets)
- RTG-6/3, RTG-6/4 & RTG-6/5 (Index Table with 6 Collets)



THREAD SERIES

UP TO 5 CNC AXES WITH MOTORSPINDLES UP TO 20HP

- **Taps:** Thread and Chamfer in the same clamping
- **Thread Gages & Form Taps**
- **Bone Screws**
- **Thread Rolls** with up to 400 starts
- **General Thread Grinding** with or without relief
- **Multi-rib or Single-rib Grinding**



FILTRATION SYSTEMS

- AFS-8-200 Coolant Filtration System
- Cleaning rate per filter dome 200-300 l/min (53-80gpm)
- Up to 50 bar (800 psi) coolant pressure
- Large Oil Reservoir up to 2000 liters (530 gallons)
- Stand-Alone Sludge Drying Unit
- Integrated Sludge Dryer to Recycle & Prolong Oil Usage

Advanced 5µ Filtration



2 ITM Machines are Designed for 24 Hour Production...7 Days a Week

ITM Company History:



Mission Statement: ITM was founded with the purpose of supplying application driven, high value production grinding machines to a worldwide customer base. ITM builds the machines that help customers build precise tools in less time. Precision built to last. Continuous improvement of products is an ITM policy.

Grinding out the limitations.

ITM was founded in June of 1981 in Westport, Connecticut. In 1992, ITM moved it's operation to Palm Coast, Florida. The new facilities have provided ITM with room to grow as it's customer base increases. Devoted to solving the most challenging grinding operations, ITM's machine concept has been developed through constant consideration of the market's needs.



ITM Design & Eng. Facility, Palm Coast



Front Office

A worldwide customer base and exposure to a variety of industry markets such as cutting tools, tools and parts for the medical industry, automotive industry and other special fields has provided ITM with the knowledge that can only be obtained through years of diversified experience. This knowledge and experience is utilized in our present machine design. By using a building block concept, in conjunction with the latest computer technology, our machines are easily tailored to the customer's exact needs. This results in a machine perfectly suited for the customer's desired applications.

As of 2013, International Tool Machines continues to enjoyed a successful history in the production of precision computer controlled grinding machines. In the production of it's products, the ITM Corporation develops the concept and the software, and assembles the machines as well as the required electronics. The entire development and design process of the ITM product is accomplished utilizing the latest computer technology.



ITM Assembly Area

Form & Plunge Grinder (FPG)

tel: 386-446-0500

email: info@itmfl.com

Your First Choice for High Production & Precision OD Grinding

ITM FORM GRINDERS

PEELSERIES

(PPG, FPG, UODG)

- *For High Performance OD Grinding and end of tool Grinding*
- *Diameters from 2.5mm to 50mm (see model number)*
- *Materials: High Speed Steel, Stainless, Carbide, Ceramic & PCB*
- *Clamping with two individual Chucks for grinding both part ends in one set up, or clamping with Chuck & Center*
- *Wheels: Conventional, CBN & Diamond*
- *FANUC Controls*



ITM's PEELSERIES Form/Peel Grinder is an integration of German engineering and US manufacturing, build completely by engineers at the Palm Coast, Florida facility. The machine is designed to grind the points and cutting diameters of tool blanks complete in one setup. Two rigid synchronized spindles are mounted opposite each other onto high precision rails. One spindle is equipped with a high precision power chuck, the other spindle can be equipped with female centers.

The machine has a heavy duty, vibration-less base. The twin Workheads (A axis: Tool rotation), cross slide (Z axis: wheel infeed), longitudinal slide (Y axis), and one workhead (X axis: workhead longitudinal travel) are CNC controlled. The machine can be equipped with an automatic cassette loader or a FANUC robot to allow for hours of unattended operation.

For loading and unloading, ITM offers a cassette loading system. Up to 300 pieces can be pre-loaded in cassettes for long periods of unattended operation.

Contact us for more information at 386-446-0500 or visit us at www.itmfl.com

Optional Robot Loader



Form & Plunge Grinder (FPG)

tel: 386-446-0500

email: info@itmfl.com

PEELSERIES: High Performance O.D. & End of Tool Grinding

Form & Plunge Grinder

For grinding cylindrical or tapered parts with multiple steps or profiles..

- 4 CNC Axes
- Motor spindles up to 30HP

WORKPIECE DATA

- Min. Diameter 2.5 mm
- Max. Diameter 50 mm
- Max. OAL 300 mm (12")
- Other dimensions upon request!

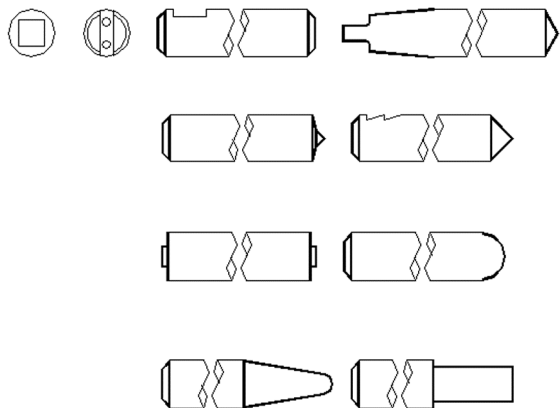
GRINDING WHEELS

- Diameter 350 mm (14")
- Diamond, CBN
- Up to 150 m/s (30,000 sfm)

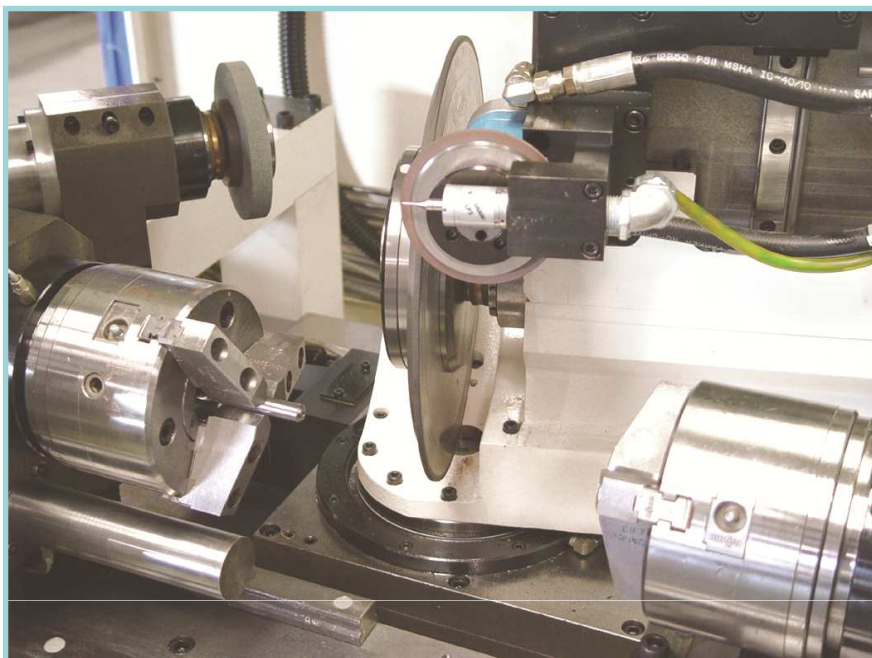
MACHINE DIMENSIONS

- Height: 2335 mm (92")
- Width: 2690 mm (106")
- Depth: 2845 mm (112")
- Weight: 5,000 kg (11,000 lbs)

SAMPLE CONFIGURATIONS



ITM holds over 30 patented machine designs.



GRINDING OPERATIONS

Straight OD's, Contours, Tapers, Chamfers, Profiles, Shoulders, Grooves, End of Tools etc.

MACHINE FEATURES & OPTIONS

- Clamping with two individual Chucks for grinding both part ends in one set-up, or clamping with Chuck & Center
- Workpiece Rotation up to 5,000 rpm
- CNC Wheel Head Angle 60°
- Water-cooled direct drive Motorspindles with quick change flanges
- Reliable FANUC Controls with built-in PC
- Inch/Metric switchable
- Internal dressing of Diamond and CBN wheels with silicon carbide wheels and diamond roll
- Automatic Probing of Wheel Diameter after dressing
- Auxiliary Spindle for additional Grinding operations, e.g. coolant hole connections, slots, squares, flats
- CNC Positioning for Workhead (A-axis rotation)
- Easy to use Windows based Software with Simulation Mode for grinding a great variety of part contours
- Automatic Cassette Loader with double gripper

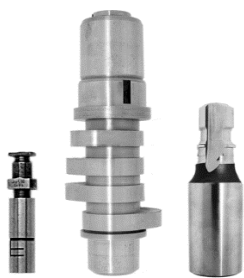


ITM Assembly Area

For over 30 years, ITM has been producing a variety of CNC grinding machines for worldwide customers

from a variety of industry markets such as precision cutting tools, medical instruments, aerospace components, and the automotive industry. ITM designs the machines, develops software, assembles the components, and installs all the machine electronics at the Palm Coast, Florida facility. The machined and fabricated components are outsourced to carefully selected vendors in Florida, Connecticut, and Germany. Many of our vendors have been with ITM since the beginning of the company. By outsourcing these components, we are able to respond quickly when large multiple machine orders are placed and at other times of high demand.

Sample Applications for ITM Machines



Aerospace & Automotive Parts



Burs / Routers



**Countersinks/Counterbores
Centerdrills**



Endmills



Hole Cutters



Dies

Medical Tools & Parts



Gears & Worms



Stepdrills



Taps

Recipe for Success!

The innovation of these machines is that 80 percent of their components can be applied universally to a range of tasks, while only 20 percent of the machine must be customized to suit specific tasks. ITM can also develop proprietary machine designs for customers giving them a distinct advantage over their competitors.

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For more information on ITM machines, please visit us at www.itmfl.com/en/profile



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Another key ingredient in ITM's success is the accumulated grinding knowledge that has been gained by ITM personnel from diversified exposure to a large number of industry markets. We believe that the best grinding machine is ineffective without the correct grinding technology.

ITM offers turn-key solutions with the most productive and cost effective grinding wheel technology and coolant systems. In order to overcome the limitations of existing coolant systems, ITM developed its own coolant filtration system. The correct grinding technology and a consistent coolant supply are the keys to producing high quality parts in the shortest time possible.



ITM Service Team

ITM Machines are Designed for 24 Hour Production...7 Days a Week 7

High Precision & High Production Grinding



International Tool Machines

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