Better than 3D-printed... MasterPrinted!









MasterPrint

Program, Simulate, 3D Print and Mill with Ingersoll Machine Tools' new Additive Manufacturing Solution

MasterPrint is Ingersoll Machine Tools' new family of Additive Manufacturing equipment that provides your company with the ability to program, simulate, 3D print and mill wide-and-high composite parts in a single piece.

MasterPrint has been designed, built and tested in the dedicated Development Center at the Ingersoll U.S. headquarters in Rockford, Illinois.

MasterPrint is aimed both at the *fast prototyping* and *durable molds* manufacturing needs of the aerospace and naval sectors, but can serve a wider market, wherever printing cheaply, quickly, reliably wide-and-high parts is a requirement.







MasterPrint differentiates from the competitors' line-up through core-distinctive features that have made Ingersoll's products easily recognizable and greatly appreciated by the market

- 1. Flexibility to manufacture durable tools of complex geometry, with
 - a **family of variable-angle nozzles** to print at any orientation
 - a wide range of materials to print with, starting from simple pellets: ABS, ULTEM/PEI, PPS/PEEK, PPSU-PESU, Nylon, Polycarbonate (PC), Polystyrene (HIPS) ...



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2. An Hybrid System - to expand and upgrade your equipment just with the tools you need

multiple modules all exchanged with and handled by a single positioner, gantry or robotic:

- 3D Printing (3 6 axes)
- milling (5 axes)
- fiber placing (6 axes)
- tape laying (6 axes)
- inspection (6 axes)
- trimming (6 axes)





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3. Capacity - to manufacture wide and high parts in a single piece, using

extensive working volumes starting from 12 m long, 2.5 m high, 4 m wide

large flow extruders of 150 – 300 - 500 – 1000 lbs/h fed by equal size dryer equipment





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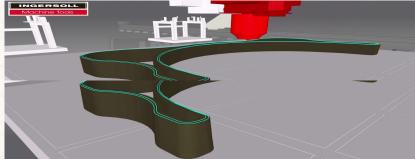
4. The Siemens 840D CNC

the control your operators and maintenance crews are most familiar with

5. A Seamless programming environment

Ingersoll SW Suite to program and simulate all manufacturing operations and modules











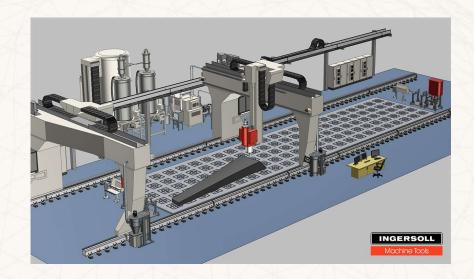
6. Simplicity, Safety and Ergonomics

no large enclosures, but open-air printing with Ingersoll's application of localized high-temp heat and effective fume management

perimeter guarding for total protection. Safe, easy and convenient access to the workzone in maintenance mode with control pendant;

zone management

single machine operating in multiple zones multiple machines sharing multiple zones





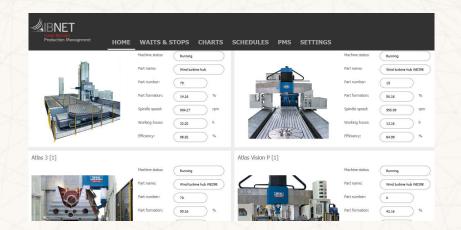
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remote process/equipment monitoring and pre-emptive maintenance with Ingersoll IB-NET

compliance with U.S. and E.U. (CE) regulations and certifications



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