

Introducing The First Fiber Molding Machine: **SinterCell™ 200**

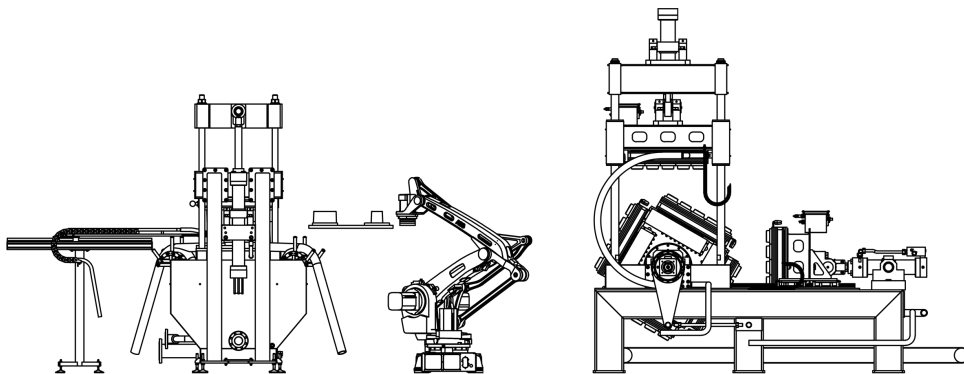
The SinterCell™ 200 is a second-generation wet-fiber molding machine that achieves unprecedented productivity through innovative engineering, proprietary tooling design, and intelligent control system technologies.

The intelligent control system is the “brain” that optimizes each part of the SinterCell™ 200 fiber forming process and the process flow, ensuring fast production with high and consistent quality. Thereby eliminating any guesswork and tinkering needed for optimal performance.

The system enables the fiber-forming process to forge superior hydrogen bonds between the cellulose fibers by rapidly removing free-moving water particles under high heat and high pressure without destroying the important properties of the cellulose.

Design Features and Highlights

- Controlled press nips for water and steam extraction
- Equipped with Hoting's flexible, high-temperature, and highly porous bronze tools
- Lightweight with a low energy consumption footprint
- Intelligent control system with trend analysis, performance monitoring with recipe library
- All machines are certified for food product processes
- Rotating tool press design
- Designed for easy cleaning and low downtime for maintenance and tool changes
- Shunt circulation for forming tank enables even fiber distribution
- Closed-loop water system
- Remote access and control capability for fast assisted help
- A standard pulp feeding system can feed up to three machines
- Variable stroke



Technical Specifications

Reference Product: SC - A13 Tray
 Dimensions 108(w) - 162 (l) - 36(h) mm

Surface Area: Pulp Forming Unit Rotational Press Unit Tool Plate Forming Area	1529(w) - 3510(l) - 2357(h) mm 3500(w) - 2900(l) - 3885(h) mm 830 mm x 1300 mm
Installed Power	350 kW
Average Power Consumption ¹	180 kW
Maximum Product Height	120 mm
Recommended Material of Production	BCTMP 400 CSF

Technology, Process and Performance

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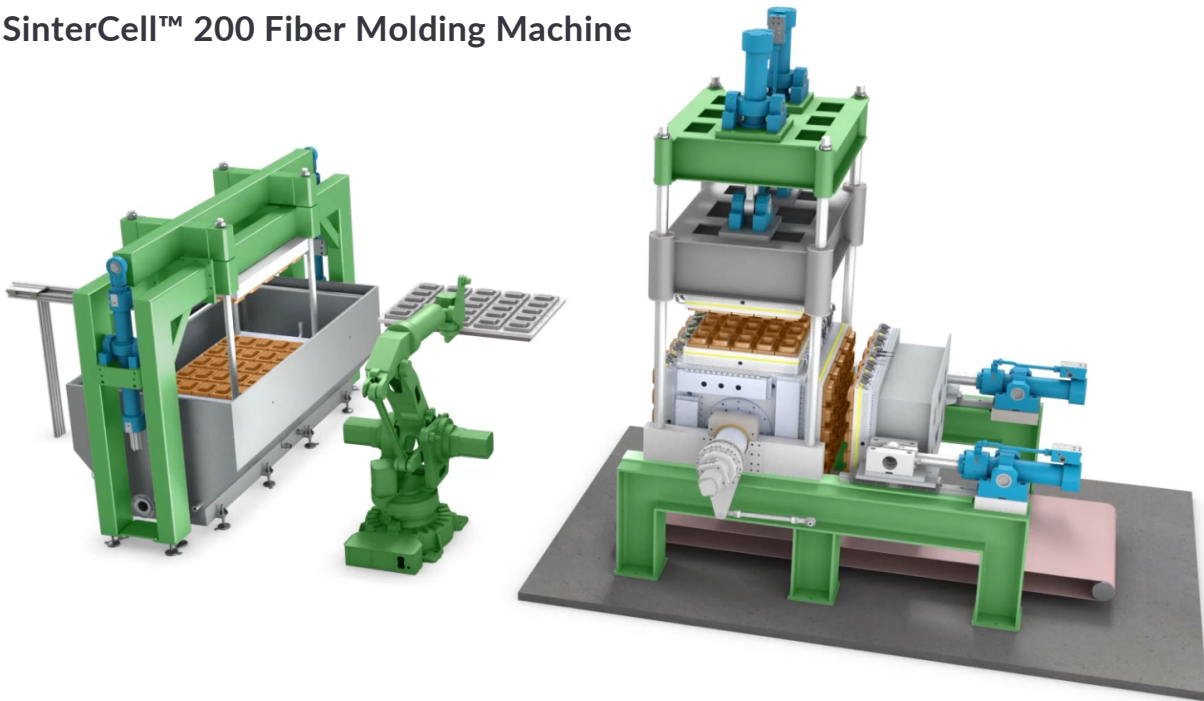
Productivity Speeds:	4500 to 5625 pieces per hour 16 to 20 seconds per cycle
Power Consumption ¹	3,760 to 4,660 kWh per 1000 kg of pulp
Pulp/Water Concentration	0.5% to 0.9%
Process Steps	1. Forming 2. Hot Press Drying
After-Press Average Product Humidity	5% to 10%
Product Weight	12 to 14 grams
Wall Thickness	0.7 to 1.0 mm
Minimum Wall Angle	Heights over 30 mm: 11 degrees Heights under 30 mm: 7 degrees
Maximum Press Force	40 tons
Heat Utilization	Up to 230°C on tool surface ~ 120°C on tools in rotating box

¹ Power consumption estimates are based on 1st generation SinterCell™ 100 machine performance

Service Consumption Inputs

Compressed Air	Air quality SS-ISO 8573-1
Volume	70 liter/second oil free pressure: 7 bars
Electrical Power	Installed: 350 kW Production: 180 kW
Power Supply	3 x 400 VAC/N/PE/50Hz
Water Supply	Quality, soft water 2°-5° German hardness flow
Ventilation	No additional ventilation required in industrial facilities

The SinterCell™ 200 Fiber Molding Machine



Packaging In Harmony With Nature

SinterCell™ 200

Machine Components List

Components	Description
Pulp Forming Unit	The pulp-forming unit consists of the forming tank and forming tools used to mold the cellulose into its 3D shape.
Robotic Transport Arm	Robotic transport arm is used to move units from the forming unit to the rotational press unit. The robotic arm can be configured to service two forming tanks to one rotational press unit or two rotational press units from one forming tank.
Rotational Press Unit	Proprietary toolsets run on a rotational basis to calibrate the heat, pressure and steam extraction to create a signature SinterCell hydrogen cellulose bond.
Toolsets	Tools are exclusively manufactured by Hoting Innovation according to design and end-product specifications defined in consultation with the customer.
Intelligent Control System	A Control system for logging production data and recipe handling provides the means for supervisory control and data acquisition via automation software.
<i>Optional Components</i>	
After Treatment Unit	Addresses the various after treatment needs inclusive but not limited to; the robotic pick and place system together with quality control camera, printing, and lamination stations.
Crane	To expedite tool plate changeover
Quality Monitoring System	Programmable system to monitor production output.

Disclaimer: Performance estimates will vary based on actual SinterCell™ end-product specifications, tooling configurations, and production volume.