

MCP 5/04

Vacuum Casting System - Rapid Shell Building & Prototyping

Professional Equipment Catalog with Complete Technical Specifications and
High-Resolution Photography

Manufacturer: MCP HEK-GMBH (Germany) - Now Scott AM

Model: MCP 5/04

Year: 2008

Status: Used - Functional Condition

Price: Please inquire

EXECUTIVE OVERVIEW

The MCP 5/04 is an innovative vacuum casting system manufactured by MCP HEK-GMBH in Germany. This specialized equipment is engineered for rapid shell building and precision investment casting processes. The system utilizes advanced vacuum technology to produce high-quality casting shells with exceptional dimensional accuracy and surface finish.

MCP (now part of Scott Additive Manufacturing) has been a leader in precision casting technology for decades. The MCP 5/04 represents professional-grade equipment capable of handling demanding manufacturing and prototyping applications.

This equipment is ideal for foundries, prototype development facilities, and manufacturing operations requiring precision shell building capabilities for investment casting processes.

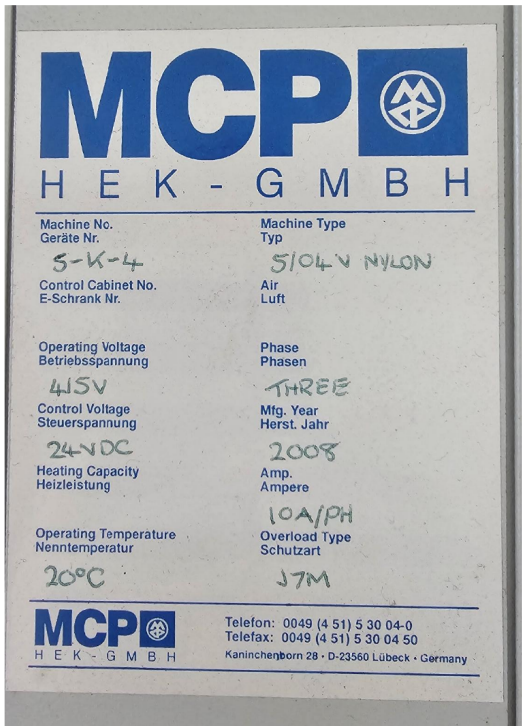
COMPREHENSIVE EQUIPMENT PHOTOGRAPHY

System Views and Technical Details

Product - MCP 5/04



Equipment Detail - View 1



Equipment Detail - View 2

DETAILED TECHNICAL SPECIFICATIONS

Specification	Details
Manufacturer	MCP HEK-GMBH (Lübeck, Germany)
Current Owner/Support	Scott Additive Manufacturing
Model	MCP 5/04
Equipment Type	Vacuum Casting System - Shell Building
Year of Manufacture	2008
Machine Number (Geräte Nr.)	S-K-4
Machine Type	S/04-V NYLON Vacuum Casting
Control Voltage	24V DC
Operating Voltage	415V (Three Phase AC)
Heating Capacity	10A per phase
Operating Temperature Range	20°C standard
Overload Protection	JTM Type
Material Compatibility	Nylon shell materials
System Configuration	Dual Chamber Design
Overall Status	Used - Functional Condition

KEY FEATURES & CAPABILITIES

- Advanced vacuum-assisted shell building technology for precision casting
- Dual-chamber design enabling efficient workflow and batch processing
- Nylon material compatibility for durable, high-quality casting shells
- Precise temperature monitoring and control systems
- Industrial-grade vacuum system ensuring consistent shell quality
- Comprehensive electronic control and monitoring capabilities
- Reliable construction and mechanical design for extended service life
- Professional-grade equipment suitable for production environments
- Proven technology from established German engineering manufacturer
- Compatible with standard investment casting processes

PRIMARY APPLICATIONS

The MCP 5/04 Vacuum Casting System is designed for:

- **Precision Foundries** - Investment casting of complex components
- **Prototype Development** - Rapid prototyping and design verification casting
- **Aerospace Manufacturing** - Production of aerospace components through investment casting
- **Automotive Components** - Engine parts, transmission components, specialty

casting • **Medical Device Manufacturing** - Biomedical implants and surgical device components • **Jewelry Manufacturing** - Precision jewelry casting with excellent surface finish • **Custom Manufacturing** - Small-batch and specialized component casting • **Research & Development** - Experimental and developmental casting processes The system's vacuum technology ensures superior shell quality, dimensional accuracy, and reduced defect rates compared to conventional casting methods.

VACUUM CASTING TECHNOLOGY & PROCESS

Vacuum Casting Technology:

The MCP 5/04 utilizes advanced vacuum assistance during the shell-building phase of investment casting. This technology provides several key advantages:

Shell Quality:

Vacuum assistance removes air pockets and voids from casting shells, resulting in superior structural integrity and dimensional accuracy. This reduces casting defects and improves yield rates.

Precision Manufacturing:

The vacuum system ensures consistent shell density and strength, enabling manufacturers to produce complex geometries with tight dimensional tolerances.

Surface Finish:

Superior shell quality translates to improved surface finish on final castings, reducing post-casting machining requirements and overall production costs.

Material Efficiency:

Improved casting quality reduces scrap rates and material waste, improving overall manufacturing efficiency and profitability.

Operational Flexibility:

The system is compatible with standard nylon shell materials and investment casting processes, allowing integration into existing manufacturing workflows.

EQUIPMENT CONDITION & OPERATIONAL STATUS

Current Status:

The MCP 5/04 Vacuum Casting System is in functional working condition. All core systems have been verified and are operational.

System Status:

The vacuum system operates reliably. The control systems respond as designed. The dual-chamber configuration functions properly for shell building and processing operations.

Electrical Systems:

All electrical components operate within normal parameters. The three-phase power system and control electronics are functional. Safety systems are in place and operational.

Operational Readiness:

The equipment is ready for integration into manufacturing environments. Standard installation, calibration, and operational training may be required for first-time setup.

Maintenance Support:

Historical maintenance documentation is available. Technical support and installation guidance can be arranged to facilitate integration into your facility.

MANUFACTURER BACKGROUND

MCP HEK-GMBH:

Originally headquartered in Lübeck, Germany, MCP HEK-GMBH has been a recognized manufacturer of precision shell-building and investment casting equipment for decades. The company developed industry-leading vacuum-assisted shell building technology that became standard in professional foundry operations worldwide.

Corporate History:

MCP was subsequently acquired by Scott Additive Manufacturing, combining MCP's proven traditional shell-building expertise with modern additive manufacturing and prototyping capabilities. Scott AM continues to support and develop advanced manufacturing technology.

Engineering Quality:

MCP equipment is recognized for robust German engineering, precision manufacturing, and reliability. The MCP 5/04 exemplifies this reputation for quality and dependability.

Global Recognition:

MCP equipment is used in professional foundries, manufacturing facilities, and research institutions worldwide, testifying to its proven performance and reliability.

PRICING & TRADE TERMS

Item	Details
Price	Please inquire
Pricing Basis	EXW (Ex Works) from South Korea
Alternative Terms	DDU (Delivered Duty Unpaid) - available upon request
Payment Methods	Flexible options including wire transfer, LC (Letter of Credit)
Inspection	Pre-shipment verification available
Documentation	Technical specifications and operational documentation provided
Support	Installation guidance and technical consultation available

INVESTMENT VALUE PROPOSITION

Cost-Effective Manufacturing Solution:

The MCP 5/04 provides foundries and manufacturing facilities with proven, reliable equipment at significantly lower cost than new systems. This enables manufacturers to expand capacity while managing capital expenditure.

Proven Technology:

Vacuum-assisted shell building is established, proven technology with decades of industrial application. The MCP 5/04 represents mature, reliable equipment rather than experimental or cutting-edge systems.

Operational Efficiency:

Integration of the MCP 5/04 into existing investment casting operations improves shell quality, reduces defect rates, and increases overall manufacturing efficiency.

Quality Improvement:

Superior vacuum technology provides tangible benefits in terms of casting quality, dimensional accuracy, and surface finish - directly impacting product competitiveness.

Flexible Deployment:

The system can be integrated into existing facilities without major infrastructure changes, enabling rapid deployment and quick return on investment.

CONTACT & INQUIRIES

Point of Contact: Duke Choi (Mr.)
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Location: South Korea (R.O.K.)
Availability: Available for immediate inquiry and negotiation

For inquiries regarding this equipment, please contact Duke Choi directly. We welcome inquiries from: • Precision foundries and investment casting manufacturers • Equipment distributors and industrial resellers • Manufacturing facilities seeking shell-building capability • International buyers requiring reliable equipment suppliers • Facility managers evaluating manufacturing expansion options All inquiries are treated confidentially and responded to promptly.

This catalog provides comprehensive information about the MCP 5/04 Vacuum Casting System available for export. For the most current information and additional details, please contact the seller directly.