

# MV-10/20

ORBITING/VECTORIZING  
RAM EDM



**HANSVEDT**

Orbiting/Vectoring Ram EDM Systems  
*for precision and affordability*

Ram EDM Machining.  
Perfected by

**HANSVEDT®**



# Orbiting/Vectoring Ram Electrical Discharge Machining.

Perfected by Hansvedt.®

Hansvedt...simplifying the  
EDM process.



## MV-10/20 EDM FEATURES:

- Rugged, compact floor-standing machine tool
- Large workpiece capacities:  
MV-10—200 pounds  
MV-20—500 pounds
- Precision cast iron XY table with Turcite® lined dovetail ways
- Rigid cast iron quill-type ram with 3.375x3.25" platen to accept a V-block or precision tooling
- High-response DC servo and ballscrew drive
- Flexible, very-friendly software with menus for a wide variety of tasks
- 3.5" disk drive and RS-232 I/O
- High performance, digital 75-peak amp M-Pulse power supply (150-peak amp optional)
- Programmable DC arc protection
- Programmable orbiting/vectoring head with .400" travel in U- and V-axes
- High-flow dielectric fluid system including reservoir, pump and 5 micron filter
- Flushing controls for pressure, worktank bypass and fluid level
- Fluid level safety switch and transparent worktank door

## PRODUCTIVITY YOU DEMAND:

- Orbiting/vectoring feature reduces electrode requirements and finishing time—separate roughing and finishing electrode sizes are not required
- Orbiting produces a better surface finish on both the cavity bottom and sidewalls, reducing polishing time
- Orbiting allows easier part size control with better accuracy—adjust cavity size independent of electrode size
- Built-in library of surface finish settings plus user defined capability
- Dependable DC arc sensing avoids damaged parts and electrodes

## PERFORMANCE YOU EXPECT:

- Exceptional metal removal rates:  
1.4 in<sup>3</sup>/hr, graphite to steel  
2.7 in<sup>3</sup>/hr optional
- Surface finish: 8 micro-inch AA
- Fast worktank fill and drain rates
- Exceptional operation with both graphite and metallic electrodes
- Continuous filtration system provides a high flow of clean fluid to the work area
- Orbiting motions allow optimum flushing conditions

## PROFITABILITY YOU DESERVE:

- Customize an option package to suit your requirements:  
75-amp booster module  
Fire suppression system  
Dielectric chiller  
Remote control  
Off-line programming software  
Capacitor module  
System 3R tooling
- Outstanding customer support with installation, factory training and phone assistance
- Energy efficient and operator safe low voltage power supply output

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## MV-10 EDM SPECIFICATIONS:

Machine	
Table Dimensions (WxD)	15x9"/381x229mm
Worktank Dimensions (WxDxH)	24x16x11" 610x407x280mm
Table Travel	
X-Axis	8"/203mm
Y-Axis	6"/152mm
Ram Travel (Z-Axis)	8"/203mm
Orbit Travel	
U-Axis	.400"/10mm
V-Axis	.400"/10mm
Platen-to-Table Distance	4.75 to 12.75" 121 to 324mm
Electrode Weight (Max.)	33b/15kg
Workpiece Capacity (Max.)	200lb/91kg

### Dielectric System

Reservoir Capacity	65 US gal / 225 liter
Filter Type	Dense Pack

### MV-10 Floor Space

(WxDxH)	70x60x84" 1778x1524x2134mm
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### Net Weight

1,950lb/886kg

## MV-20 EDM SPECIFICATIONS:

Machine	
Table Dimensions (WxD)	20x12"/508x305mm
Worktank Dimensions (WxDxH)	35.5x20.5x13.0" 902x521x330mm
Table Travel	
X-Axis	13"/330mm
Y-Axis	10"/254mm
Ram Travel (Z-Axis)	8"/203mm
Orbit Travel	
U-Axis	.400"/10mm
V-Axis	.400"/10mm
Platen-to-Table Distance	6.75 to 14.75" 171 to 375mm
Electrode Weight (Max.)	33lb/15kg
Workpiece Capacity (Max.)	500lb/227kg

### Dielectric System

Reservoir Capacity	100 US gal / 378 liter
Filter Type	Dense Pack

### MV-20 Floor Space

(WxDxH)	85x74x84" 2159x1880x2134mm
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### Net Weight

2,600lb/1182kg

## MV-10 AND MV-20 CONTROL/POWER SUPPLY:

Type	PC based
Controlled Axes	Z (ram) UV (orbiter)
Memory	2 GB
CRT display	14"/365mm
Input	Manual, RS-232 3.5" disk drive
Output	RS-232 3.5" disk drive
Peak Current	75 amp 150 amp optional
Electrode Wear	<1%
Input Power	195-250 VAC 60 Hz, 3 phase

*"Hansvedt Quality. Redefining  
Craftsmanship for the 21st Century."*



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## Hansvedt

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