

# Wire-cut EDMs MV-R Series

ADVANCE PLUS control expands the capabilities of electrical-discharge machining

**ADVANCE PLUS** 4-axis LSM (XYUV linear shaft motor)  
Four-sided hardened table



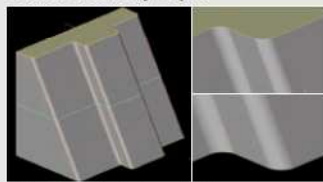
UV OPT-drive system  
(standard for MV-R series)

**ADVANCE PLUS** X **ODS**

## Improved corner and circular accuracy

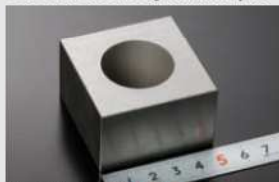
- ODS provides high accuracy even when cutting a U-V independent tapered shape
- Machining accuracy is improved in very small inside & outside corn tadii (CM3)  
\*CM3 (Corner Master3) : Corner machining control
- Compensation accuracy improved by new AFCⅢ servo control

Corner accuracy  $\pm 1\mu\text{m}$



Circle command of the top and bottom surface of arbitrary shape

Circular accuracy within  $2\mu\text{m}$



Wire electrode :  $\phi 0.2(.008)$ "/BS  
Workpiece : Steel (SKD11), 130mm(1.18")

V350V power supply  
(standard for MV-R series)

**ADVANCE PLUS** X **PFC**

## Improved machining speed

- V350V power supply control realizes high-speed machining
- Optimized control of power supply during intermediate and finishing processes reduces total machining time

Machining time reduced up to 17%

Conventional model

MV-S **Reduced 9%**  
MV-R **Reduced 17%**

Wire electrode :  $\phi 0.2(.008)$ "/BS  
Workpiece : Steel(SKD11), 160mm(2.4")

Machining time comparison for Rz3.5 $\mu\text{m}$  with 3 cuts

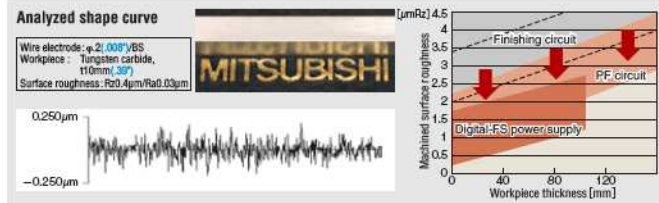
\*Compared to conventional Mitsubishi Electric Wire-cut EDM (FA Series)



Digital-FS power supply  
(option for MV-R series)

## Surface roughness of Rz1.0 $\mu\text{m}$ or less

- Optimum surface roughness of Rz0.4 $\mu\text{m}$
- Machining with the workpiece set directly on the table (insulation jig not required)
- V350V Machining range not limited (entire XY stroke area)



Angle Master ADVANCE  
(option for MV-R series)

**ADVANCE PLUS** X **ODS**

## Improved taper accuracy

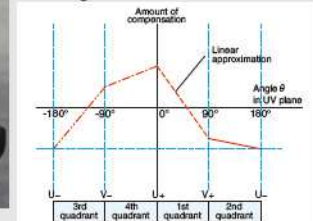
- ODS provides high accuracy even when cutting a U-V independent tapered shape
- Taper accuracy is improved regardless of wire angle direction

Machining accuracy  $\pm 2\mu\text{m}$



Wire electrode :  $\phi 0.2(.008)$ "/BS  
Workpiece : Steel (SKD11), 140mm(1.58")

Displacement control according to wire angle direction

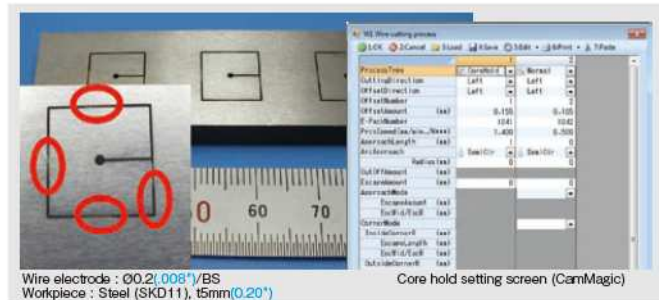


COREHOLD (sludge retention)  
(option for MV-R series)

**ADVANCE PLUS** X **NUI**

## Improved productivity

- This function allows the sludge to be automatically held in place after the rough cut for complete unattended operation
- These positions and lengths can be set by CamMagic or the built-in CAM on the machine



## Option

○ Standard equipment ● Factory installation only ×: Not available

	MV1200R/2400R	Installed machine
UV OPT-drive system	○	○
Angle Master ADVANCE	●	×
Special material machining power supply	○	○
Digital-FS power supply	●	×
COREHOLD	●	×
Sleep mode	○	○
Anti-virus protection	○	○

\*Anti-virus protection is provided by one of the world leaders in security control McAfee is a registered trademark of McAfee, Inc. in the United State and other countries

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