

High Precision Coating Tool

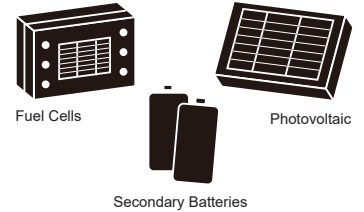
SLOT DIE

MMC RYOTEC Slot Die features high precision, quality, and durability by adopting Tungsten Carbide technology, top-tier manufacturing, fluid analysis and design, and a detailed inspection process.



■ **Application Ranges Include**

- Lithium Ion Battery
- OLED
- MLCC
- Capacitor
- Functional Films
- Thin Film Solar Cells / Organic Solar Cells
- Fuel Cells
- LCD
- Optical Films



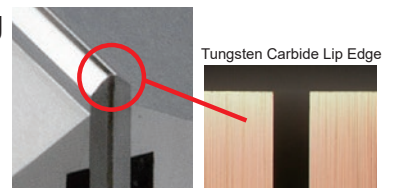
■ **High Precision by Proprietary Grinding Technology**

Our grinding technology enables us to improve the coating uniformity with a razor-sharp coating lip below 2µm/m straightness.



■ **Long-life and High Quality Coating due to Tungsten Carbide Lips**

The combination of stainless steel alloy body with excellent corrosion-resistance and micro-fine tungsten carbide with excellent wear-resistance, enables long life and excellent quality coating.



■ **Custom Sizing**

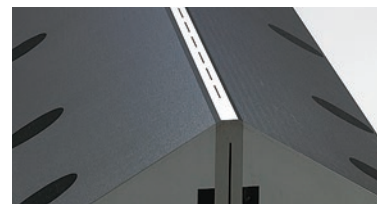
Can be manufactured to lengths up to 3800mm(150inch) for higher efficiency and productivity.

● **Application Ranges**

- Length Available : Max. 3800mm (Max. 150inch)
- Dry Film Thickness : 10nm - 0.7mm (0.0004mils - 0.027inch)
- Wet Film Thickness : 3µm - 1mm (0.12mils - 0.039inch)
- Viscosity : About 1cps - 30,000cps

■ **Coating Patterns**

Intermittent coating and striped coating is also available.



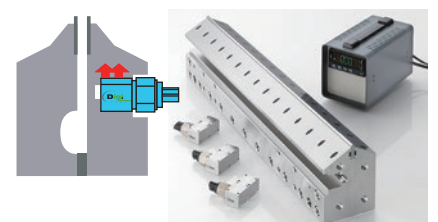
■ **Slit Width Adjustment Systems**

● **Bolt Adjustment**

- Bolt type allows precise adjustment
- Able to widen or narrow the slit width
- Wide adjustment range and high versatility

● **Hydraulic Adjustment System (Digi PRESS)**

- Accurate quantitative control is possible
- High restorability
- Easy-to-read digital hydraulic control display
- Adjustable at any position in the groove



MMC RYOTEC Corporation

A Group Company of MITSUBISHI MATERIALS

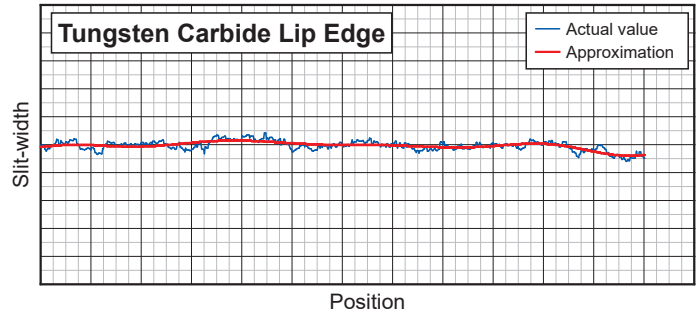
Precision Non-contact Measurement

An exclusive measuring tool for MMC RYOTEC' Slot Die

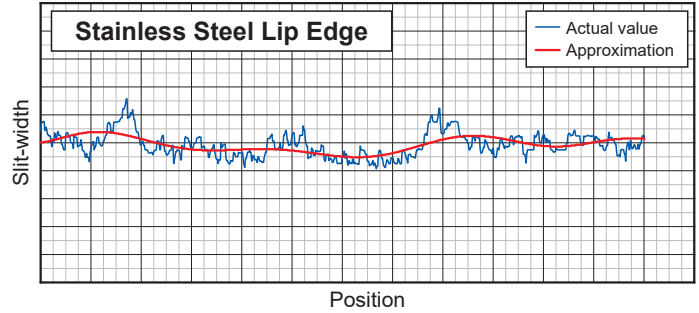


- CCD camera can measure slit width overall.
- Slit width that can be measured: Up to a Maximum of 0.5mm

Slit-width Measurement Data



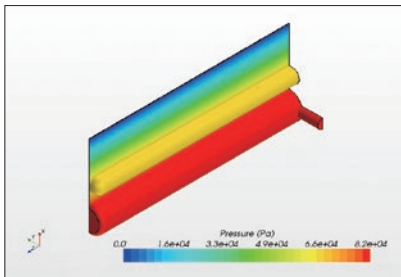
Slit-width Measurement Data



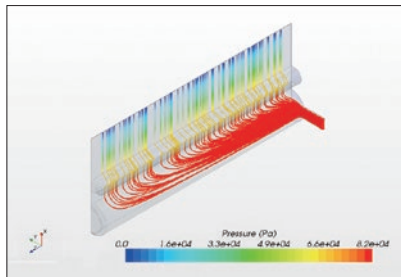
Fluid Analysis

The fluid analysis simulates the inner pressure of the manifold and deviation of the coating thickness, and the manifold shape can be optimized based on these results.

Distribution of inner pressure



Distribution of streamline

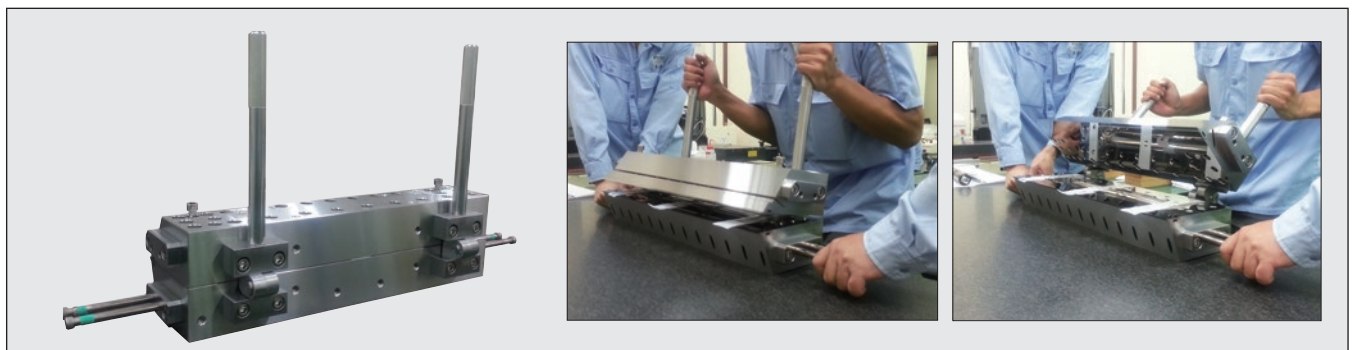


Distribution of wet (coating) thickness



Hinge Mechanism (Option Setting)

A hinge mechanism can be installed as an option. The die can be opened or closed by operating the handle. Cleaning and maintenance will be easy with the die on the coating modules.



MMC RYOTEC Corporation

A Group Company of MITSUBISHI MATERIALS

Tokyo Office [Eastern Japan/ International]
KFC bldg., 7F, 1-6-1, Yokoami, Sumida-ku, Tokyo 130-0015, Japan
TEL +81-3-5819-5264 FAX +81-3-5819-5259

Gifu Office [Central Japan]
1528 Yokoi Nakashinden, Godo-cho, Anpachi-gun, Gifu 503-2301, Japan
TEL +81-584-27-5419 FAX +81-584-27-5022

Osaka Office [Western Japan]
OAP Tower, 28F, 1-8-30, Tenmabashi, Kita-ku, Osaka-shi, Osaka 530-6070, Japan
TEL +81-6-6355-1052 FAX +81-6-6355-1057

<http://www.ryotec.co.jp/en/products/wrt/slotdie.html>

