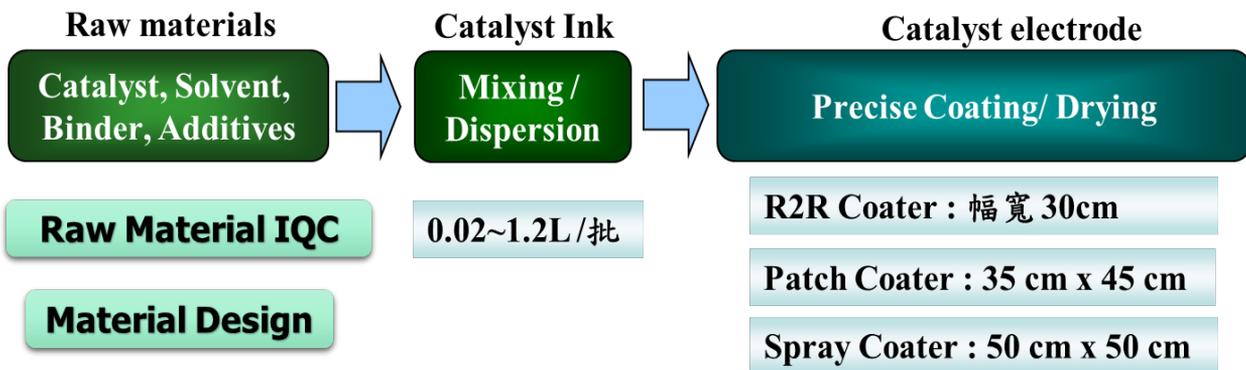




高性能膜電極組

製程能力



Electrode / Membrane

CCM/ MEA Manufacturing

Patch Laminator
45cm x45cm (Max.)
Speed = 6pcs /10min

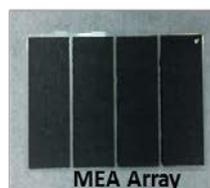
R2R Laminator
Width = 30 cm(Max.)
Speed = 0.3 m/min

CCM/MEA Array Assembler
Speed = 6 pcs / min

- ✓ 可靠度驗證, 可大量生產
- ✓ 尺寸 1cm²~300 cm² or above (客製化)
- ✓ Roll-to-roll PEMFC CCM (width < 30cm)

CCM / MEA

Customer Design Products



MEA規格

	高功率	高濃度	低加溼	免加溼	車用
種類	DMFC			PEMFC	
尺寸	1 ~ 300 cm ² (可客製化)			14 ~ 300 cm ² (可客製化) / Roll	
製程	Patch	Array	R2R / Patch	R2R / Patch	R2R / Patch
性能	150 mW/cm ² (80°C)	30mW/cm ² (38°C)	1100mA/cm ² (80°C) (0.65V) (65%RH)	830mA/cm ² (0.65V) (0%RH)	350mA/cm ² (80°C)(0.8V) (40%RH) (150kPa)
競爭者能力	~110mW/cm ²	20-25mW/cm ²	1000mA/cm ² (0.6V)	435mA/cm ² (0.68V)	300 mA/cm ² (DOE)
操作壽命	8000hr (30%)	5000hr (19%)	5000hr (7%)	2000cycles (11%)	-
應用範圍	20-300(W)	1-5(W)	100-5000(W)	100-3000(W)	2-30(kW)
驗證	20W System 300W System	1W System 3W System	-	500W Stack UAV Stack	-

- Name/Title : 蔡麗端/組長、林俊男/主任
- Tel : +886-3-5915310、+886-3-5915304、(FAX)+886-3-5820442
- Email Address : LiDuanTsai@itri.org.tw、henryjnl@itri.org.tw