



RT-R2R Web Vacuum Metallizer

High Throughput High Vacuum

FREE SPAN

Paper Metallization Film Metallization

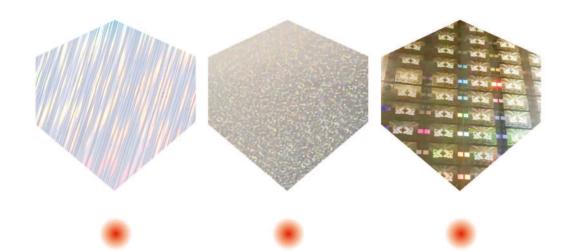
DRUM SUPPORTED

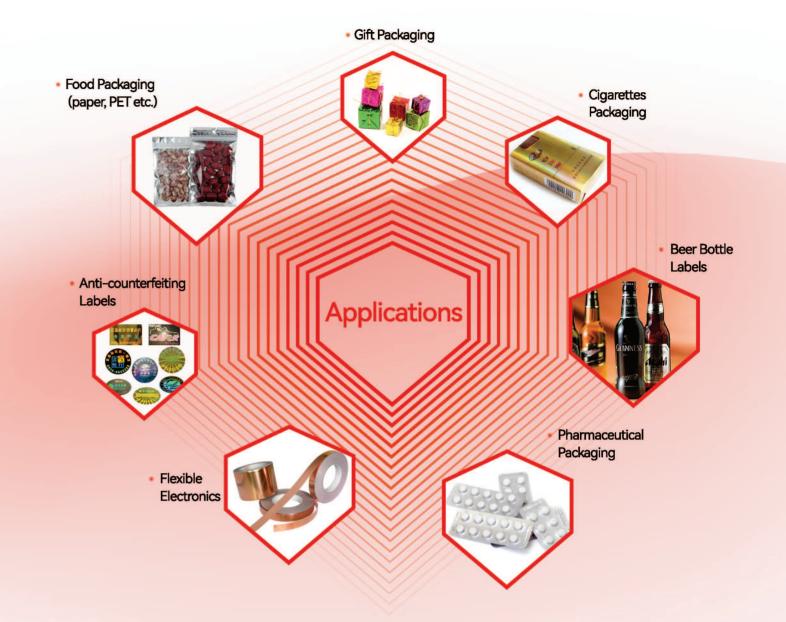


Royal Technology

Royal Technology is a worldwide supplier of Roll to Roll web vacuum metallizing systems, which are applied in packaging, electronics, optical and flexible material industries.

Our research & development (R&D) are supported by professional engineers in the United States (Darly Custom Technology) and the manufacturing facilities are located in Shanghai. With over 20 years experience, our high performance vacuum web metallizers can provide the types of coatings necessary for a variety of materials, like plastic films, paper and non-woven materials etc.



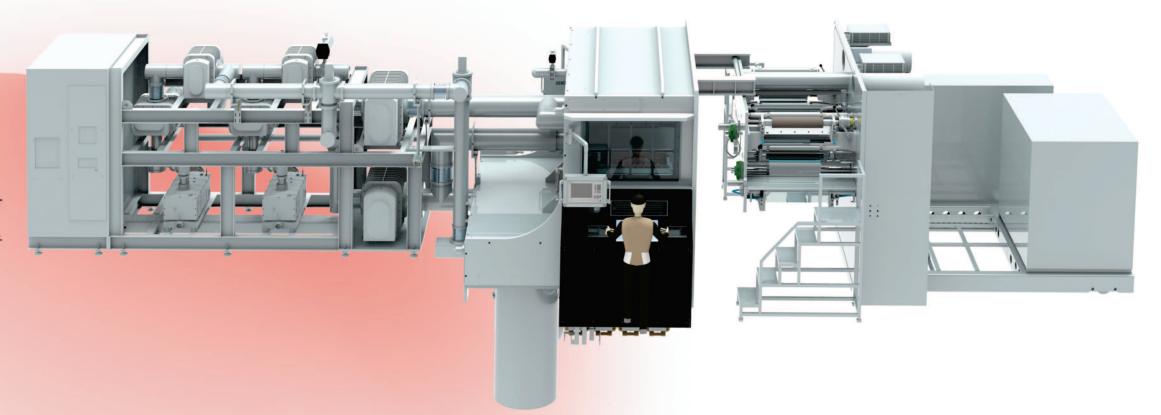


Web Coaters For Packaging Industry

Aluminum decorative coated plastic film and paper are essential in packaging applications. Royal Technology has developed some of the latest technologies that have higher productivity and lower operational costs. The new coating process avoids the heavy aluminum foil laminating, moreover, the heavy barrier (up to ONE micron thickness) metallized web is stronger and more resistant to moisture and oxidization.

Key Features

- High throughput reduces production cost
- Heavy deposition layer for high barrier application
- Free-span process eliminates the drum line and edge trim
- Friendly operation for low tension substrates like CPP, BOPP and LDPE
- Individual wire feeds
- Easy maintenance
- Precision web handling mechanism with servo motor drives for accurate control at any line speed
- Compact design for easy installation using minimal floor space.



Thermal Evaporation-Wire Feeder



Double Evaporation Sources For Heavy Deposition Planar Sputter





Pre-treatment Tool: Ion Source



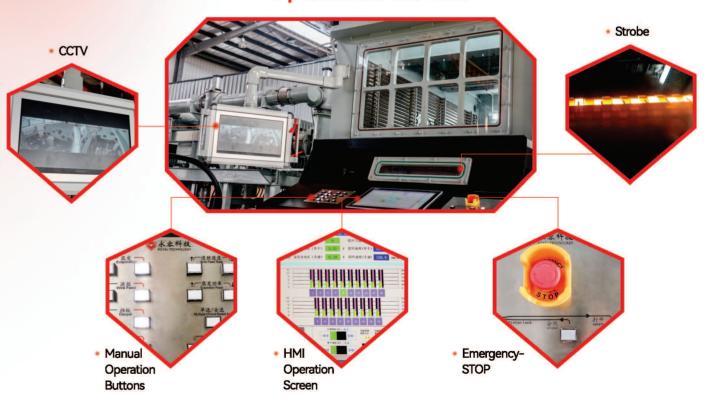
Cooling Water Manifold



Web Drive & Winding System

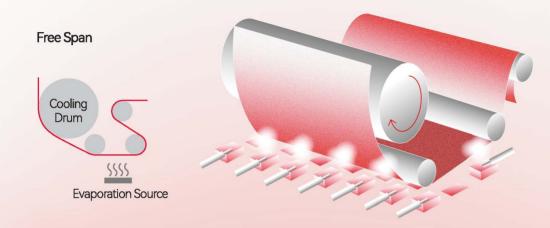


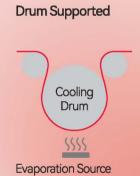
Operation Platform

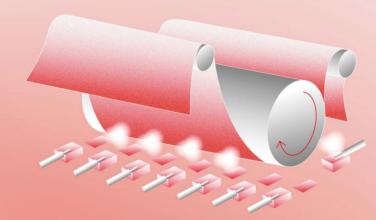


FREE SPAN &
DRUM SUPPORTED

Comparison Of Performance

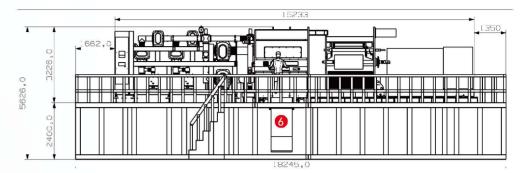


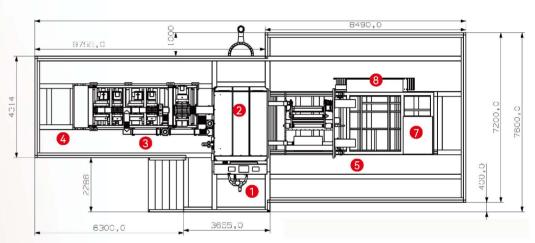




Content	Free Span	Drum Supported PET, Paper and PI etc.		
Applied Materials	PET,OPP,CPP, PET,PVC etc.			
Coating Time	Post deposition	During deposition		
Uncoated Film Edge	None	Yes		
Aluminum Consumption	Low	High		
Two-sides Coating	Available	Unavailable		
Heavy Deposition	Good	Better		
Light Deposition	Better	Good		
Deposition Uniformity	Better	Good		
Deposition Adhesion	Better	Good		
Drum Line Control	Better	Good		
Low Tension Polymer Web	Better	Good		

- 1# Operator Station
- 2# Process Vacuum Chamber
- 3# Rough Pump Package
- 4# -Power Distribution Cabinet
 - -SCR Control Cabinet
- 5# Web Drive Carriage
- 6# High Vacuum Pump
- 7# Chiller Package
- 8# Web Drive Cabinet





R2R Web Vacuum Metallizer Models

Description	R2R-600	R2R-1100	R2R-1250	R2R-1500	R2R-2200	R2R-2500		
Coating Technology	TI	Thermal or Sputtering		Thermal				
Substrate width (Max.)mm	600	1100	1250	1500	2200	2500		
Roll Diameter (Max.)mm	800	1000	1000	1000	1000	1000		
Core Diameter(inner)mm		3"/6"			6"			
Coating speed (meter/second)		0.5 ~17, adjusta	ble, depends on	ds on coating process required				
Coating Rollers Temperature (°C)	-20 to 25							
Coating Chamber Ultimate Pressu	re(Pa)		5*10 ⁻³	3				
Pumping Speed At the	condition of w	ithout loading, cl	ean, room tempe	erature: less than	8 mins, from atr	n to 7*10 ² Pa		
Pre-treatment Tool	Linear Ion Source							
Deposition Source	BN Crucible or Planar/Rotary cylinder sputtering cathode							
Deposition Material	Al, Au,Cr,Cu,Ni, NiCr, Stainless Steel, Ti,							
		Power: 3F	Phase, 5wires, 38	0V±10%,50Hz/60)Hz			
Working Environment	Cooling water: EDI, 4~6 Bar @25°C							
		Compressed air: 5~6Bar, filtered and dried						