

MultiTech

复合真空
镀膜设备

Customization to satisfy your special demand
Standardization to lower your production cost
定制化以满足您的特殊需求
标准化以降低您的生产成本



We Focus On Applications More
我们更专注于应用

Description	RT1000-DLC	RT1000-IPG	RT1250-BLACK	RT1612-BLACK
Deposition Chamber	φ1000 * H1000mm	φ1000 * H1000mm	φ1250 * H1250mm	φ1600 * H1250mm
Load Diameter (Max.)	6*φ250mm 12*φ120mm	6*φ250mm 12*φ120mm	8*φ270mm 10*φ230mm	10*φ300mm 16*φ200mm
Load Height (Effective)	650mm	650mm	900mm	900mm

Technical Advantages	RT1000-DLC / RT1000-IPG	RT1250-BLACK / RT1612-BLACK
	<ul style="list-style-type: none"> • Plug-in integrated system for fast installation • Short cycle times for decorative coatings • High yield of coating products • High density and excellent uniformity • High abrasion and corrosion resistance • Aesthetic and highly performant 	<ul style="list-style-type: none"> • Higher volume • Multiple deposition sources for fast deposition • Combined arc and several sputtering cathodes : Arc for good adhesion and strong bonding layer, Sputtering deposition for specific coatings.

Major Applications	RT1000-DLC / RT1000-IPG	RT1250-BLACK / RT1612-BLACK
	<ul style="list-style-type: none"> • Black DLC coatings on medical instruments, jewelry, watch parts. • 24K pure gold/18K gold alloy coatings on luxury and branded products: metal accessories etc. • Microelectronics industry 	<ul style="list-style-type: none"> • Medium and larger workpieces: SS cutlery, door handles, bathroom fittings, automotive components, sports, house appliances, kitchenware and spectral frames,etc.

Deposition Cathodes	RT1000-DLC / RT1000-IPG	RT1250-BLACK / RT1612-BLACK
	5 arc + 2 (or 4) pairs of MF cylinder sputter	Option A: 8 arc + 1 set DC planar sputter; Option B: 5 arc + 2 sets DC planar sputter
		7 arc + 3 (or 4) pairs of MF cylinder sputters
		12 arc + 4 (or 6) pairs of MF cylinder sputters

Operation & Control System Siemens PLC + Industrial Computer + RoyalTech. Operation Program, Available for remote operation and diagnosis

These configurations are the standard. For a specific developing market and new special coatings, customized configurations and modifications are available on request.



Installation 安装



IPC工控机

描述	RT1000-DLC	RT1000-IPG	RT1250-BLACK	RT1612-BLACK
腔体尺寸	φ1000 * H1000mm	φ1000 * H1000mm	φ1250 * H1250mm	φ1600 * H1250mm
工件最大有效旋转直径	6*φ250mm 12*φ120mm	6*φ250mm 12*φ120mm	8*φ270mm 10*φ230mm	10*φ300mm 16*φ200mm
工件有效装载高度	650mm	650mm	900mm	900mm
技术优势	<ul style="list-style-type: none"> • 插拔式集成系统，快速安装 • 装饰涂层生产周期快 • 镀膜产品良品率高 • 膜层致密性高，均匀性好 • 耐磨、耐腐蚀性能卓越 • 不仅是装饰性，更多的是功能性能 		<ul style="list-style-type: none"> • 高产能，更多装载量 • 配有多套膜沉积源，沉积速率更快 • 离子镀弧阴极与磁控溅射阴极的组合： 弧离子镀一般用于绑定过渡层的沉积，可提高膜层附着性； 磁控溅射用于后续特定涂层的沉积 	
应用领域	<ul style="list-style-type: none"> • 医疗仪器、珠宝、手表零件上的黑色 DLC 涂层。 • 奢侈品24K/18K金：品牌LOGO金属配件等中、小工件。 • 微电子行业 		中大型工件：不锈钢餐具、门把手、卫浴配件、汽车零部件、运动用品、家用电器、厨具和眼镜架等。	
膜沉积源	5套圆弧+ 2或4对中频圆柱 磁控溅射阴极	方案A: 8套圆弧+ 1支 直流平面磁控溅射阴极 方案B: 5套圆弧+ 2支 直流平面磁控溅射阴极	7套圆弧 + 3或4对 中频圆柱磁控溅射阴极	12套圆弧 + 4或6对 中频圆柱磁控溅射阴极
操控系统	西门子PLC + 工控机+ 永容科技自主研发的操作软件,可用于远程操控和远程诊断			

以上列表为设备标准配置，针对特殊的应用领域需要开发新的涂层，可根据所需工艺要求提供定制设备。

PVD Decorative Coating Applications 装饰镀应用领域

Mirror
镜面



Matte
磨砂哑光



Brushing
拉丝



New Colors 新颜色

Generally can be deposited on 2D flat products, like glass panels, stainless steel sheets SS304/316/400.
一般应用于2D 平面不锈钢材质产品。
Navy Blue、Baby Blue、Grass Green、Apple Green、Purple、Red
深蓝色、浅蓝色、草绿色、苹果绿色、紫色、红色



Your satisfaction is great motivation for us
您的满意是我们最大的动力



Jet Black 黑色

Be applicable to bathroom faucets, medical equipment, jewelry and watch accessories, electronic products, stainless steel tableware, cutlery, etc.
应用于卫浴水龙头、医疗器械、首饰手表配件、电子产品、不锈钢餐具：刀叉等

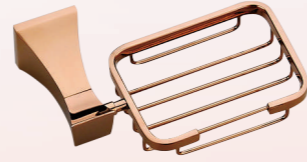
PVD Decorative Coating Applications 装饰镀应用领域



ABS-yellowish 玫瑰金-黄



ABS-reddish 玫瑰金-红



Brass/Zinc Alloy 铜、锌合金



Textile Crochet 纺织钩针



Wrench 工具扳手



Metal lampshade 金属灯罩



SS316 Jewelry 首饰



Watch 手表



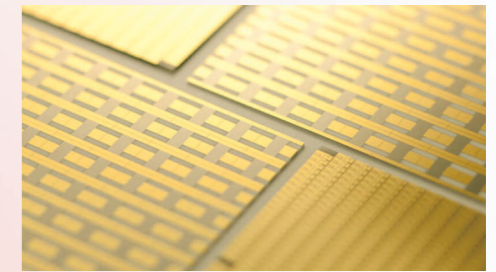
Consumer Electronics 电子产品



IPG Gold SS Jewelry
不锈钢首饰镀真金



Watch Band 手表带



Au gold - circuit board 电路板-镀真金

Rose Gold 玫瑰金

Be applicable to stainless steel, ABS plastic parts, iron alloys, etc.
应用于不锈钢、ABS塑料件、铁合金等



Yellow Gold-黄金色



Dark Gold-深金色



Pale Gold-浅金色

Zirconium Gold 锆金色

Zirconium is highly resistant to corrosion by alkalis, acids, salt water and other agents.
It is an ideal coating material for bathroom fittings, medical instruments and construction materials.
锆对碱、酸、盐水和和其他试剂的腐蚀具有很强的抵抗力。是卫浴配件、医疗器械、建筑材料的理想涂层。

Ti- Gold 钛金色

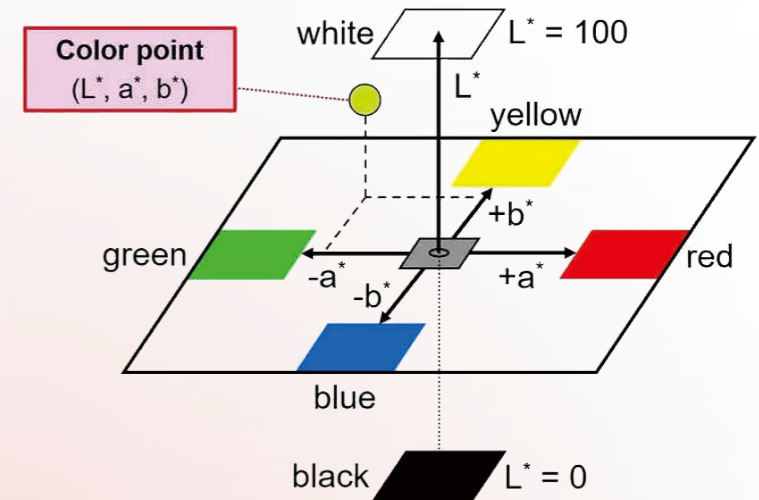
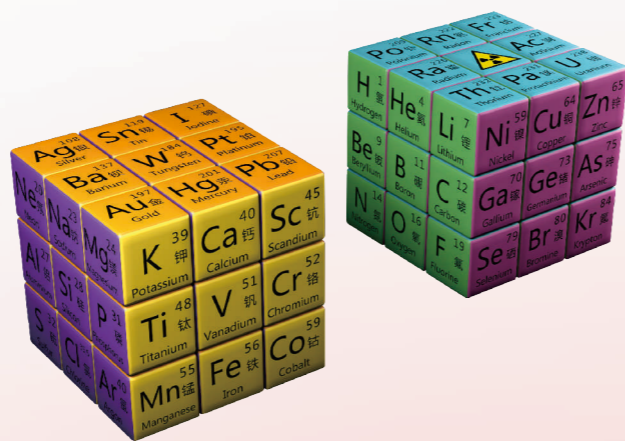
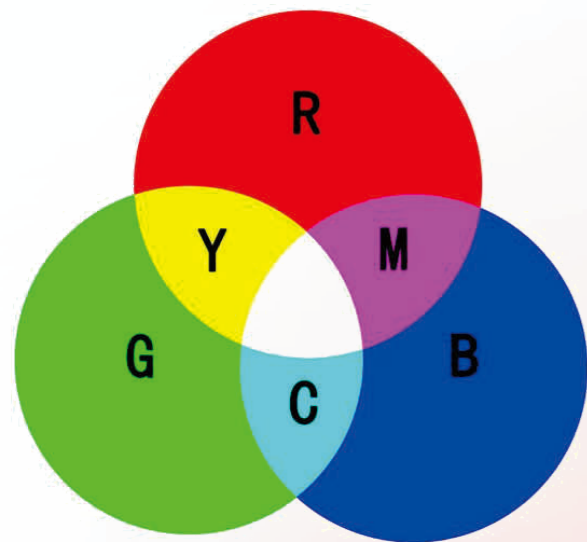
Be applicable to textile equipment crochet, tool wrench, faucet handle, metal lampshade, etc.
可应用于纺织设备钩针、工具扳手、水龙头把手、金属灯罩等



Rainbow Color 彩色

Be applicable to glass, stainless steel materials.
可应用于玻璃、不锈钢材质等





L=L* (Luminosity) 0: black 100: white
 A= A* (-128 ~ +128) -128: GREEN +128: RED
 B= B* (-128 ~ +128) -128: BLUE +128: YELLOW

Film thickness

1. Golden Colors

Targets	Coating Films	Colors
Ti-based	TiN	Golden Brown
	TiN+Au (Au 59%)	Yellow-green gold
	TiZrN	Golden
	TiCN	Golden-red
Zr-based	ZrN	Pale Gold/Brass
	ZrCN	Yellow Gold
	ZrN+Au (Au75%)	Bright Yellow Gold
	ZrN+Au (Au75%)	Red Gold

2. Grey/Black Colors

Targets	Coating Films	Colors
Ti-based	TiC	Dark Grey
	Ti	Ti-silver
TiAl-based	TiAlCN	Black
Zr-based	ZrO	Stainless Steel
	ZrOC	Black
	CrC	Black
	CrSiC	Black
Cr/Cr Alloy-based	CrWC	Black
	CrN	Metalic Grey
	Cr	Cr-silver

3. Rose Gold Colors

Targets	Coating Films	Colors
Ti-based	TiCN	Bronze
	TiON	Light-Bronze
TiAl-based	TiAlN	Rose Gold- Reddish
Zr-based	ZrOC	Dark-Bronze
	ZrCN	Violet/Rose gold

4. Other Colors

Targets	Coating Films	Colors
Ti-based	TiO	Rainbow
	TiO(x)	Red, blue, green, pink, purple
Stainless Steel	SUS	Nickel
	SUSC	Grey