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3. 此圖為 3D 模型圖。此圖為 3D 模型圖，顯示了雷射光路在鏡面反射時的 3D 模型圖。此圖為 3D 模型圖，顯示了雷射光路在鏡面反射時的 3D 模型圖。
4. 此圖為 3D 模型圖。此圖為 3D 模型圖，顯示了雷射光路在鏡面反射時的 3D 模型圖。此圖為 3D 模型圖，顯示了雷射光路在鏡面反射時的 3D 模型圖。 (3D 模型圖)



雷射光路圖 :

1030-1090nm Galvo 雷射光路

Model	PSH14-H	PSH20-H	PSH30-H
Input laser power (MAX.)	CW: 1000W @ fiber laser Pulsed: 500W @ fiber laser	CW: 3000W @ fiber laser Pulsed: 1500W @ fiber laser	CW: 1000W @ fiber laser Pulsed: 150W @ fiber laser
Water cool/sealed scan head	yes	yes	yes
Aperture (mm)	14	20	30
Effective Scan Angle	±10°	±10°	±10°
Tracking Error	0.19 ms	0.28ms	0.45ms
Step Response Time(1% of full scale)	≤ 0.4 ms	≤ 0.6 ms	≤ 0.9 ms
Typical Speed			
Positioning / jump	< 15 m/s	< 12 m/s	< 9 m/s
Line scanning/raster scanning	< 10 m/s	< 7 m/s	< 4 m/s
Typical vector scanning	< 4 m/s	< 3 m/s	< 2 m/s
Good Writing quality	700 cps	450 cps	260 cps
High writing quality	550 cps	320 cps	180 cps
Precision			
Linearity	99.9%	99.9%	99.9%
Resolution	≤ 1 urad	≤ 1 urad	≤ 1 urad
Repeatability	≤ 2 urad	≤ 2 urad	≤ 2 urad
Temperature Drift			
Offset Drift	≤ 3 urad/°C	≤ 3 urad/°C	≤ 3 urad/°C
Qver 8hours Long-Term Offset Drift (After 15min warn-up)	≤ 30 urad	≤ 30 urad	≤ 30 urad
Operating Temperature Range	25°C±10°C	25°C±10°C	25°C±10°C
Signal Interface	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol	Analog: ±10V Digital: XY2-100 protocol
Input Power Requirement (DC)	±15V@ 4A Max RMS	±15V@ 4A Max RMS	±15V@ 4A Max RMS

1030-1090nm F-Theta Lenses

Part Description	Focal Length (mm)	Scan Field (mm)	Max Entrance Pupil (mm)	Working Distance(mm)	Mounting Thread
SL-(1030-1090)-170-254-(20CA)-WC	254	170x170	20	290	M85x1
SL-(1030-1090)-250-425-(30CA)-WC	425	250x250	30	475	M132x1
SL-(1030-1090)-142-277-(15CA)-WC	277	142x142	15	340	M85x1
SL-(1030-1090)-254-420-(15CA)-WC	420	254x254	15	509	M85x1
SL-(1030-1090)-230-420-(20CA)-WC	420	230x230	20	509	M85x1
SL-(1030-1090)-410-650-(20CA)-WC	650	410x410	20	562	M85x1

1030-1090nm Beam Expander

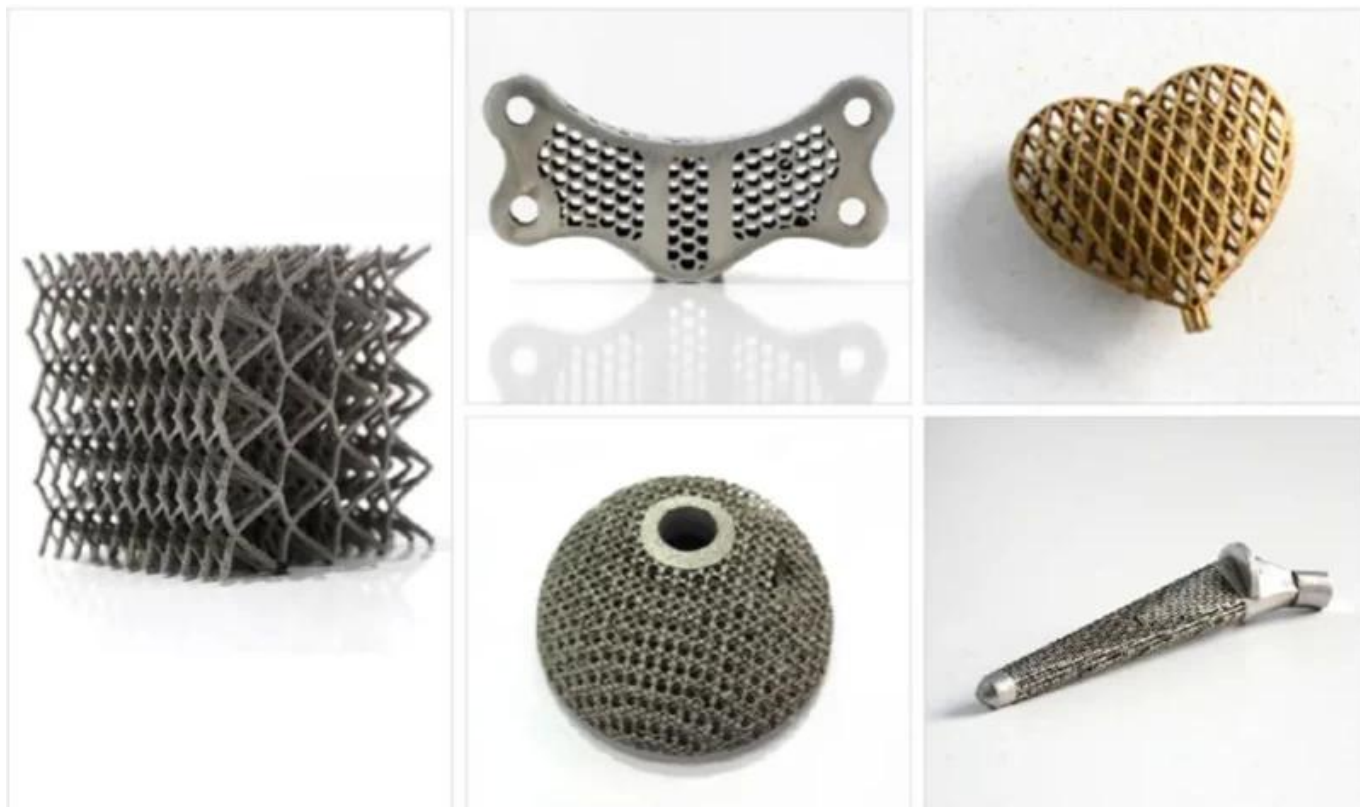
Part Description	Expansion Ratio	Input CA (mm)	Output CA (mm)	Housing Dia(mm)	Housing Length(mm)	Mounting Thread
BE-(1030-1090)-D26:45-1.5x-A	1.5X	18	26	44	45	M30x1 M43x0.5
BE-(1030-1090)-D53:118.6-2x-A	2X	30	53	49	118.6	M30x1
BE-(1030-1090)-D37:118.5-2x-A-WC	2X	18	37	59	118.5	M30x1

1030-1090nm Protective Window

Part Description	Diameter(mm)	Thickness(mm)	Coating
Protective Window	98	4	AR/AR@1030-1090nm
Protective Window	113	5	AR/AR@1030-1090nm
Protective Window	120	5	AR/AR@1030-1090nm
Protective Window	160	8	AR/AR@1030-1090nm

1030-1090nm QBH Collimating Optical Module

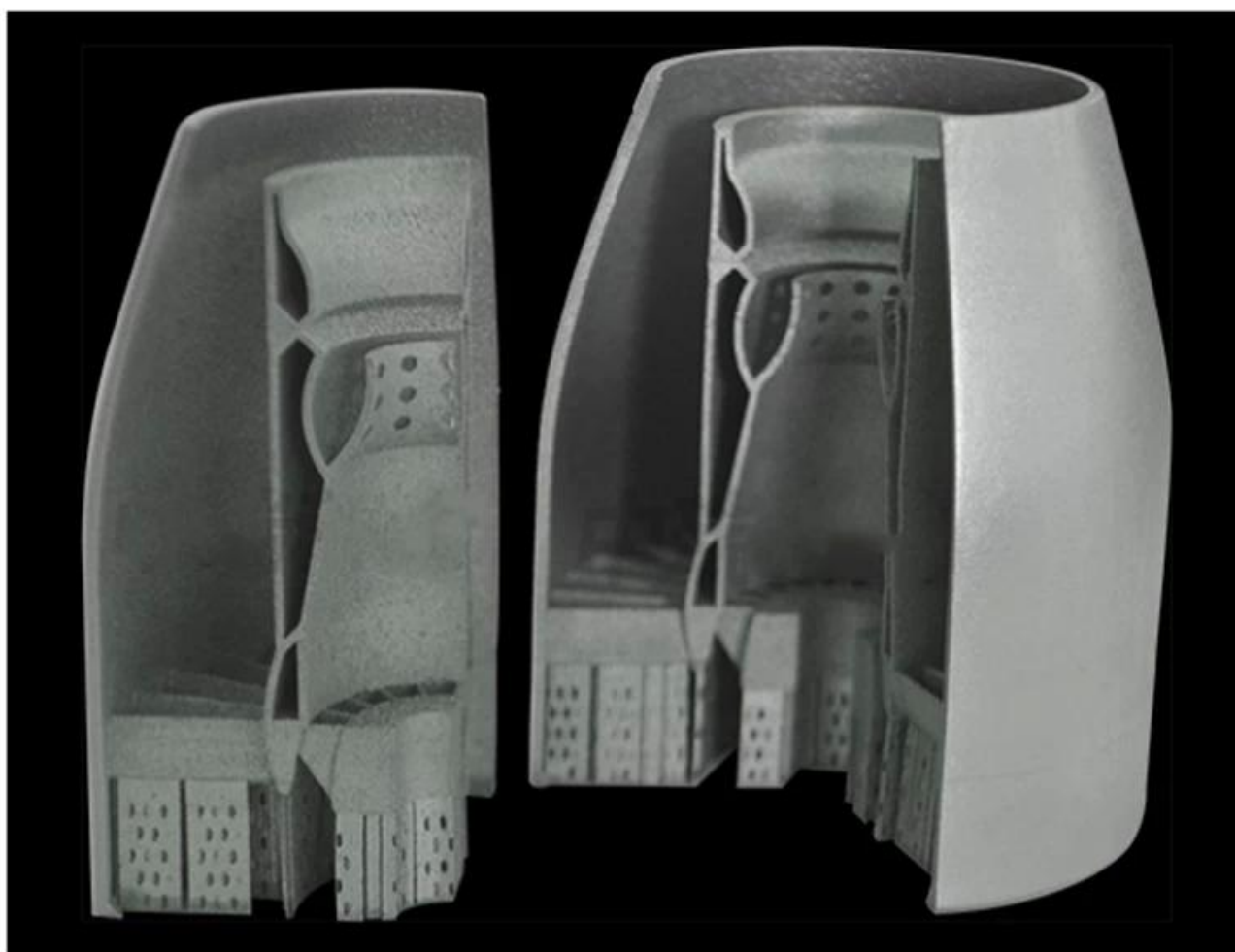
Part Description	Focal Length (mm)	Clear Aperture (mm)	NA	Coating
CL2-(1030-1090)-30-F60-QBH-A-WC	60	28	0.22	AR/AR@1030-1090nm
CL2-(1030-1090)-30-F75-QBH-A-WC	75	28	0.17	AR/AR@1030-1090nm
CL2-(1030-1090)-30-F100-QBH-A-WC	100	28	0.13	AR/AR@1030-1090nm
CL2-(1030-1090)-38-F75-QBH-A-WC	75	34	0.22	AR/AR@1030-1090nm
CL2-(1030-1090)-38-F100-QBH-A-WC	100	34	0.16	AR/AR@1030-1090nm
CL2-(1030-1090)-38-F125-QBH-A-WC	125	34	0.13	AR/AR@1030-1090nm



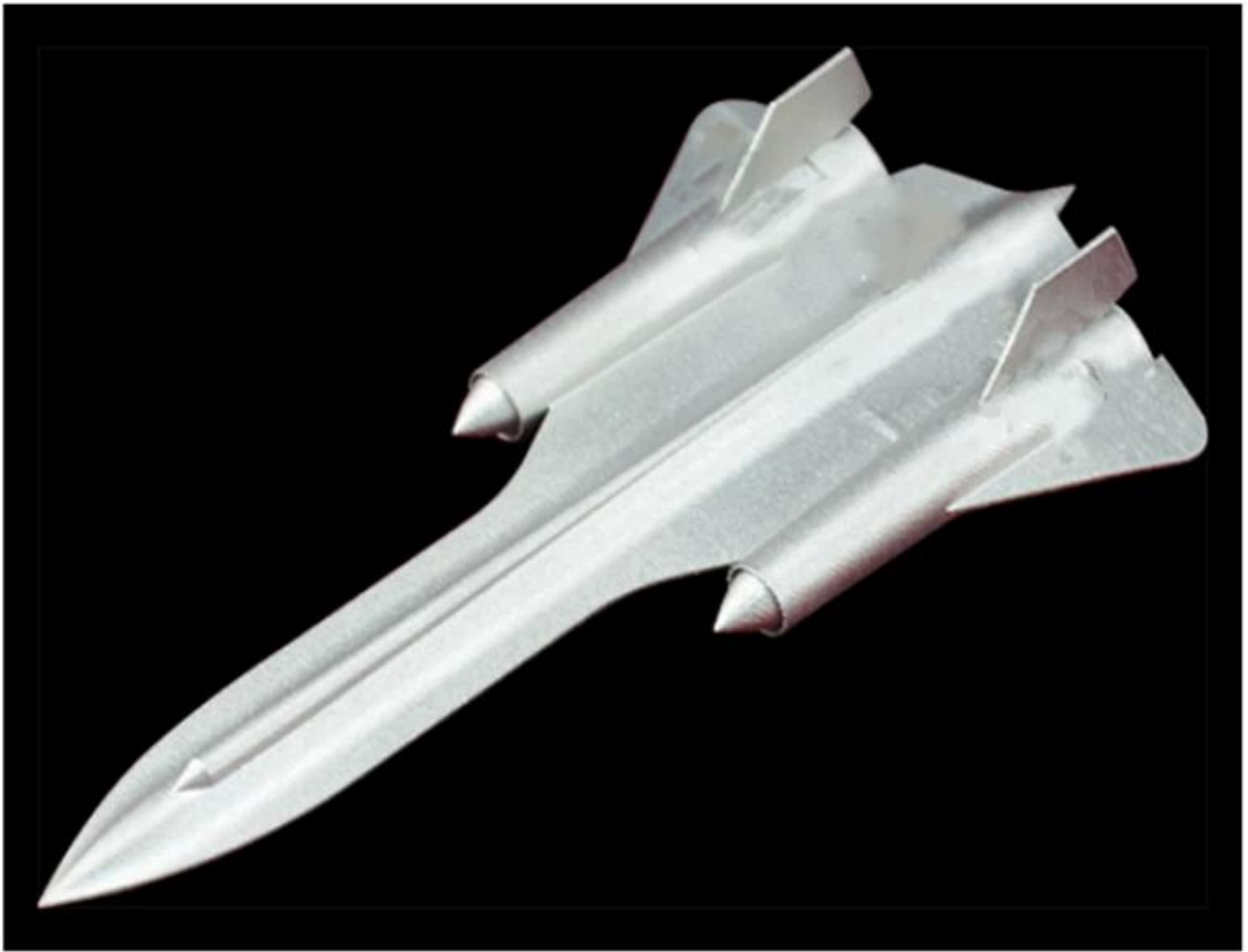
Die Steel



Titanium Alloy



Aluminium Alloy ($AlSi_{10}Mg$)

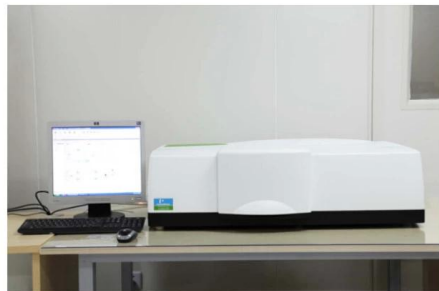


Co-Cr Alloy (MP1)





TRIOPTICS OptiSpheric 2000 AF
---Testing EFL, R, Centering Error, Wedge Angle, BFL, MTF

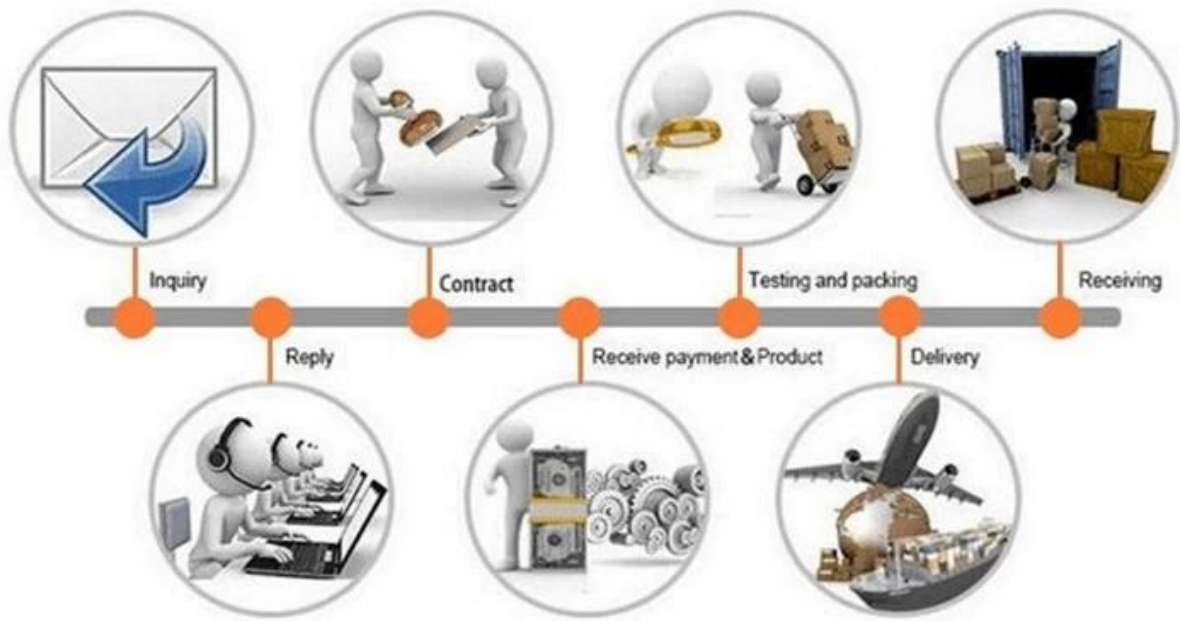


PerkinElmer Lambda 950---Testing Transmission and Reflectivity



Carmanhaas Coating Machine





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- 1 問) 〇 〇〇〇 〇〇〇〇 〇〇〇〇〇〇.
- 2 問) 〇〇〇 〇〇〇 〇〇 〇〇〇 〇 〇〇 〇〇 〇〇〇〇〇〇.
- 3 問) 〇〇〇 〇〇 〇 〇〇 〇〇〇 〇〇〇〇〇.
- 4 問) 〇〇 〇 〇〇 〇〇 〇〇〇 〇〇 〇〇〇 〇〇〇〇〇.

問 問:

- (1) 〇〇〇 〇〇 〇〇 〇〇〇 DHL, UPS, FedEx, TNT, EMS, ETS 〇〇〇 〇 〇〇〇〇.
- (2) 〇〇〇〇〇〇〇〇〇, 〇 〇 〇〇〇〇〇〇〇〇 〇〇〇〇〇〇〇 〇〇FOB, CNF, CIF. 〇〇〇〇〇〇〇〇〇〇〇〇〇〇 〇〇〇〇〇〇〇〇〇〇〇〇〇 〇.

問 問 問

Q1. 〇〇〇〇〇 〇〇〇〇?

A1 : 〇, 〇〇〇 〇〇 〇〇〇 〇〇 〇 〇〇 〇〇〇 〇〇 〇〇〇〇〇 〇〇 〇 〇〇〇〇〇〇〇.

Q2. 〇〇〇 〇〇〇 〇〇〇?

A2 : 〇〇〇 〇〇〇 〇 QC 〇〇 〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇 〇〇 〇, 〇〇 〇〇 〇 〇〇〇 〇〇〇〇 〇〇〇 〇〇〇 〇〇〇〇〇.

Q3. 〇〇〇 〇〇〇〇〇?

A3 : 〇〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇〇〇 〇〇〇 〇〇〇〇〇.

Q4. 〇〇〇 〇〇〇〇〇〇〇〇?

A4 : 〇〇〇 〇〇〇〇〇 〇〇 〇〇 〇〇〇〇 〇〇 〇〇〇〇 〇〇〇〇 〇〇〇 〇〇 〇〇, 〇〇, 〇〇 〇〇 〇 〇〇 〇〇〇〇〇. 〇〇〇〇〇.

Q5. May May Marching 〇〇〇 〇〇〇〇〇 〇〇 〇〇〇 〇〇〇〇〇〇〇?

A5 : 〇! 〇〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇〇〇〇 〇〇 〇〇〇 〇〇 〇〇 〇 〇〇〇〇.

Q6. 〇〇〇 〇〇 〇 〇 〇〇〇〇?

A6 : 〇, 〇〇〇 〇〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇 〇〇〇〇〇.

Q7. OEM 〇〇 ODM 〇〇〇 〇〇〇 〇 〇 〇〇〇〇?

A7 : 〇〇 OEM / ODM ORD 〇〇 〇〇 〇〇〇 〇〇 〇〇〇 〇〇 〇〇〇 〇〇〇〇.ers. 〇〇〇 〇〇〇〇 〇〇〇〇〇 〇〇〇〇 〇〇 〇〇 〇〇〇〇〇.

Q8. 〇〇〇 〇〇〇 〇〇〇〇〇〇〇?

A8 : 〇〇〇 〇 〇〇〇 〇〇〇 〇〇〇 〇〇 〇〇 〇 MOQ 〇〇 T / T 〇〇 〇 〇 〇〇〇〇.