

## » » » » » Product Information

### Product Description:

Lasers can provide high-speed cleaning and surface preparation in virtually all industries. The low-maintenance, easily automated process can be used to remove oil and grease, strip paint or coatings, or modify surface texture, for example adding roughness to increase adhesion.

Carmanhaas offer professional laser cleaning system. ([Optics lens for laser cleaning gun manufacturers](#)) Commonly used optical solutions: the laser beam scans the working surface through the galvanometer

system and the scan lens to clean the entire working surface. Widely used in metal surface cleaning, special energy laser sources can also be applied to non-metallic surface cleaning.

Optical components mainly include QBH collimation module, galvanometer system and F-THETA scan lens. QBH collimation module converts the diverging laser beam into a parallel beam (reducing the divergence angle), galvanometer system realizes beam deflection and scanning, and F-Theta scan lens achieves uniform beam scanning focus.

### Advantage:

- 1.No abrasive materials are used, with no problems of contaminant separation and disposal;
- 2.No solvents are used - chemical-free and environmentally friendly process;
- 3.Spatially selective - cleaning only the area required, saving time and costs by ignoring regions that don't matter;
- 4.Non-contact process never degrades in quality;
- 5.Easily automated process that can lower operating costs by eliminating labor while giving greater consistency in results.



## Technical Parameters:

### 1030nm - 1090nm F-Theta Lens

Part Description	Focal Length (mm)	Scan Field (mm)	Max Entrance Pupil (mm)	Working Distance(mm)	Mounting Thread
SL-(1030-1090)-100-170-M39*1	170	100x100	8	175	M39x1
SL-(1030-1090)-140-335-M39*1	335	140x140	10	370	M39x1
SL-(1030-1090)-110-340-M39*1	340	110x110	10	386	M39x1
SL-(1030-1090)-100-160-SCR	160	100x100	8	185	SCR
SL-(1030-1090)-140-210-SCR	210	140x140	10	240	SCR
SL-(1030-1090)-175-254-SCR	254	175x175	16	284	SCR
SL-(1030-1090)-112-160	160	112x112	10	195	M85x1
SL-(1030-1090)-105-170-(15CA)	170	105x105	15	215	M85x1
SL-(1030-1090)-150-210-(15CA)	210	150x150	15	269	M85x1
SL-(1030-1090)-175-254-(15CA)	254	175x175	15	317	M85x1
SL-(1030-1090)-180-340-(30CA)-M102*1-WC	340	180x180	30	417	M102x1
SL-(1030-1090)-180-400-(30CA)-M102*1-WC	400	180x180	30	491	M102x1
SL-(1030-1090)-250-500-(30CA)-M112*1-WC	500	250x250	30	607	M102x1

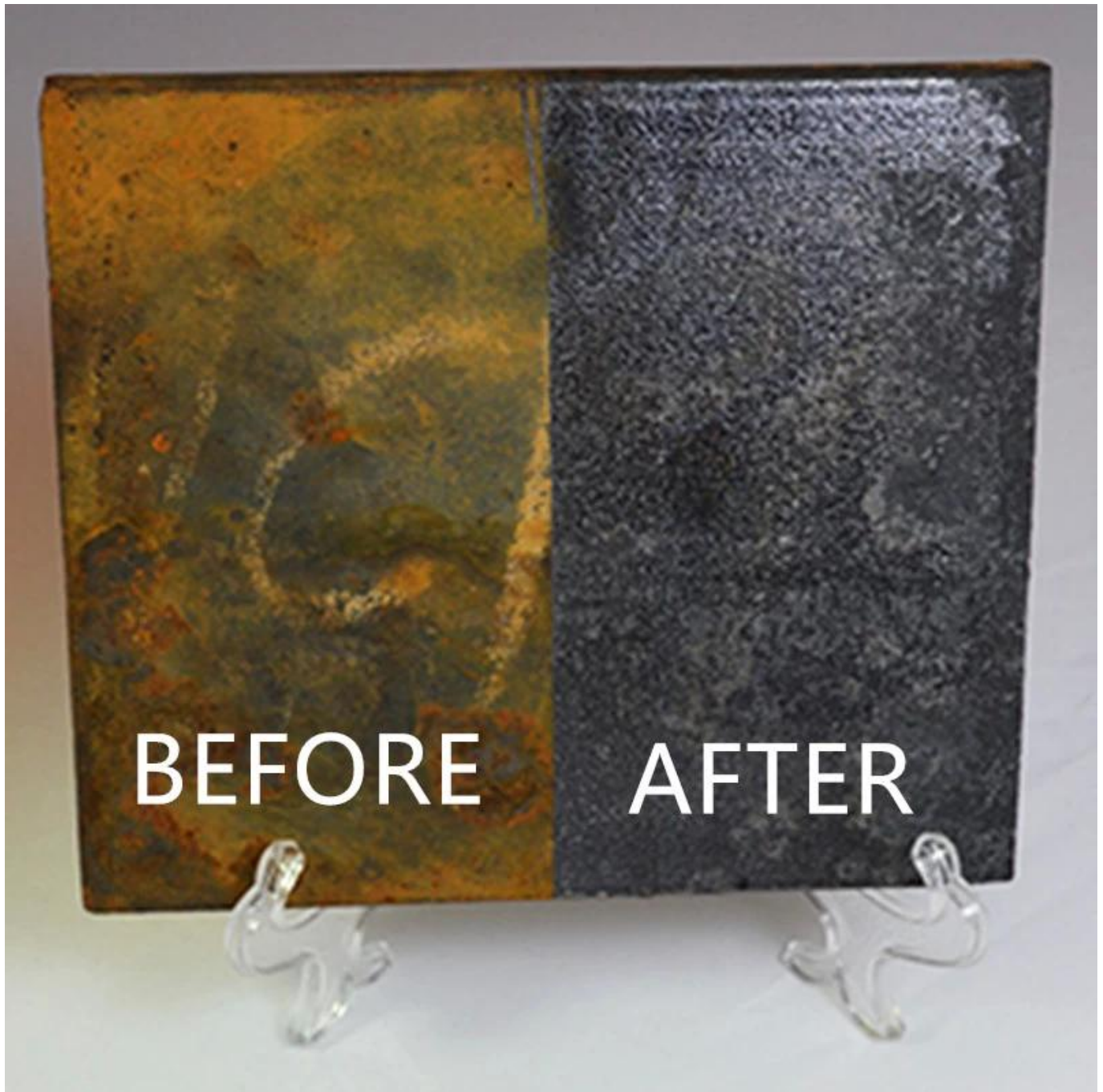
Note: \*WC means Scan Lens with water-cooling system

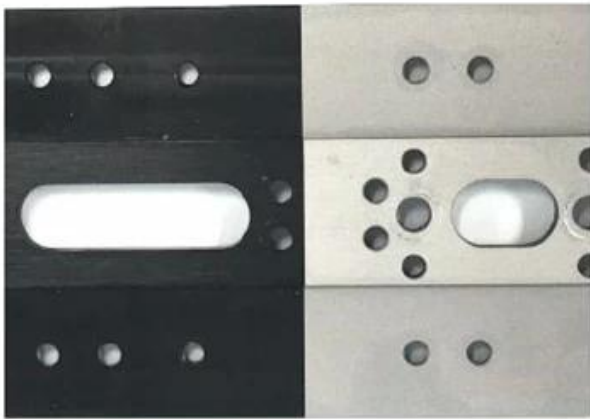
### QBH collimating optical module□1030nm - 1090nm□

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)-30-F125-QBH-A-WC	125	28	0.1	AR/AR@1030-1090nm
CL2-(1030-1090)-30-F150-QBH-A-WC	150	28	0.09	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
CL2-(1030-1090)-38-F135-QBH-A-WC	135	34	0.12	AR/AR@1030-1090nm
CL2-(1030-1090)-38-F150-QBH-A-WC	150	34	0.11	AR/AR@1030-1090nm
CL2-(1030-1090)-38-F200-QBH-A-WC	200	34	0.08	AR/AR@1030-1090nm

### **Why are more manufacturers using laser cleaning for material preparation?**

Laser cleaning offers multiple advantages over traditional approaches. It does not involve solvents and there is no abrasive material to be handled and disposed of. Compared with other processes that are less detailed, and frequently manual processes, laser cleaning is controllable and can be applied only to specific areas of a part, can be easily automated to maximize productivity, and provides the guaranteed repeatability demanded by an increasing number of quality standards.





BEFORE

AFTER



BEFORE

AFTER



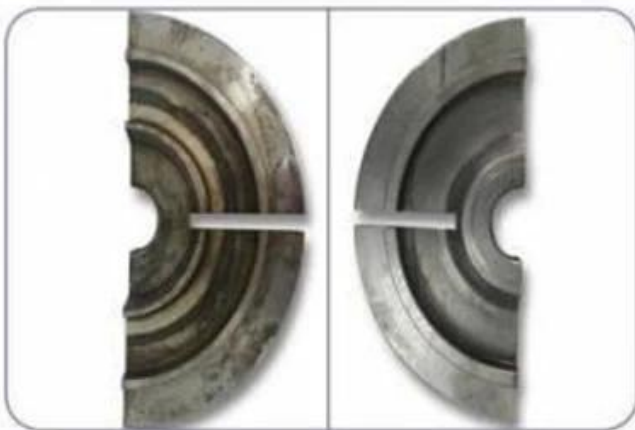
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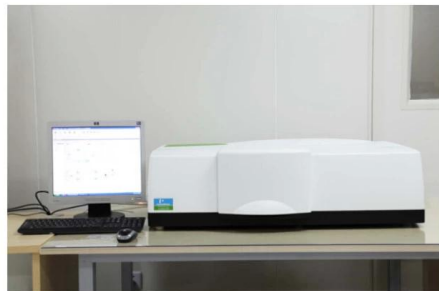
AFTER



» » » » » **Factory**



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



**PerkinElmer Lambda 950**---Testing Transmission and Reflectivity



**Carmanhaas Coating Machine**

## 》》》》》 Certificate&Exhibition



## 》》》》》 Packing List





**Return Policy:**

Should returns be required:

Step 1) Contact us with this website email.

Step 2) Provide as much detail as possible about the problem you are having.

Step 3) Authorization to return the item will be issued.

Step 4) Return the item for the agreed replacement or refund.

### **Logistics:**

(1)For Laser Optics order delivery,can be optional with DHL,UPS,FedEx,TNT,EMS,ets

(2)For Laser machine order delivery,can be optional with terms of EXWork FOB,CNF,CIF By Air or by Sea based on the buyer's forwarders or ours.

## » » » » » FAQ

Q1.Are you a manufacturer?

A1: Yes, we are professional and experienced manufacturer with our own molds and production lines.

Q2.How about quality of products?

A2: Our technicians and QC teams test the products one by one using aging line, professional devices and instruments to ensure the quality for all products.

Q3.How about price?

A3: We are a manufacturer and always offer our customers the most competitive prices.

Q4.How to place an order?

A4: Contact with online service, or sent email to us directly, we will reply to you with product price, specifications, packing etc. soon. Thank you.

Q5.May I send material to test marking performance?

A5: Yes! You are welcome to send material to test our superior quality and service.

Q6.Can I visit your factory?

A6: Yes, welcome to visit our factory at your convenient time.

Q7.How can I make OEM or ODM orders?

A7: We have different print processing for different OEM/ODM orders. Please contact us with online service or send email to us directly.

Q8. How should I pay for my orders?

A8: You can pay by T/T would be available for qualified bank and MOQ required for each order.