

## Product Information

### Product Description:

**Dynamic focus system supplier china**, Dynamic scanning optical system optics: 1pc small focus lens, 1-2pcs focus lens, Galvo mirror. The entire optical lens forms a function of beam expansion, focusing and beam deflection and scanning.

The expanding part is a negative lens, ie small focus lens, which realizes beam expansion and moving zoom, the focusing lens is composed of a group of positive lenses. The galvo mirror is mirror in the galvanometer system.

### Advantage:

- (1) Optimization of lens design: Optimum ratio of diameter to thickness ratio
- (2) Lens high damage threshold:  $>30\text{J/cm}^2$  10ns
- (3) Ultra-low absorption coating, absorption rate:  $<20\text{ppm}$
- (4) Galvanometer thickness to diameter ratio:  $1/35$
- (5) Lens surface accuracy:  $\leq \lambda/5$



## Optical components and optical system for post objective scanning system

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## CO2 Post-Objective Lens

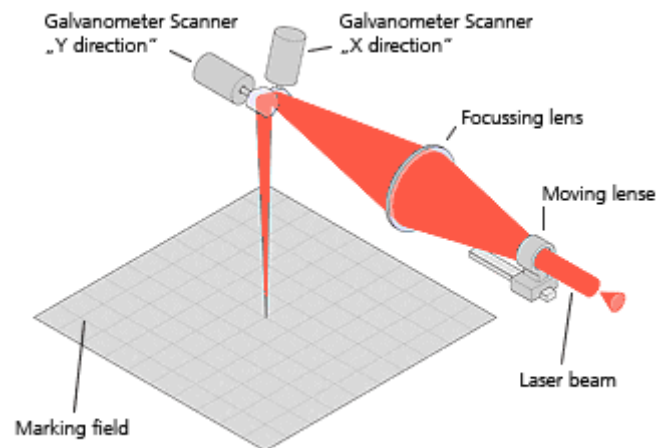
Max Entrance Pupil (mm)	Optics 1 Diameter(mm)	Optics 2 Diameter(mm)	Optics 3 Diameter(mm)	Scan Field (mm)	Clear Aperture of Scanner (mm)
8	15	55	55	600x600 800x800	30
12	22	55	55	1600x1600	30

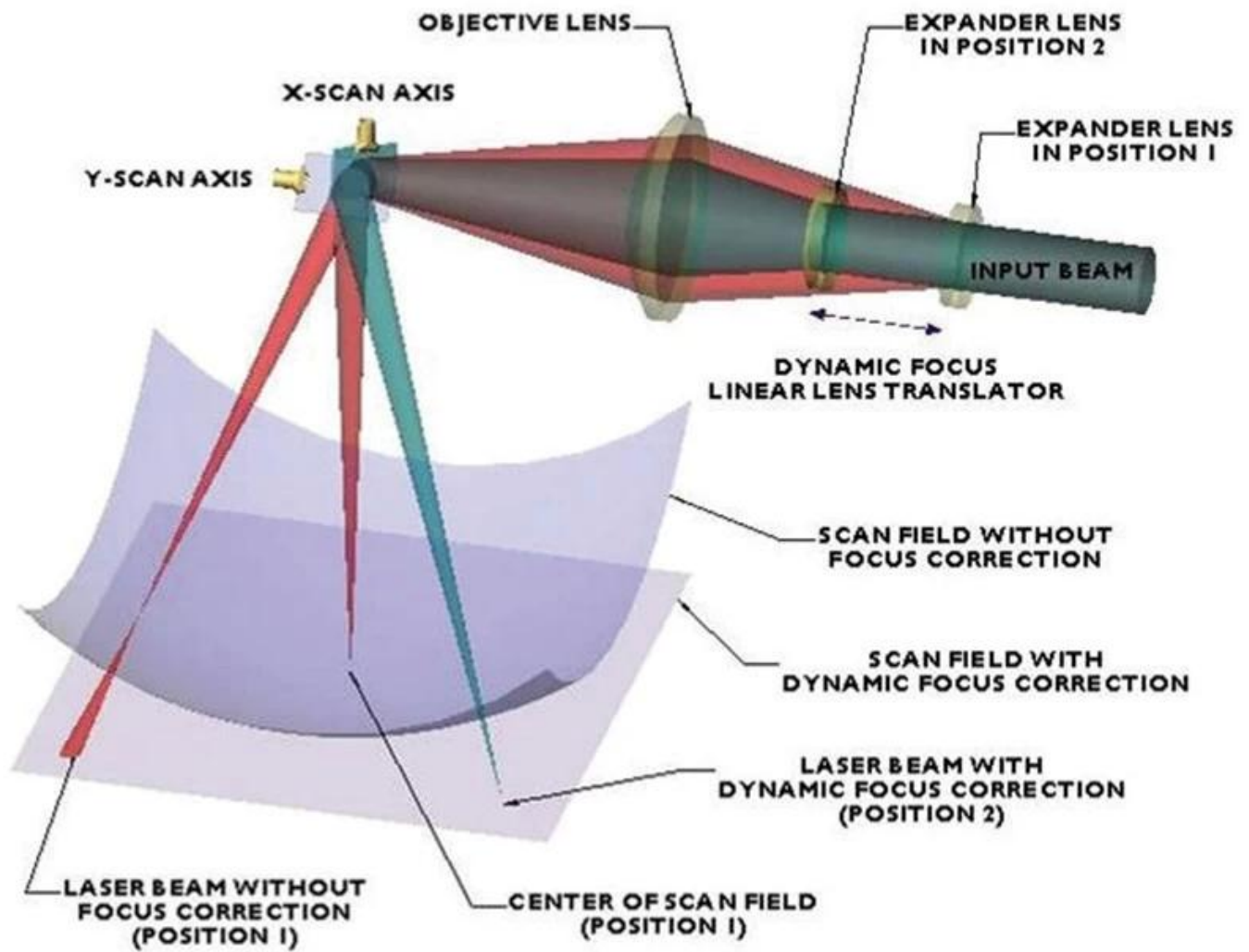
## CO2 Galvo Mirror

Part Description	Max Entrance Pupil (mm)	Material	Coating
55mmL*35mmW*3.5mmT-X 62mmL*43mmW*3.5mmT-Y	30	Silicon	MMR@10.6um

## CO2 Window

Diameter(mm)	Thickness (mm)	Material	Coating
80	3	ZnSe	AR/AR@10.6um
90	3	ZnSe	AR/AR@10.6um
90x60	5	ZnSe	AR/AR@10.6um
90x64	2.5	ZnSe	AR/AR@10.6um
90x70	3	ZnSe	AR/AR@10.6um

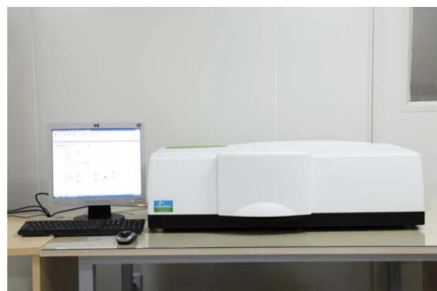




Factory



**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



# CERTIFICATE

## ATTESTATION CERTIFICATE OF MACHINERY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully. 2006/42/EC Machinery Directive and 2014/35/EU Low Voltage Directive have been taken as references for these processes

Company Name : **Camman HAAS Laser Technology (Suzhou) Co., Ltd.**

Company Address : No 155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu, P.R.China

Related Directives and Annex : **Low Voltage Directive 2014/35/EU  
Machinery Directive 2006/42/EC**

Related Standards : **EN ISO 12100:2010; EN 60204-1:2006+A1:2009+AC:2010**

Product Name : **Laser Marking Machine**

Report No and Date : **SD-90049717:09.08.2018**

Product Brand/Model/Type : **LMCH-3W,LMCH-5W,LMCH-10W,LMCH-15W,LMCH-20W,LMCH-25W,  
LMCH-30W,LMCH-50W,LMCH-60W,LMCH-70W,LMCH-100W,  
LMCH-120W,LMCH-150W,LMCH-200W,LMCH-300W,LMCH-500W**

Certificate Number : **M.2018.201.N6073**

Initial Assessment Date : **10.08.2018**

Registration Date : **13.08.2018**

Reissue Date/No :

Expiry Date : **12.08.2023**

The validity of the certificate can be checked through [www.udem.com.tr](http://www.udem.com.tr). The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. This certificate only covers the product(s) stated above and UDEM must be notified in case of any changes on the product(s).

Address: Mithakent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TURKEY

Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 70

E-mail: [info@udemtd.com.tr](mailto:info@udemtd.com.tr) [www.udem.com.tr](http://www.udem.com.tr)

*Signature*  
UDem International Certification  
Auditing Training Centre Industry  
and Trade Inc. Co.



## Certificate of Approval

Certificate No.: 10119Q12565ROM

Awarded to

**Carman Haas Laser Technology(SuZhou)  
Co., Ltd.**

Organization Code Certificate No. / Unified Social Credit Code:91320594MA1MF4EP56  
Add.:No.155, West Road Suhong, Suzhou Industrial Park, Suzhou City, Jiangsu Province, P.R. China. 215000

Beijing ZhongLianTianRun Certification Center (ZLTR) certify that the  
Quality Management System of the above organization has been assessed and found to be  
in accordance with the requirements of the standard:  
**GB/T19001-2016 / ISO9001:2015**

### SCOPE OF CERTIFICATION/REGISTRATION

**The Research and Development and Production of Optics Lenses (Except the limits of  
national laws and regulations. )**

This certificate is made valid when used with certification scopes and the requirements of applicable  
laws and regulations. These requirements include, but are not limited to, administrative permits,  
scopes of qualifications, and CCC requirements.

Subject to operation conditions in requirements conformity with Quality Management System,

This Certificate is valid for a period of three years only,

**Date from: Mar 13th,2019 To: Mar 12th,2022**

The effectiveness of this Certificate shall be Validated by periodic surveillance audit  
of ZLTR for maintenance.

Information of this certificate can be found on the official website of Beijing Zhonglian Tianrun  
Certification center (<http://www.zltr.com.cn>)



**Beijing Zhongliantianrun Certification Center**

Room2603, 22nd Floor, 2nd Unit, Block 1, No.4 Yard, Qiyang Road, Chaoyang District, Beijing, P.R. China 100102

Information of this certificate can be found on the official website of Certification and Accreditation Administration of the People's Republic of China (<http://www.cnca.gov.cn>)

ISO 9001

ISO 9001





## Packing List

## Packaging & Shipping

### Packaging 1



### Packaging 2



### Packaging 3



### Shipping 4





## Lens Cleaning

### 1. For light pollution (dust, fiber particles) were flexible cleaning.

Using a blowing balloon, Blow off scattered contaminants on the surface of the optical element.



### 2. For light pollution (stains, fingerprints) were flexible cleaning.

Propanol, acetone glue with a cotton swab or alcohol to gently wipe the surface.



### 3. For moderately polluted (saliva, oil) in moderate-intensity cleaning.

Infiltrating distilled white vinegar with a cotton swab, wipe the surface a little pressure.



## **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:**

Optics order ship by DHL, UPS, FedEx, TNT, EMS etc

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 forwarder 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.

