CIOE 2020
Visitor Guide

Intelligent Manufacturing

September 9-11, 2020
Shenzhen World Exhibition and Convention Center
Focus on the applications and development of optoelectronic technologies in Intelligent Manufacturing Industry

China’s 35 trillion "new infrastructure" strategy has become a new hotspot for the market and investors, and intelligent manufacturing as the core development of industrial manufacturing, which will be applied to all aspects of infrastructure construction such as intercity transportation, logistics, municipal construction, IoT base stations, etc., With the support of “Made in China 2025”, China’s intelligent manufacturing comes to the international vision; CIOE will showcase the key production technologies for intelligent equipment, robotics, automotive, aerospace, electronics, etc.

Exhibit Profile

Laser marking machines, laser cutting machines, laser welding machines and other laser processing equipment; Industrial robots, motion control equipment, automated production lines, processing equipment, control systems and functional components and other high-end intelligent equipment; 3D printers, 3D software technology, printing materials; Machine vision systems and applications, optical processing, coating equipment, filters, lenses and other optical materials and original parts.

Target Visitors

Smart equipment, robotics, automotive, aerospace, electronics, metal templates and other manufacturing enterprises.

Key Exhibitors

6 Concurrent Sub-Expos at CIOE 2020
### CIOE 2020 Visitor Guide for Intelligent Manufacturing

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<tr>
<th>Company</th>
<th>Booth</th>
<th>Description</th>
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<tr>
<td>Trumpf (China) Co., Ltd.</td>
<td>2B32</td>
<td><strong>TruLaser Cell 3000</strong>&lt;br&gt;The TruMark Series 3000 offers you everything that a marking laser needs for integration. You can choose between lasers for all standard wavelengths (IR / infrared, green, and UV / ultraviolet). The laser also offers impressive peak pulse powers of up to 100 kW and a high pulse-to-pulse stability. The TruMark Series 3000 therefore covers many areas of application and materials. The modular design means that you can adapt your marking lasers to perfectly meet your needs. One particularly convenient feature is that the software-controlled focal position adjustment, pilot laser, and mechanical beam trap are integrated in the laser head.</td>
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<tr>
<td>Han’s Laser Technology Industry Group Co., Ltd.</td>
<td>2C31</td>
<td><strong>HS20 Fiber Laser Marker</strong>&lt;br&gt;Stable performance: industrial-grade laser, high-speed dedicated scanner;&lt;br&gt;Easy to operate: friendly interface, simple and fast operation, easy to get started.&lt;br&gt;Strong compatibility: support for DXF, PLT vector and image format import; support for dot matrix fonts and TTF fonts;&lt;br&gt;Wide range of materials: different lasers can be selected, for PET, PP, PVC, ABS, and so on. It is suitable for a variety of metallic and non-metallic packaging materials, such as paper, stainless steel, aluminum, iron and so on.</td>
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<tr>
<td>Wuhan ZhongGu Lianchuang Photoelectronics Technology Co., Ltd.</td>
<td>2B11</td>
<td><strong>Ceramic laser punching machine</strong>&lt;br&gt;Precision laser ceramic punching machine is mainly used for punching the substrate material of alumina and alumina nitride ceramic circuit substrate.&lt;br&gt;Equipment features: marble bed base, integrated closed structure. Adopt imported linear motor drive. Adopt high-precision, silent, anti-corrosion guide rail. Adopt fixed light path design, high stability. Adopt imported high quality CO2 laser. Special high-speed punching software.</td>
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<tr>
<td>Sapphire Laser Technology Co., Ltd.</td>
<td>2C01</td>
<td><strong>Fiber Laser Marking Machine</strong>&lt;br&gt;Fiber laser marking machine is a new technology product that integrates fiber laser technology, computer control, mechanical and automatic control technology. The system uses the fiber laser has a long service life, high reliability, maintenance-free host, can work for a long time, can most of the Metal materials are processed. We have installed a special software for Windows platform. The user can operate the machine directly from the user interface, or edit the graphics with AutoCAD and other software. Software import for marking.</td>
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<tr>
<td>Company</td>
<td>Booth No.</td>
<td>Product Description</td>
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<tr>
<td>Shenzhen Inte Laser Technology Co., Ltd.</td>
<td>2A51</td>
<td><strong>Automatic Cover Film Double-head Laser Cutting Equipment</strong></td>
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<td>Machine features: 1) The cover film product can realize roll-to-roll, roll-to-sheet or sheet-to-sheet processing; 2) Relative to nanosecond laser processing, the cutting edge carbonization can be reduced to achieve carbon-free processing; 3) Double station processing to improve processing efficiency; 4) High-efficiency software processing function, less manual intervention, and fully automated product.</td>
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<td>Shenzhen Vilaser Equipment Co., Ltd.</td>
<td>2A11</td>
<td><strong>VIL811R Automatic Solder Paste Laser Soldering Machine</strong></td>
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<td>Suzhou Tusen Laser Co., Ltd.</td>
<td>2A31</td>
<td><strong>Picosecond Laser Processing Machine</strong></td>
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<td>The use of leading technology fiber picosecond lasers enables precision microfabrication applications to solve hard and delicate applications such as glass, sapphire, ceramics, etc. Precision processing problems of brittle materials. The equipment has high precision, good quality, fast speed and stable performance. The company has been successfully applied in many fields, such as laser processing, to provide customers with advanced and complete laser processing solutions.</td>
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<tr>
<td>Shanghai Zhikaijie Laser Technology Co., Ltd.</td>
<td>2A46</td>
<td><strong>Laser Cutting Systems for Brittle Materials</strong></td>
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<td>1. Marble platform, stable bearing, corrosion resistance; 2. Ensure cutting quality; 3. Configure automatic alignment CCD and visual lens, accurately identify the control software sent; 4. Independent programming can be directly imported into CAD graphics; 5. Laser processing method is non-contact processing to save operating costs; 6. It can automatically generate records of machining, operation and error reporting, and can export data to make the status of equipment clear.</td>
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Information Classification: General
Dongguan Hispeed Laser Technology Ltd.  
Fiber Laser Marking Machine

The fiber laser marking machine is built-in with YLP type of laser source, which is not only high efficiency, stable performance, but also long life time, and requires considerable less power and less servicing and maintenance, life time is up to 70,000 - 100,000 hours. The laser power usually ranges from 20W, 30W to 50W, and marking area is up to 200 x 200mm.

Ningbo Shangjian Automation Technology Co., Ltd.  
TO Package Wire Bonder

Automatic TO package bonding machine: 1. Efficient material handling and clamping system; 2. Programmable optical path system; 3. Convenient operation and monitoring system; 4. High-efficiency and high-precision XYZR direct drive system; 5. Product interchange conveniently.

Shenzhen Maxphotronics Co., Ltd.  
MFMC 35000W multimode continuous fiber laser

The MFMC-35000 multimode continuous fiber laser is a laser with high electro-optical conversion efficiency and uniform spot energy distribution (near flat top). Mainly used in new energy, 3C, electric power and other industries using copper, aluminum and its metal cutting, welding and cladding of alloy materials for industrial processes. High power: Continuous and stable output of 35000W for more applications. Elevated, comparable volume; Anti-High Reflex: Unique and innovative hardware-level anti-reflex protection technology processes a variety of high-reflex materials without fear of damage.

Suzhou Bellin Laser Co., Ltd.  
Picosecond Lasers

Product features: 355nm/532nm/1064nm, pulse width <15ps, operating frequency range 1Hz ~ 1000kHz, support Burst mode output, integrated long life seed laser, Ethernet communication, remote diagnosis. Products applied to glass, ceramics, brittle materials, OLED processing, semiconductors, and other fields.
BWT Beijing Ltd.  
**2B05**  
Fiber Lasers

BWT’s fiber lasers have an excellent beam quality, allowing the laser beam to be focused close to the diffraction limit for precise processing. Two operating modes, continuous and modulated pulse, greatly reduce the processing heat affected zone; reliable performance, modular all-fiber design. All optoelectronic devices are encapsulated in a rugged enclosure that can endure the rigors of industrial applications. The products are used in precision machining, 3D printing, sheet metal processing, and processing of various steel, aluminum and nickel-based alloys.

Suzhou Everbright Photonics Co., Ltd.  
**2B68**  
High Power Direct Diode Laser System-4000W

The Everbright 4000W high power direct semiconductor laser system is equipped with self-developed high power laser chip and fiber coupling module. It has high electro-optic conversion efficiency, adjustable light band, power, pulse width, stability and is easy to operate. It is wildly used in Laser quenching, laser brazing, laser cladding and other fields.

Nanguang Hi-Tech (Xiamen) Laser Co., Ltd.  
**2A67**  
Diode Pumped Solid State UV Lasers

Diode pumped solid state UV lasers possess several advantages of short wavelength, narrow pulse width, high peak power, excellent stability. Applications: 1. 3C electronic marking 2. Precision Machining of Ceramic, Glass, Wafer and LED 3. 3D printing 4. High speed labeling of polymer materials.

Nanoscribe China Co., Ltd.  
**2D83**  
Quantum X

The new Quantum X from Nanoscribe is the world’s first two-photon grayscale lithography based lithography (2GL) maskless micro-nanometer 3D printing device for the fabrication of micro-optical diffraction and refractive elements. It features high print speeds, complete WYSIWYG design freedom, the ability to meet the fine details of complex structures, and the ability to print in a variety of ways. Optical quality surface requirements. The fast and accurate additive manufacturing process significantly shortens design iterations and enables low-cost micro-nano 3D printing.
Zhisensor Technologies Co., Ltd. 2D40 3D Camera

Zhisensor can provide miniaturized depth sensing equipment with sub-millimeter accuracy. This product can be widely used in the fields of 3D scanning, industrial detection, bin-picking, insurance 3D damage determination, 3D face recognition, machine vision and so on.

Xian Chishine Optoelectronics Technology Co., Ltd. 2E41 Industrial 3D Camera

Industrial 3D Cameras: Real-time Scanning and Stable Output; Binocular infrared structured light; Built-in chip for processing; Adopt proprietary laser control technique to scan an area and offer accuracy up to 0.05mm; Collaborate with robots or work independently in path planning and guidance, seam tracking, palletizing and 3D modeling applications.

Neuvition Technology (Xiamen) Co., Ltd. 2E33, 2E34 3D High-Resolution LiDAR with video M1-Plus

Neuvition's high definition LiDAR that supports up to 480 vertical lines and 3550 pixels per line. Titan M1-Plus generates a point cloud of up to 2,000,000 points per second in a field of view of horizontal 80° by vertical 25°, with a range of up to 200 meters. The frame rate can be dynamically adjusted from 1fps to 20fps through API. The system can work well from -20°C to +65°C.

LorenTech (Beijing) Co., Ltd. 2E23, 2E24 Solid State LiDAR

LorenTech all-solid-state lidar offers the advantages of all-solid-state high reliability, resistance to bright light interference, and long measuring range, combined with 3D point cloud and RGB fusion, with intelligent detection and positioning function. Widely used in various levels of automated vehicles, unmanned delivery vehicles, robots and AGVs; perimeter protection, area monitoring, personnel monitoring, and other applications. Counting and behavior monitoring and early warning; port automation, storage automation; and intelligent transportation, smart city.
Shanghai Labsphere Optical Equipments Co., Ltd. 7A07 Standard LiDAR Test Target Kits

Features:
- Perfect Lambert diffuse reflectors
- Reflectance from 5% to 94% optional
- Sizes up to several meters
- Resistant to contamination and washable for field use
- Coating service available
- Imaging system flat field correction
- Imaging system lines

Shenzhen Young Win Technology Co., Ltd. 7B09 4K HDMI Industrial Camera

4K HDMI camera, SONY IMX226 1/1.8” color 12M CMOS, 4K 30fps@3840*2160, built-in measurement function, support 12M static photos, auto switch between 1080P and 4K monitor.

Hangzhou Shunli Optotech Co., Ltd. 7C07 Auto-focus Industrial Camera

Autofocus Industrial Camera C Series, large field of view digital microscope M Series, microscope with Unique Optical Mechatronics Design new products such as the A-series are among the first in the world and are favored and loved by customers. Our products are widely used in high-end image detection, automation, biomedical, scientific, security monitoring, HD video conferencing, drone aerial photography, education, and visually impaired aids, etc..

Shenzhen Oseecam Technology Co., Ltd. 7E63 Industrial Camera

1. Machine vision lens is widely used in industrial detection; 2. The image surface size covers 1/1.8", 2/3" and 1", and the focal length covers 6mm to 75mm; 3. Distortion < -2%; 4. Customized reinforced seismic and waterproof schemes.

The imaging Single Photon Avalanche Diode (SPAD) array integrated CMOS component and consists of 400 x 100 array of individually addressable SPAD pixels. The high-resolution Time of Flight (TOF) image sensor for 3D ranging USES a line-by-line readout architecture, so the 40K array element requires only 100 readout channels. It is ideal for automotive LiDAR and 3D sensing applications for industry, transportation and robotics.

Widely used in industrial identification, high-precision measurement, detection, identification, 3D scanning, biological identification and other industrial machine vision and image processing systems. Features: 1. The large depth of field, high resolution, shock resistant optical design, with a variety of optical correction way, guarantee the images of high definition, stable optical performance 2. C interface industrial standard lens, manual focus lock and aperture lock screw the human nature design 3. Compact structure, adopts full metal, shape and design of glass.
Wuhan Eoptics Technology Co., Ltd.  
**3E58**  
**Muller matrix ellipsometer**

As the optical instrument equipment provider, Eoptics is fully committed to the development of nano film, surface morphology, visual defects and other industrial automation detection equipment.

Wuhan Feiliu Intelligent Technology Co., Ltd.  
**1A51**  
**Intelligent monitoring system**

Combined with various machine vision, deep learning and neuron algorithms to provide big data acquisition and processing and application analysis, and provide solutions for automatic control, informatization, operation and maintenance problems. Provide automatic driving intelligent control module, communication data link core module, environment sensing navigation and positioning module (fusion lidar, MMW radar and vision) and various detection sensor modules. We provide professional industrial uav, walking robot, suspension robot and all kinds of industrial automatic monitoring equipment.

Kooman Robot (Wuhan) Co., Ltd.  
**1A51**  
**Robot R&D**

Mainly engaged in the research and development of the six-axis cooperative robot, and based on the cooperative robot to provide enterprises with a specific type of station automation solutions.

Satisloh Asia Ltd.  
**5D63**  
**SPM-10 & SPS-10 milling and polishing machine**

The SPM-10 & SPS-10 milling and polisher is equipped with a 5-axis, linear drive and complete temperature management, extending the function and accuracy to a new level. Depending on your requirements and process, the SPM-10 can be equipped with either an air bearing or a mixed ceramic bearing cutter shaft, both of which can reach 100,000 RPM.
Buhler Leybold Optics Equipment (Beijing) Co., Ltd.  3B51

Precision optical vacuum coating machine

The Leybold Optics IBS series offer ion beam sputtering with very low loss optical coatings, ideally suited for high-precision coating production in laser, gyroscope, metrology, microscopy, telecommunications and other demanding applications.

Schneider Optical Machines (Shanghai) Co., Ltd.  5D36

UPC 400

The UPC 400 is designed to be a perfect symbiosis between production and measuring equipment. All basic processes of free-form surface machining, including material handling, metrology and data processing, are integrated into a single machine platform. Complete fabrication and measurement of optical elements with a maximum diameter of 400 mm can be accomplished with a single clamping device.

Bruker (Beijing) Scientific Technology Co., Ltd.  5B18

UMT TriboLab

The new UMT TriboLab™ delivers faster speed, greater torque, better force measurement, and unparalleled flexibility. All functions are integrated into one machine. In a few minutes, you can go from rotating motion to reciprocating motion, from milli to kilo-force measurement, and from sub-zero to ultra-high temperature testing environment.

Mitutoyo Measuring Instruments (Shanghai) Co., Ltd.  7D52

CS-H5000CNC

High-precision stylus CNC surface measuring instrument can simultaneously measure surface roughness and shape/contour. The maximum driving speeds of the X1 and X2 axes are 40mm/s and 200mm/s respectively, enabling high-speed positioning, thus improving the efficiency of multi-section/multi-workpiece measurement. Z1 axis detector is integrated with anti-collision safety device. When the instrument body collides with the workpiece or fixture, the detection device can stop working automatically.
Guangdong Huicheng Vacuum Technology Co., Ltd.  

**Magnetron sputtering optical coating machine**

Coating area $\Phi \times 1200mm / 2100 \times 1800 / 1000mm \Phi / 1300 \times 700mm \Phi$,
applicable wavelength of 380 nm to 780 nm, used in AR, hard AR film, hard film, decorative film, HR film, etc.

Suzhou iVAC Coating Technology Co., Ltd.

**IBS machine**

It is especially suitable for complex and precise optical coating with the uniformity up to $\pm 0.25\%$ or better. It is mainly used for deposition of optical film with low dispersion and high laser damage threshold and multi-layer filter with high precision. Common deposition film layers include TiO$_2$, Ta$_2$O$_5$, Nb$_2$O$_5$, ZrO$_2$, HfO$_2$, SiO$_2$ and so on.

Shenzhen Keepahead Ultrasonic Equipment Co., Ltd.

**Automatic precision component cleaning machine**

1. Effectively reduce the treatment cost of ultrasonic waste liquid; 2. Water or solvent can be recycled; 3. Integrated structure and compact structure; Small floor space, low maintenance cost; 4. Original stirring and discharging turbine picks; 5. Fully sealed structure design, effectively prevent waste liquid odor leakage; 6. Intermittent and continuous automatic processing can be set; 7. Condense water content of waste liquid; 8. Independent distillation combination mode is adopted, with large thermal conductivity area, low overheating, secondary heat source utilization device, low energy consumption and low operating cost.

Gerchin

**IoN 100WB Plasma Cleaner**

The IoN 100 emphasizing versatility and control for customers plasma treatment needs. It uses RF generated plasma in a compact, fully integrated package. Application: Surface Precision Cleaning Oxide/Organic Removal Wire Bond and Encapsulation Pre-Clean Flip Chip Underfill Wafer Bumping Photo-resist Stripping Surface Modification Bond Strength Enhancements Hydrophilic/Hydrophobic Molecular Graft.
IKS-OPT2700 is a large-area optical thin film electron beam evaporation coating machine. The coating machine system consists of vacuum chamber, vacuum pump, vacuum detection and control, substrate heating system, electron beam evaporation system, ion source assisted deposition system, resistance evaporation system, film thickness monitoring system, working gas volume flow control system, workpiece rotation system, automatic coating controlled by PLC, etc.

A high voltage generated by a high voltage transformer, applied to an X-ray tube, produces X-rays. Diffraction occurs when $n = 2dsin$, which is amplified by the counter, shows strength through the amplifier's microammeter, and the goniometer reads the exact Angle. This equipment adopts PLC control technology, high degree of automation, very low failure rate, strong anti-interference ability, good system stability. All Chinese man-machine interface, 10 inch TFT touch screen, intuitive interface, easy to operate.
Agilebull Technology Co., Ltd.  

**5C11**  
Fully automatic optical lens assembly installation  
Mainly used in security and vehicle optical lens industry assembly production. Modular design machine can be assembled, pressed, hot melt, dispensing, MTF detection, laser marking and other modules freely, to meet the personalized needs of lens assembly. High assembly precision, fast speed, simple debugging, stable and reliable.

Dalian Somtec Industry Parts Co., Ltd.  

**5E60**  
Double-side polishing machine DS700
1. Circulating cooling plate 2. Anti adhesion, drop off protection system 3. Cold water circulating system 4. Equipped with pressure system within 1 kg 5. Matching thickness positioning system 6. Equipped with unloading system 7. both inside and outside round ring can change the size 8. Cruise ships can be from 5 to 4. 9. Ultra-thin products polishing: Φ 27 * 0.07, 50.8 * 0.10 Φ, 70 * 70 * 0.15, etc. 10. polishing liquid drip type/circulating 11. operation panel. 12. Different customers can provide industrial support and technical support.

Shenzhen Changyong Precision Technology Co., Ltd.  

**5D05**  
ProLap Table plane grinding machine  
It is suitable for the products with small and thin workpiece size. It can be precisely ground and polished in research institutions, universities and laboratories. It can meet the requirements of high precision density. It is suitable for precise grinding and polishing of gallium nitride, gallium arsenide, silicon carbide and indium phosphide, optical fiber parts, etc.

Shenzhen Opal intelligent manufacturing Industrial Co., Ltd.  

**5B04**  
Ultrasonic Cleaners  
Through the impact of "gasification effect" produced by high frequency ultrasonic wave, the oil and dirt on the workpiece surface can be quickly shed to achieve the purpose of cleaning.
CIOE will start its new journey at Shenzhen World Exhibition and Convention Center with larger exhibition area and better facilities. Plan your visit with your traffic guide and check out where will be your closest spot to get on our shuttle bus.

During non-exhibition period

CIOE has launched its official English WeChat account for delivering more industry news and marketing analysis for you to get to know China’s market better. Scan the QR code on the right or search CIOE Shenzhen in WeChat to follow.

CIOE 2020 Floor Plan

FLOOR PLAN

China International Optoelectronic Exposition (CIOE 2020)
September 9-11, 2020    Shenzhen, China