



NEXIO TEKNOLOGI OTOMASI
Industrial Automation and Solutions
Otomasi Industri dan Solusi

Address: Kawasan 3 Bisnis Center, Ruko Sapphire Blok A, No. 52,
Jl. Lingkar Tanjungpura, Tanjungpura, Kec. Karawang Bar.,
Karawang, Jawa Barat 41361

Telephone: +6281310202895 (Taufiq)
+6285282375757 (Samuel)

Email: admin@nexioteknologi.com
taufiq@nexioteknologi.com
samuel@nexioteknologi.com

Website: nexioteknologi.com



NEXIO TEKNOLOGI OTOMASI
Industrial Automation and Solutions
Otomasi Industri dan Solusi

- Industrial Robots
- PLCs / HMs
- Software Solutions



Empowering Automation, Shaping the Future
Memberdayakan Otomasi, Membentuk Masa Depan

Company Profile

Established on 2024, PT Nexio Teknologi Otomasi is a system integrator that builds around the real-time data hub and connects industrial robots, PLC, HMI, ERP, MES, and all automation-related systems, so that organizations can have a clear view of their current business operations and assets, anytime and anywhere.

We are dedicated to helping companies harness technology to improve productivity and product quality. Additionally, we offer a wide range of spare parts for control systems, including PLCs, relays, HMIs, and other essential components.

Our services include troubleshooting robots, predictive maintenance, regular inspections, and industrial robot spare part replacements. We are ready to be your partner in developing industrial IoT and digitally transform your business according to your industrial needs.

We strive to deliver top-tier automation solutions that drive efficiency and innovation. Our motto, "Empowering Automation, Shaping the Future," reflects our focus on providing advanced technologies to enhance productivity and streamline operations. Customer satisfaction is our top priority, and we are committed to offering reliable, customized solutions to meet the unique needs of your business.

Didirikan pada tahun 2024, PT Nexio Teknologi Otomasi adalah sistem integrator yang berfokus pada data hub real-time, menghubungkan robot industri, PLC, HMI, ERP, MES, dan semua sistem otomasi terkait, sehingga organisasi dapat memiliki pandangan yang jelas tentang operasi bisnis dan aset mereka, kapan saja dan di mana saja.

Kami berkomitmen untuk membantu perusahaan memanfaatkan teknologi guna meningkatkan produktivitas dan kualitas produk. Selain itu, kami menyediakan berbagai komponen suku cadang untuk sistem kontrol, termasuk PLC, relay, HMI, dan komponen penting lainnya.

Layanan kami meliputi pemecahan masalah robot, pemeliharaan prediktif, inspeksi berkala, serta penggantian suku cadang robot industri. Kami siap menjadi mitra Anda dalam mengembangkan IoT industri dan mentransformasi bisnis Anda secara digital sesuai dengan kebutuhan industri Anda.

Kami berdedikasi untuk menyediakan solusi otomasi terbaik yang mendorong efisiensi dan inovasi. Moto kami, "Memberdayakan Otomasi, Membentuk Masa Depan," mencerminkan fokus kami dalam menyediakan teknologi canggih untuk meningkatkan produktivitas dan merampingkan operasi. Kepuasan pelanggan adalah prioritas utama kami, dan kami berkomitmen untuk menawarkan solusi yang andal dan disesuaikan untuk memenuhi kebutuhan unik bisnis Anda.

Product Catalog

03-04. Industrial IoT Architecture

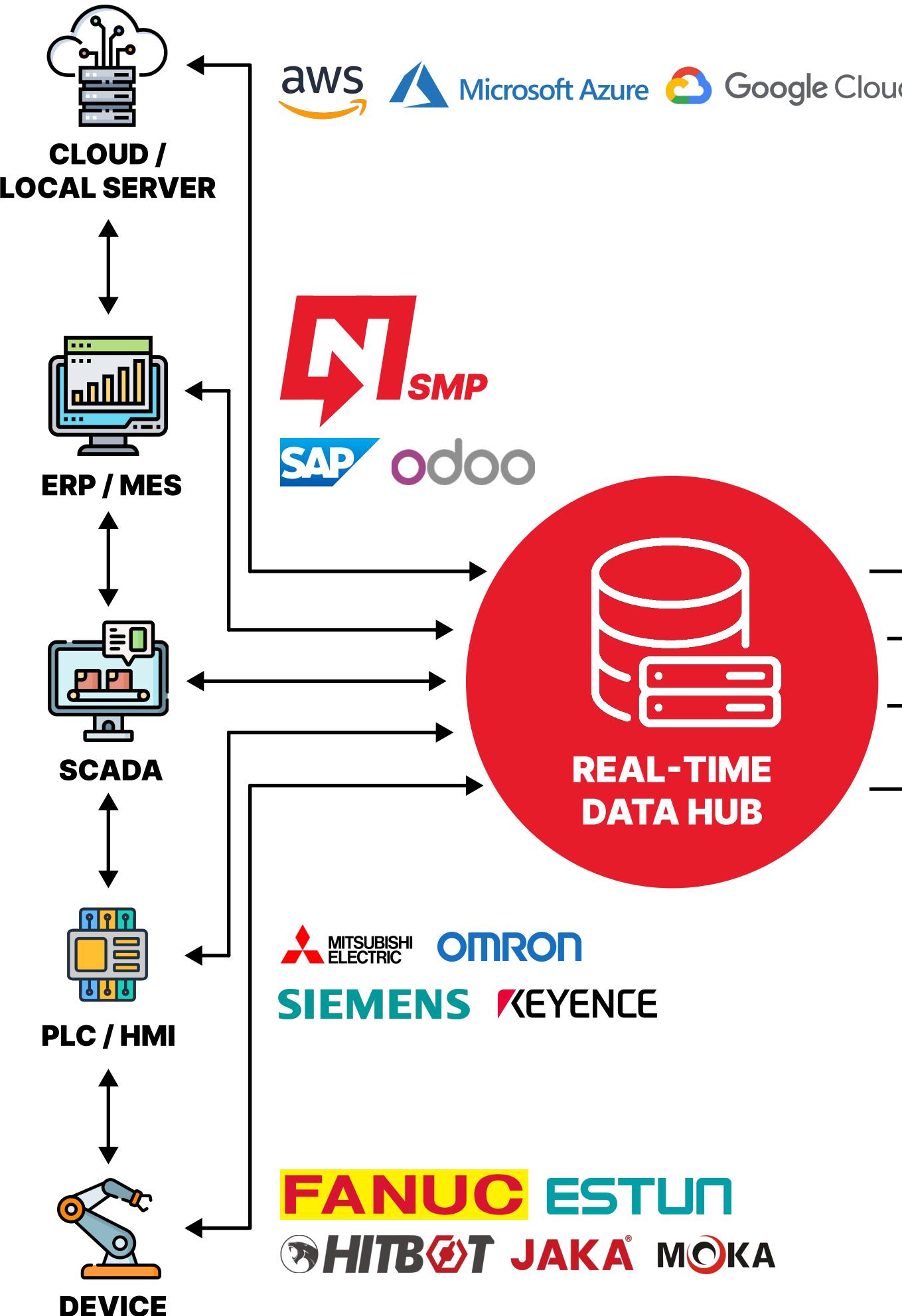
05-08. Industrial Robot

09-13. Spot Welding Equipment

14. Camera

15. Programmable Logic Controller (PLC)

16. Human Machine Interface (HMI)



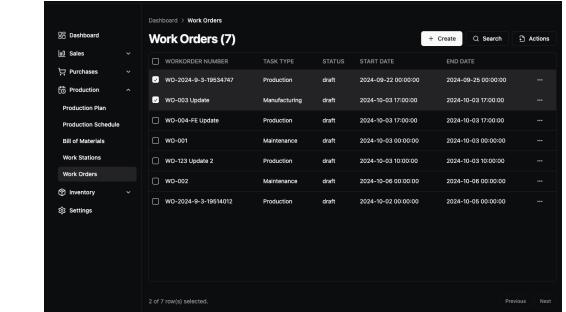
NEXIOTEK-Factory Solutions

Smart Manufacturing Platform

Streamline work order management, track production outcomes, and manage bills of lading with seamless integration capabilities

SMP

- Create, schedule, and track work orders for manufacturing and maintenance, ensuring smooth production workflow
- Generate bill of material resource planning and inventory management
- Seamlessly integrate with business systems



Overall Equipment Effectiveness Monitoring System

Highly effective system for monitoring and optimizing equipment performance in real-time

OEEMS

- Real-time performance tracking
- Improve production throughput and quality
- Configurable machine performance metrics, including OEE, APQ, etc



Predictive Maintenance Solution

Enhance equipment reliability with advanced predictive maintenance capabilities using real-time data analysis

PDMS

- Early fault detection
- Utilize machine learning to analyze and provide insights into optimal maintenance schedules
- Extend equipment lifespan

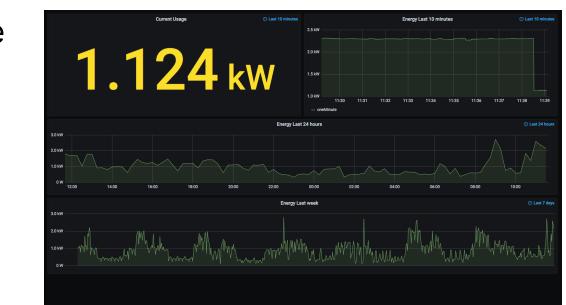


Energy Monitoring System

Highly stable and reliable centralized monitoring and management system for key energy consumption equipment

EMS

- Real-time energy consumption usage for analysis
- Dashboard with clear energy indicators
- Customizable alerts and reports



Industrial Robot

Spot Welding

Revolutionizing Welding Efficiency and Quality through Automation

Spot welding automation has transformed the way industries like automotive manufacturing handle high-precision welding tasks. By leveraging advanced robotics and automation technologies, manufacturers can now achieve faster, safer, and more cost-effective welding operations.

Otomatisasi pengelasan titik telah mengubah cara industri, seperti manufaktur otomotif, menangani tugas pengelasan presisi tinggi. Dengan memanfaatkan teknologi robotik dan otomatisasi canggih, produsen kini dapat mencapai operasi pengelasan yang lebih cepat, lebih aman, dan lebih hemat biaya.



With the integration of spot welding, along with technologies like visual camera positioning, robots can accurately handle tasks such as loading, unloading, and welding with minimal human intervention. A single operator can oversee multiple workstations, cutting labor costs while significantly improving the quality of the welds. In fact, these systems can double the efficiency of traditional manual welding operations.

Dengan integrasi pengelasan titik, bersama dengan teknologi seperti posisi kamera visual, robot dapat menangani tugas seperti pemuatian, pembongkaran, dan pengelasan secara akurat dengan intervensi manusia yang minimal. Seorang operator tunggal dapat mengawasi beberapa stasiun kerja, mengurangi biaya tenaga kerja sekaligus meningkatkan kualitas pengelasan secara signifikan. Bahkan, sistem ini dapat menggandakan efisiensi operasi pengelasan manual tradisional.



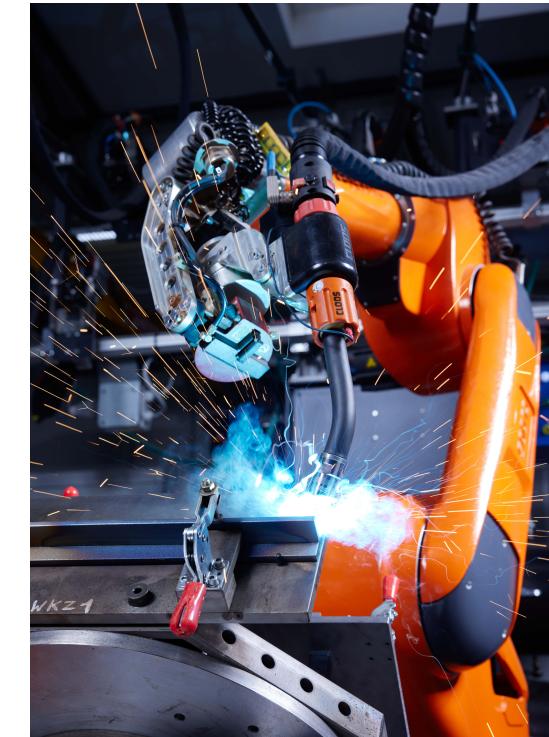
Welding Samples

Arc Welding

Precision Welding Solutions for Automotive Applications

Our advanced arc welding technology is designed to meet the demands of the automotive industry, delivering high-quality and efficient welding processes. With integrated software for seamless control and precise adjustments, this solution enhances productivity and ensures consistent results across various automotive components.

Teknologi pengelasan busur kami yang canggih dirancang untuk memenuhi kebutuhan industri otomotif, menghasilkan proses pengelasan berkualitas tinggi dan efisien. Dengan perangkat lunak terintegrasi untuk kontrol yang mulus dan penyesuaian presisi, solusi ini meningkatkan produktivitas dan memastikan hasil yang konsisten pada berbagai komponen otomotif.

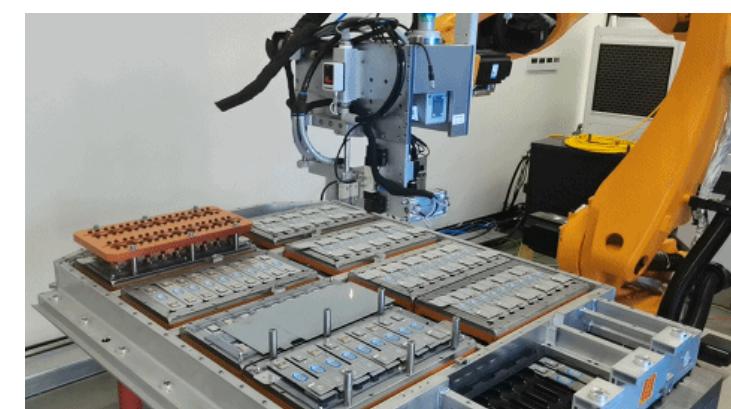


Laser Welding

High-Precision Welding for Enhanced Efficiency

Our laser welding system offers high track precision and excellent repetitive positioning, making it ideal for improving welding efficiency. With a dual-workbench setup, it enables seamless workpiece clamping at the external station while welding occurs internally, optimizing throughput. Widely applicable in sheet-metal processing, automotive, kitchen fittings, electronic engineering, and medical device manufacturing, it ensures consistent quality and precision across industries.

Sistem las laser kami menawarkan presisi jalur yang tinggi dan posisi berulang yang sangat baik, menjadikannya ideal untuk meningkatkan efisiensi pengelasan. Dengan pengaturan meja kerja ganda, sistem ini memungkinkan penjepitan benda kerja yang lancar di stasiun eksternal sementara pengelasan berlangsung di stasiun internal, mengoptimalkan throughput. Cocok digunakan secara luas dalam pemrosesan pelat logam, otomotif, perlengkapan dapur, teknik elektronik, dan pembuatan perangkat medis, sistem ini memastikan kualitas dan presisi yang konsisten di berbagai industri.



Laser Flight Welding

Painting

Precision Painting with Advanced Industrial Robotics

Engineered for precision and consistency, delivering high-quality paint finishes across various surfaces and materials. Designed for complex painting tasks, it ensures uniform application, reduces overspray, and minimizes material waste. With programmable paths and automation, this solution increases productivity while maintaining strict quality control, making it ideal for automotive and industrial equipment manufacturing.



Dirancang untuk presisi dan konsistensi, menghadirkan hasil akhir cat berkualitas tinggi di berbagai permukaan dan material. Didesain untuk tugas pengecatan yang kompleks, robot ini memastikan aplikasi cat yang seragam, mengurangi overspray, dan meminimalkan pemborosan material. Dengan jalur yang dapat diprogram dan otomatisasi, solusi ini meningkatkan produktivitas sambil mempertahankan kontrol kualitas yang ketat, menjadikannya ideal untuk industri otomotif dan peralatan industri.

Palletizing

Efficient Palletizing Automation

Automating palletizing can enhance the safety and profitability of your operations. Whether you're stacking full layers or handling individual boxes, bags, pails, or drums, industrial palletizing robots provide a fast, steady, and reliable automated solution. With a wide range of options in size, payload capacity, cycle speeds, and precision, these robots ensure efficient and careful handling of your products to meet diverse operational needs.



Mengotomatisasi proses palletizing dapat meningkatkan keamanan dan profitabilitas operasi Anda. Baik Anda sedang menumpuk lapisan penuh atau menangani kotak, kantong, ember, atau drum secara individual, robot palletizing industri menyediakan solusi otomatis yang cepat, stabil, dan andal. Dengan berbagai pilihan ukuran, kapasitas beban, kecepatan siklus, dan presisi, robot-robot ini memastikan penanganan produk Anda yang efisien dan hati-hati untuk memenuhi beragam kebutuhan operasional.

Deburring

Deburring Process with Precision Automation

The automated deburring system offers high precision and repeatability, significantly improving upon manual deburring methods. Its integrated smart tool management system, allows for extended autonomous operations, reducing the need for constant supervision. The system tracks tool wear in real-time, automatically replacing worn tools to minimize downtime and maintain efficiency. With force feedback control, the robot adapts to part variances and ensures accurate deburring, even for complex geometries, ensuring consistent quality throughout the process.

Sistem deburring otomatis menawarkan presisi tinggi dan pengulangan yang konsisten, secara signifikan meningkatkan metode deburring manual. Sistem manajemen alat pintar yang terintegrasi, memungkinkan operasi otonom yang diperpanjang, mengurangi kebutuhan pengawasan terus-menerus. Sistem ini melacak keausan alat secara real-time dan secara otomatis mengganti alat yang aus untuk meminimalkan waktu henti dan menjaga efisiensi. Dengan kontrol umpan balik gaya, robot dapat beradaptasi dengan variasi pada bagian dan memastikan deburring yang akurat, bahkan untuk geometri yang kompleks, sehingga menjamin kualitas yang konsisten sepanjang proses.

Assembly

Streamlined Automation for Automotive Assembly

Advanced assembly systems are designed to meet the rigorous demands of the automotive industry. These automated solutions ensure precise and efficient assembly of various components, from small parts to larger structural elements. With integrated robotics and cutting-edge technology, the system improves speed, accuracy, and safety while reducing labor costs. Capable of handling complex tasks such as part alignment, fastening, and inspection, this solution enhances production line efficiency and ensures the highest quality standards in automotive manufacturing.

Sistem perakitan canggih dirancang untuk memenuhi tuntutan ketat industri otomotif. Solusi otomatis ini memastikan perakitan komponen yang presisi dan efisien, mulai dari bagian kecil hingga elemen struktural yang lebih besar. Dengan robotika terintegrasi dan teknologi mutakhir, sistem ini meningkatkan kecepatan, akurasi, dan keamanan, sambil mengurangi biaya tenaga kerja. Mampu menangani tugas-tugas kompleks seperti penyelarasan bagian, pengencangan, dan inspeksi, solusi ini meningkatkan efisiensi lini produksi dan memastikan standar kualitas tertinggi dalam manufaktur otomotif.



Automotive Assembly Line

Spot Welding Equipment

Servo Gun

Pressure	800 kgf
Power and Duty Cycle	260 kVA / 20% duty cycle
Secondary Maximum Short-circuit Current	50000 A
Transformers	Double transformers connected in parallel, lighter in weight, higher in current, unified with conventional welding gun spare parts
Diode Service Life	48000000 Cycles
Secondary Connection Block	Low Contact Resistance and Long Service Life
Weight	150 kg
Frequency Adjustment	1000 Hz - 5000 Hz

Servo Gun Body Assembly

Servo Gun Body Assembly X Type

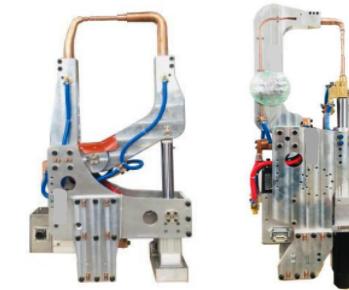
The Type X Robotic Welding Gun is a versatile, efficient solution for robotic welding, featuring a universal modular frame for easy disassembly and multi-orientation compatibility. It integrates adaptive voltage sampling, supporting multiple controllers and standardized components, minimizing inventory costs and delivery times. Compatible with various transformers and robot capacities, it also includes a quick-change bracket for fast, cost-effective installation, making it ideal for adaptable welding setups.

Type X Robotic Welding Gun adalah solusi serbaguna dan efisien untuk pengelasan robotik, dengan rangka modular universal yang mudah dibongkar dan kompatibel dengan berbagai orientasi. Dilengkapi dengan adaptive voltage sampling, mendukung berbagai pengontrol dan komponen standar yang meminimalkan biaya inventaris serta waktu pengiriman. Kompatibel dengan berbagai transformator dan kapasitas robot, alat ini juga memiliki braket quick-change untuk instalasi cepat dan hemat biaya, menjadikannya pilihan ideal untuk pengelasan yang fleksibel.

Servo Gun Body Assembly C Type

The Type C Robotic Welding Gun is designed for precision and durability, with a modular structure for easy maintenance and adaptability. Built with aluminum profiles and CNC-formed components, it offers high accuracy and includes self-lubricating bearings, extending maintenance to three-month intervals. Weighing 55-70 kg (without transformer and servo motor), it supports various transformers, fitting numerous robotic systems. Sharing over 80% of components with other models, it reduces costs and simplifies spare parts management, making it ideal for high-performance robotic welding.

Type C Robotic Welding Gun dirancang untuk presisi dan daya tahan, dengan struktur modular yang memudahkan perawatan dan adaptabilitas. Dibuat dari profil aluminium dan komponen yang dibentuk dengan CNC, alat ini menawarkan akurasi tinggi dan dilengkapi bantalan yang melumasi sendiri, memperpanjang interval perawatan hingga tiga bulan. Dengan berat bersih 55-70 kg (tanpa transformator dan motor servo), alat ini mendukung berbagai transformator dan cocok untuk berbagai sistem robotik. Berbagi lebih dari 80% komponennya dengan model lain, alat ini mengurangi biaya dan menyederhanakan manajemen suku cadang, menjadikannya pilihan ideal untuk pengelasan robotik berkinerja tinggi.



Type X / Type C

Servo Gun Drive Assembly

Drive	Design Pressure	Regular Distance	Lead Distance	Speed	Standard Throat Depth`
X Type	20000 N	132/162 mm	5 mm	780 mm/s	860 mm
C Type	16000 N	180 mm	20 mm	890 mm/s	800 mm

Servo Gun Portable Transformer

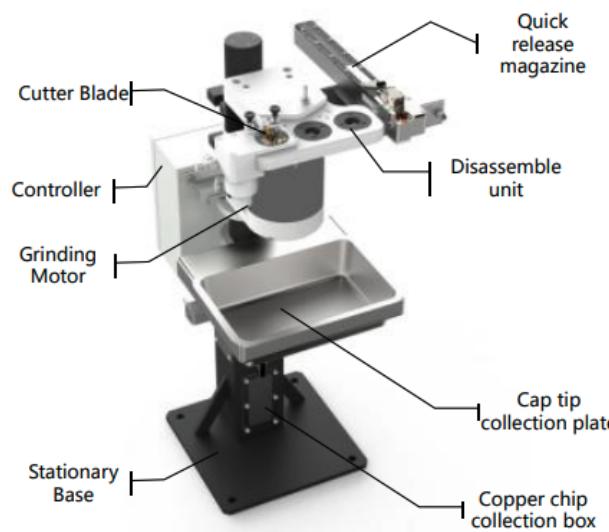
Power	Duty Cycle	Continuous Current	Max Short Current	Weight
170kVA	20%	8.9kA	36000A	20kg

Automatic Tip Changer and Dresser

Used for Electrode Cap Tip Dressing and Replacement in Spot Welding Equipment

Automatic Tip Changer and Dresser consists of a quick release magazine, grinding mechanism, cap tip replacement mechanism, collection box. It does not need to change the cap and grinding manually, which improves production efficiency and product quality, while reducing production costs and safety accidents. Mainly used for electrode cap tip dressing and replacement in spot welding equipment.

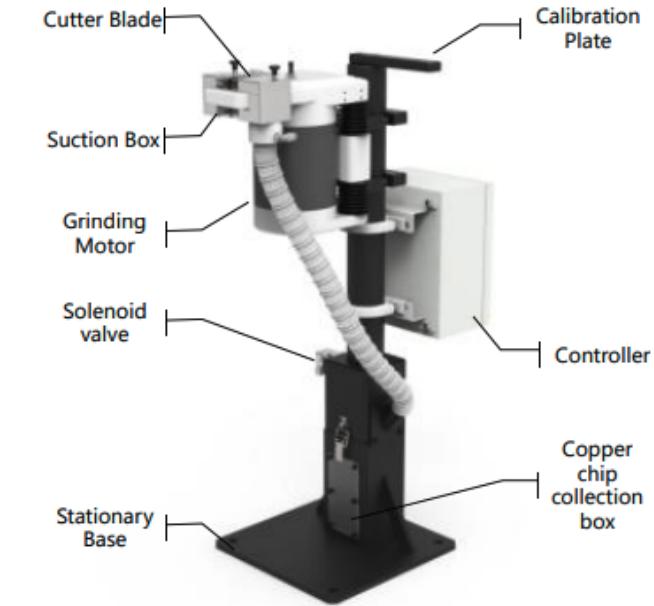
Automatic Tip Changer and Dresser terdiri dari majalah pelepas cepat, mekanisme penggerindaan, mekanisme penggantian ujung cap, dan kotak koleksi. Alat ini tidak memerlukan penggantian cap dan penggerindaan secara manual, yang meningkatkan efisiensi produksi dan kualitas produk, sambil mengurangi biaya produksi dan risiko kecelakaan. Alat ini terutama digunakan untuk perawatan dan penggantian ujung cap elektroda pada peralatan pengelasan titik.



Automatic Tip Dresser

Used for Electrode Cap Tip Dressing in Spot Welding Equipment

The standard tip dresser is mainly used for the grinding work of robot welding guns. The robot holds the welding guns and moves them to the corresponding position for tip dressing. The standard floating device can automatically adjust the position of the grinding motor within a certain range, effectively absorbing the load of the welding gun and tip dresser with shock reduction. The unique structure of the dust collection box ensures that the copper chips generated by tip dresser can be sucked into the collection box to avoid spilling to the ground.



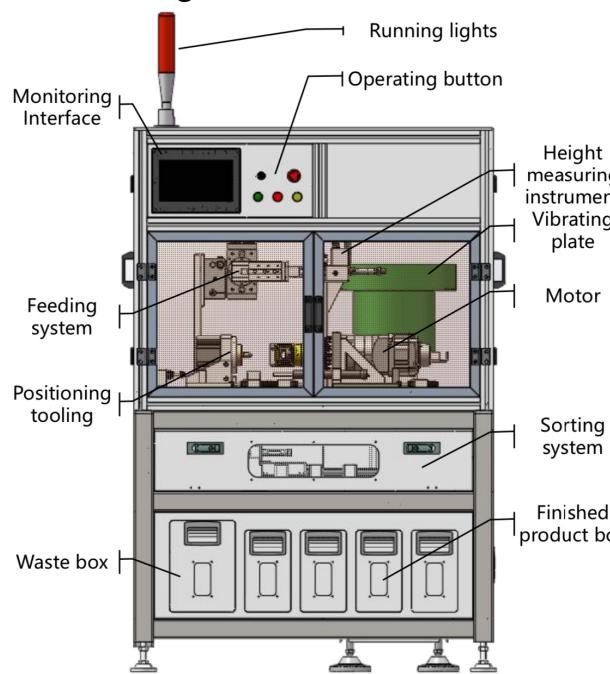
Measurement	506 * 506 * 840 mm
Power	1.0 kW
Voltage (AC)	3φ/220V/50Hz, 3φ/380V/50Hz
Control Voltage (DC)	1φ/24V
Communication Protocol	I/O, Profinet, Ethernet/IP, EtherCAT, CC-Link
Blades Direction	Horizontal, Vertical
Blade Rotation Detection	External sensor switch to confirm rotation function timely

Measurement	520 * 300 * 835 mm
Power	1.0 kW
Voltage (AC)	3φ/220V/50Hz, 3φ/380V/50Hz
Control Voltage (DC)	1φ/24V
Communication Protocol	I/O, Profinet, Ethernet/IP, EtherCAT, CC-Link
Blades Direction	Horizontal, Vertical
Blade Rotation Detection	External sensor switch to confirm rotation function timely

Centralized Tip Dresser

Used for Electrode Cap Tip Dressing with Automatic Sorting

Centralized tip dresser is mainly used for centralized grinding of lots of electrode cap tips, and has both grinding and sorting functions. The electrode cap tip is automatically loaded through the vibrating plate, and the height measuring instrument measures the height of the electrode cap tip. If it is unqualified, it will be directly rejected. The qualified product will be grabbed by the loading system to the positioning tooling, and the grinding motor will complete the grinding. After grinding, the sorting system automatically sorts the electrode caps into corresponding finished product bins according to the height of the electrode caps. By changing the positioning tooling, the versatility of electrode caps of different sizes can be achieved.



Centralized tip dresser terutama digunakan untuk penggerindaan terpusat pada banyak ujung tutup elektroda dan memiliki fungsi penggerindaan serta pemilahan. Tutup elektroda secara otomatis dimasukkan melalui piring getar, dan instrumen pengukur tinggi mengukur tinggi tutup elektroda. Jika tidak memenuhi syarat, tutup elektroda tersebut akan langsung ditolak. Produk yang memenuhi syarat akan diambil oleh sistem pemuatan ke alat pemasangan, dan motor penggerindaan akan menyelesaikan penggerindaan. Setelah penggerindaan, sistem pemilahan secara otomatis memisahkan tutup elektroda ke dalam wadah produk jadi yang sesuai berdasarkan tinggi tutup elektroda. Dengan mengganti alat pemasangan, fleksibilitas tutup elektroda dari berbagai ukuran dapat dicapai.

Measurement	1100 * 890 * 1670 mm
Power	3.0 kW
Voltage (AC)	1φ/220V/50Hz
Air Pressure	0.6 - 0.8 MPa
Applicable Specification	Diameter 13 - 16mm, Length 16 - 25mm
Production Rate	< 5 seconds / pieces

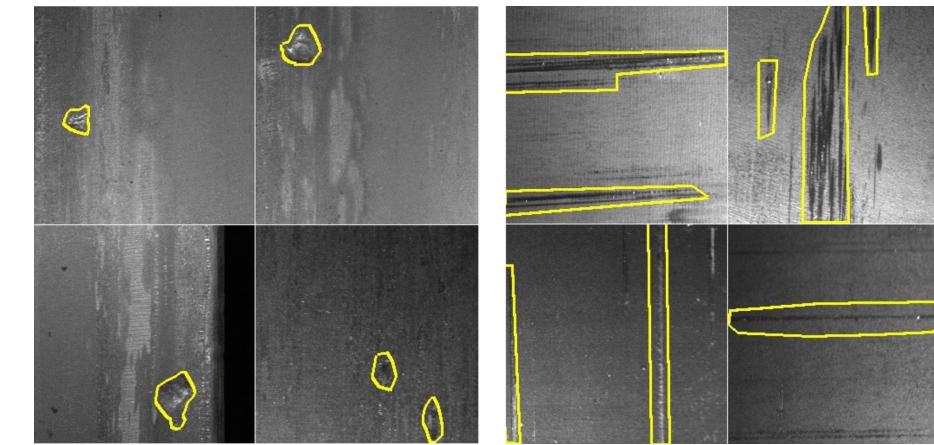
Camera

Quality Control

Improve Product Quality and Reduce Waste with Precise, Real-Time Defect Detection

Utilize advanced AI and machine vision technology to identify defects in manufacturing processes, ensuring only high-quality products move forward. Detect flaws such as surface scratches, dimensional inaccuracies, and assembly errors with accuracy, reducing rework costs and minimizing production delays. Achieve consistent quality control and maintain customer satisfaction by catching defects early in the production line.

Manfaatkan teknologi AI canggih dan visi mesin untuk mengidentifikasi cacat dalam proses manufaktur, memastikan hanya produk berkualitas tinggi yang diproses lebih lanjut. Deteksi cacat seperti goresan permukaan, ketidakakuratan dimensi, dan kesalahan perakitan dengan akurasi tinggi, sehingga mengurangi biaya pengrajin ulang dan meminimalkan penundaan produksi. Capai kontrol kualitas yang konsisten dan tingkatkan kepuasan pelanggan dengan mendeteksi cacat sejak dini di lini produksi.



Sheet Metal Defects

Object Detection

Ensure safety with object detection technology, identifying critical safety gear such as hardhats, vests, and goggles

Enhance compliance and minimize risks by ensuring all personnel are properly equipped before entering hazardous areas, providing a safer working environment and reducing the potential for accidents.



Tingkatkan kepatuhan dan minimalkan risiko dengan memastikan semua personel dilengkapi peralatan yang tepat sebelum memasuki area berbahaya, menciptakan lingkungan kerja yang lebih aman dan mengurangi potensi kecelakaan.

Programmable Logic Controller

We can support a wide variety of PLCs and other electrical parts according to the needs of our customers, including panel assembly, system setting, and configuration with machines based on the required application. We are ready to provide support, including conducting on-site studies if needed, to ensure proper usage alignment.

Berbagai macam PLC dan elektrikal part lainnya sesuai dengan kebutuhan dari customer bisa kami support berikut pembuatan panel, system setting dan konfigurasi dengan mesin sesuai aplikasi yang di butuhkan oleh customer. Kami siap support jika perlu melakukan studi actual di lapangan untuk menyesuaikan penggunaanya.



PLC Mitsubishi



PLC Siemens



PLC Keyence



PLC Omron



Main Control Panel

Human Machine Interface

We can support various brands of HMIs tailored to the customer's needs, in line with the application and field requirements. We also offer a range of sensors and digital counters, along with implementation, system setup, and usage according to specific needs.

HMI berbagai merek juga bisa kami support menyesuaikan dengan kebutuhan dari customer sesuai dengan aplikasi dan kebutuhan di lapangan. Juga berbagai macam sensor maupun digital counter bisa kami support sekaligus dengan implementasi, system setting dan penggunaan sesuai dengan kebutuhan.



HMI Mitsubishi



HMI Proface



HMI Keyence



HMI Omron



Digital Counter



Digital Temperature Control