VOL 63 | ISSUE 02 | ENGLISH - BY MONTHLY | JULY - AUGUST 2024 | PAGE - 48 | RNI No.6178/61

imprint™ Automation India Magazine

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India's Automation Magazine

Whose Giving Exhibitors Automation Business?

It's ISA India sections all the way!!

Page no. 26 + 34

ISA International Society of Automation
Chicago Section

PARA Tech Expo Launched

Industrial Automation Expo

Page no. 2

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- Schneider Growth Opportunities for Industrial Systems Integrators with universal automation
- ISA CIDCO Conference Attracts Critical Delegates Attendance
- Industrial Automation Acronyms
- SIEMENS Connect the Virtual Realm to Physical Manufacturing
- Honeywell Momentum Machine Control
- Indian Talent in Automation Technology on a Surge
- Automation Gossip & Forgotten Links

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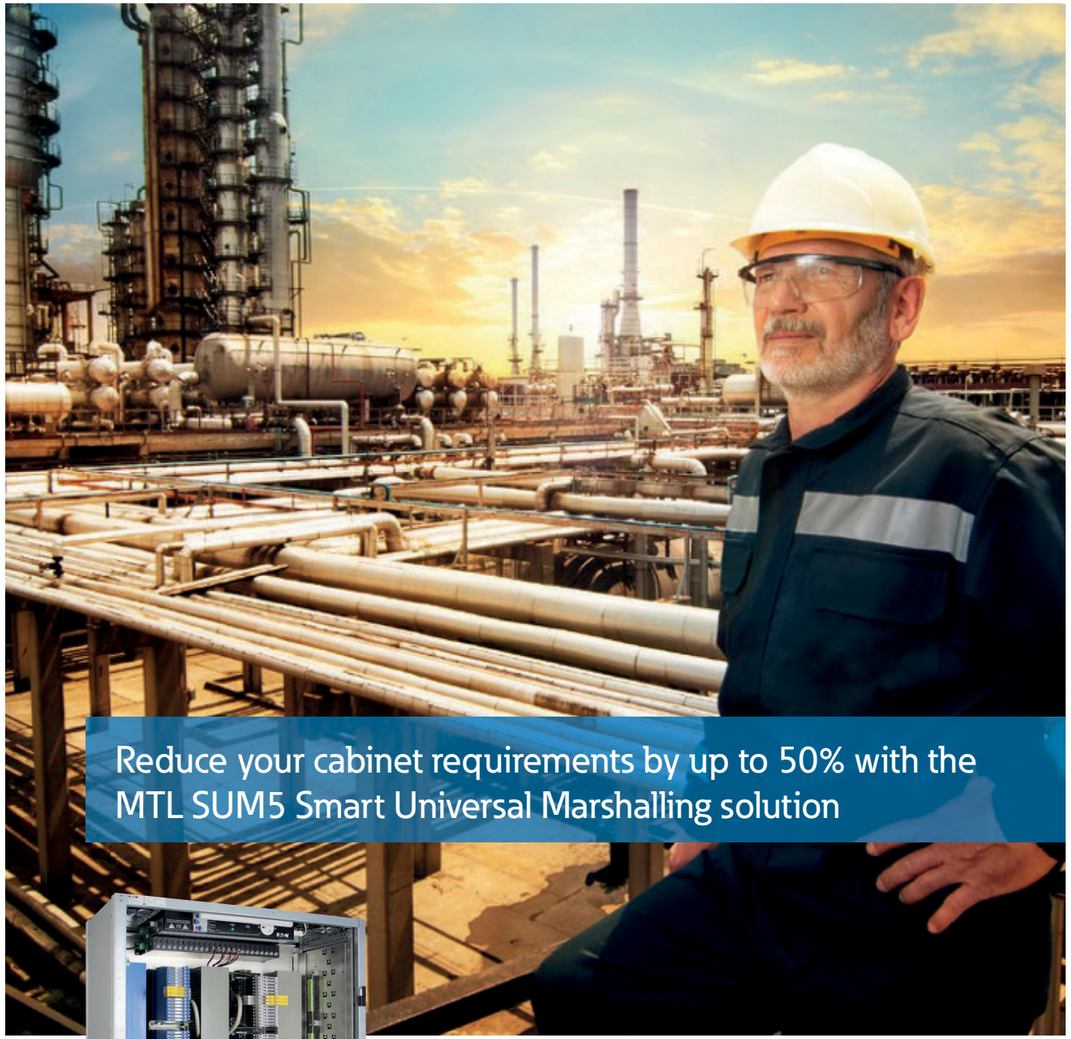

The MTL SUM5 combines five functions into one modular design for the lowest lifetime costs and lowest installed costs.

The requirement for complex interconnecting wiring is now eliminated, reducing the cost of wiring, installation, maintenance and most signifi cantly reducing risk of failure.

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Whose Giving Exhibitors Automation Business? It's ISA India sections all the way!!

ISA Sections in India have undeniable emotional factor. Started by deeply involved automation engineers years ago who respected their Involvement in automation technologies and in an altruistic manner devoted their valuable time to developing the session affiliated to ISA, Chicago. These sections whether Delhi or Maharashtra are run by professionals who value their knowledge and activity in automation engineering. The expos at the PPA or PPPA conferences are delightful in the camaraderie. The conference attracts all the Honchos and PSU movers and shakers. see page no 26 Delhi review and page no 34. Every exhibitor participating gets direct attention from the actual user and buyer and its business all the way. ISA is the most important catalyst and bringing in the maximum business to automation industry on a platform that is undoubtedly cued in.

Niranjan Bhise Joins Imprint Automation India magazine as Editor

Niranjan Bhise

Niranjan is a process automation professional with 30+ years of experience is sales, design and consulting. He is currently working on ATEX, IECEX and UL certified panel integration with design consultancy. He is doing hazardous area classification training for instrumentation and electrical integration.

Niranjan Bhise, is currently running N B Engineers and Controls, bringing experience from previous roles at nVent, Pentair, PEPPERL+FUCHS SAS and Elder Instruments Pvt Ltd.

Niranjan Bhise holds a 1985 - 1988 Engineering in Industrial Electronics @Mandar Education Society - Chiplun. With a robust skill set that includes Instrumentation, PLC, Automation, Process Control, Engineering and more, Niranjan Bhise contributes valuable insights to the industry.

Bhise will drive Imprint Automation India Magazine as per his vision to build an International Automation magazine and web portal attracting participation from global Automation companies as well institutional participation both independent and government in India to provide a neutral and transparent platform without nexus." My goal is to provide a robust magazine focused on providing business opportunities to Automation companies in India. Industry segments which offer growth in adopting automation solutions like pharma, packaging and warehousing will be highlight features in the magazine first off involving their associations.

"I intend to make Imprint Automation India a must visit new website for automation engineering talent from across India." expresses Niranjan enthusiastically.

Talking about fundamentals ***Imprint Automation India Magazine*** includes in this editorial a Glossary of Acronyms on Automation technology. A must read and very useful for all of you in the automation business. Go to page-38. Imprint's glossary will be constantly updated. Imprint's mantra is knowledge.

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Published By Infocast

Schneider's approach on Universal Automation is very positive. This article catches IIoT and Industry 4.0 by the collar. Future Proof automation is imperative. How do you ensure you can upgrade to state-of-the-art without getting into a tangle with software acting stubborn and hardware not responding! Schneider has the solution. Go to page-30

Honeywell has machine control in mind and offers Momentum for conveyor and sortation solution, promising negligent downtime and no damage to product and high throughput. Go to page 44

Siemens is not being discrete about manufacturing operations management. It promises to connect the virtual realm to physical reality. Counting every nut in the bargain. Go to page 40

We've started two new slug lines. Industrial Automation Company news and Automation Tech Global Gossip. These must-read editorial features will entertain as they keep you updated on automation ideas.

Editorial Team

www.paratechexpo.in

PARA Tech Expo Launched

Industrial Automation Expo Launched by Imprint Automation India Magazine, Published by Infocast Systems Private Limited

In response to the Automation Industry need for a more inclusive and neutral Expo Infocast Systems publishers of Imprint Automation India Magazine are launching PARA Tech Expo 2025. PARA Tech Expo will boast of a Three-Day Conference, CEO Round Table Conclave. Experiential features and the most elite gathering of Actual users and Pundits of Automation Technology.

Guiding principles

PARA Tech Expo (Professional, Automation, Robotics & Artificial Intelligence Technology Exhibition).

First Mantra: Industrial automation leads to excellence.
Second Mantra: March of automation in manufacturing

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MIDC and Maharashtra Automation Talent

PARA Tech Expo and conference is supported by MIDC. There is a vision in MIDC associating with PARA Tech Expo right at the very outset. Maharashtra is an advanced state in automation technology. Mr. Vikas Suryawanshi, Deputy collector and General Manager (Marketing) has expressed excellently the vision of Maharashtra Government and MIDC "We welcome the initiative of Infocast Systems in organising PARA Tech Expo 2025 at CECC, Vashi, NAVI Mumbai, Maharashtra, which will help contribute to Maharashtra's economy by attracting investment in automation sector to build the momentum to establish Maharashtra as the core automation technology destination in India. Furthermore, such initiatives will also help build the required skill pool of automation engineering professionals in Maharashtra, thereby developing the ecosystem for automation industry to flourish."

International Society of Automation (ISA) Chicago

Maharashtra is the only state that has two ISA sections. ISA is the Chicago based International Society of Automation, with Sections around the world, numbering 110+. In India ISA has seven Sections. Maharashtra has two Sections one in Pune and the other named Maharashtra Section based out of Navi Mumbai. Maharashtra also boasts of the highest number of professional automation engineers. Thus, Imprint Automation India Magazine which is managing PARA Tech Expo decided to host the show in Navi Mumbai. Cidco Exhibition and Convention Centre (CECC) proved to be the appropriate venue for the expo. Also, ISA Maharashtra Section hold its annual PPPA Meet at CIDCO Conference Centre.

Features to instigate automation investment

The show possesses market knowledge of automation in all sectors of production and has analysed the growth sectors too. The Expo will create three features on pharma, packaging, and warehousing. The idea is to connect the exhibitors representing automation technology both hardware and software who offer automation solutions to these three sectors. Each sector will have a pavilion to connect both companies who need automation and exhibitors to provide solutions. The Pavillions will buzz with networking and lead to productive progress in automation. Imprint Automation India magazine is connected to the automation market and its content is also focused on providing solution hardware information and new innovation and products that are state-of-the-art. The Delhi Section of ISA PPA Meet had a wonderful expo in the Eros Hotel. The presentations by global companies were eye opening. [see page 26] New technologies in monitoring on Wi-Fi with 5G providing innovative features. PARA Tech Expo aims to bring to the exhibit floor the latest technology in automation.

Expo Conference Hall in interactive environment

If you see the floor plan of the exhibit booths and the central hall where the conference is located in a custom-built hall, you will realise that the PARA Tech Expo is designed to a very interactive environment for the delegates attending and visitor's participation in the conference. Basically, PARA Tech Expo is a transparent, neutral, independent expo that will attract the leading companies in automation to explore maximum business opportunities and visitors and delegates to build their knowledge quotient. We deliver business.

www.paratechexpo.in

www.infocast.in

Expo News

Exhibitors Networking Party

It's going to be a great experience. The expo has special rates at the Four Point Sheraton located just outside the venue. Like so close, maybe 100 steps and you reach the hotel. Expo provides Mumbai attractions travel service and assured taxis from the travel agent.

The Exhibitor's Party is exclusive and attendees are exhibitors, speakers, awards winners, special invitees. Party will be at the Venue. Attendance by buying an entry pass will allow visitors to attend at a decent cost.

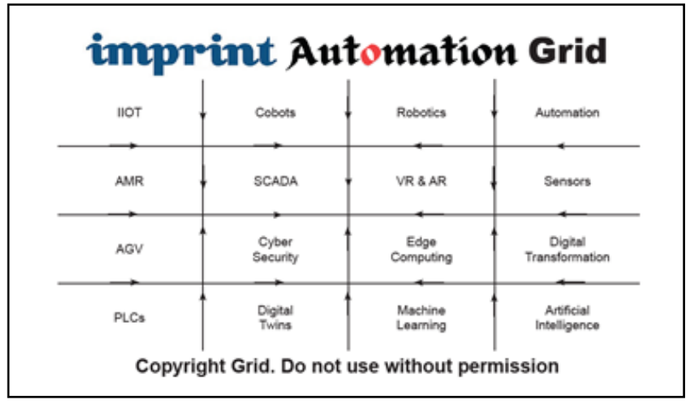
Automation Hardware and Automation Software

PARA TECH Expo is the first intelligent expo with proper segregation of exhibit display in two Halls¬-Hardware and Software. Check out the segregated product category. Each Hall is large, 4500 sqm. Total exhibit area is close to 11,000 sqm Able to accommodate sufficient number of companies to attain critical participation of latest technology. Total number of exhibitors which can be accommodated is 350+. Booth location will be done by professionals with genuine experience in automation engineering and technology.

HALL 1 Hardware Automation	HALL 2 Software Automation
Industrial Automation	Digital Transformation
Industrial Robotics	Artificial Intelligence
Machine Learning	Edge Computing
Sensors	Cyber Security
Cobots	Digital Twins
PLCs / DCs	VR & AR
AGV	IOT
Edge Computers	

The Automation Grid

Yes. PARA Tech has prepared a copyrighted Automation Grid!! Navigate this grid and you've cracked the code! This is not a game! Yes! it could evolve to become an automation game! We are working on it! Study the grid. Each arrow is floating to another aspect of automation technology, each automation technology is dependent on all the other constituents of automation technology. Imprint Automation India magazine which has conceptualised and created PARA Tech Expo created this imaginative grid. This grid guides the magazine in its editorial and in traversing the perception maze of automation solutions.



INFOCAST Content & Business Manager

Anchal Tiwari

PARA Tech Expo exhibitor prospectus is included in this issue. Go to page 7 It is very important or rather its best advised to confirm participation at the earliest so that this magazine and PARA Tech expo will immediately begin promotion, publicity, advertising of your brand and technology and company people and philosophy. Early bird discount ends 2024, September 21. Anchal Tiwari is the Content and Business Manager at Infocast Systems. anchal.tiwari@infocast.in 9821135542. Contact Anchal Tiwari for Booth booking in PARA Tech Expo 2025.

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Automation Expo at Nesco Mumbai August 21-24 occupies Hall 1 and Hall 2

EATON to Launch Breakthrough light weight PTZ Camera

EATON is Lanyard sponsor

Robonetics is Silver sponsor

500+ Stalls, 800+ companies exhibiting

CEO Networking Nite Key Topics of Discussion

- Innovative Technologies.
- Industry Collaboration.
- Future Trends.
- Sustainability & Automation.
- Case Studies & Success Stories.

Awards

- Award Nite

Process Automation Day 1

Keiichiro Kobuchi Chief AI Officer Yokogawa Digital Corporation - "Autonomous control AI that achieves both energy-saving operation and high-quality production"

Ravishankar Sundaresan CEO Alethe Labs India- "AI / ML and Digital Twin Technologies for efficient Gas Pipeline Operations"

Venkat Sankar Global IT Senior Director Boston Consulting Group (BCG)- Digital Twin applications

Mr. Davinder Paul Singh Deputy General Manager Indraprastha Gas Limited- "Role of Digitization, Automation and Innovation in Natural Gas sector"

Paul Sereiko Director – Marketing & Product Strategy FieldComm Group- "Leveraging AI for Enhanced Process and Factory Automation with PA-DIM"

Oindrilla Chatterjee Manager – Digitalization Adage Automation Pvt. Ltd.- "Digitalization, Data Analytics & AI in Gas Analytics"

Rahul Lodhe Senior Director SAP Labs India Pvt. Ltd- "Leveraging Business AI for Enhanced Business Value (Generative AI)"

Robotics Day 1

Mahendra Patil National Head - Robots & System Engineering Fanuc India- "AI and Robotics in Warehousing and Logistics"

Amit Mahajan CMD The Phoenix Group - USA- "AI and Robotics in Warehousing and Logistics"

Anuj Bihani Managing Director Alstrut India Pvt. Ltd.- "Emerging Trends in Collaborative Robotics"

Anand Mohan Director CYGNII Automation P. Ltd.- "Vision-Guided Robotic Processes in the Automotive Industry"

Vijay Seelam Founder & Managing Director Svaya Robotics- "Breaking Barriers to Adoption of Robotic

Factory Automation Day 2

Kiran Simha Automation Business Head ARI Automotive Robotic (ARI Global)- "Industrial Automation & Robotics"

Sumit Chakraborty Associate Vice President – S&M Adani Logistics Limited- "AI in Logistics, Supply Chain"

P. V. Sivaram Evangelist for Industry 4.0, Digital Transformation, Industrial Automation- "Talk on technological advancements on Factory Automation industry in India & moderate the session"

Sanjay Lalwani Data Scientist Siemens- "The impact of Generative AI in operations"

Vishal Kumar Manager - BU Automation System | Industry Management & Automation Phoenix Contact India Pvt Ltd- "Digital Factory Now"

Anand Deodhar Head IT Force Motors Ltd.- "Innovative use cases in the realm of Industry 4.0, highlighting successful digitally transformed businesses"

Pritam Chaudhari Business Development Manager Dynalog India- "Defending the Future: Industry 4.0 Cybersecurity Strategies"

Lalit Mishhra Regional Sales Head – Indian Subcontinent Cognex India- "Innovative Evolution: AI & Robotics Reshaping Manufacturing"

Automation Entertaiment

Professional Automation Robotics Artificial Intelligence PARA TECH EXPO OTT STUDIO

Concept & Created By imprint™ Automation India Magazine OTT STUDIO

Featuring videos of Automation on the move
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Submit Technology videos to ParaTech Expo. News and Corporate videos can be Submitted as well
Email- anchal.tiwari@paratechexpoin

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Capvel ICT ¬ Indicator Control Transmitter

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Industrial Automation Acronyms 38

Acronyms in industrial automation will advantage automation engineers as a guidance to understand technical documents properly. Imprint automation india magazine decided to publish acronyms for professional automation engineers as a ready reference despite easy excess of such information on the net. Reason being that reading the written word is best memory tool.

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Imprint Automation India Magazine brings you upto speed with the explosion of information in media on break through innovation, latest technology, and super progress in PARA Tech- Professional Automation Robotics and Artificial Intelligence you missed most of the blasts we provide you the forgotten links again.

Expo News

Automation Expo at Nesco Mumbai August 21-24 occupies Hall 1 and Hall 2 Eaton Launch Breakthrough light weight PTZ Camera Eaton is Lanyard sponsor Robonetics is Silver sponsor. 4

PARA Tech Expo Launched

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Imprint Automation India magazine is a bi-monthly publication, on the industrial automation, robotics, and artificial intelligence for machine learning industry, for private circulation. It reaches out to subscribers, mainly automation system integrators, automation engineers and automation industry trade professionals around the world. Additional copies are being promoted at major international industry tradeshows. Imprint Automation India magazine seeks the healthy promotion of the industrial automation technology and solutions through dissemination of useful information. Some of the information is compiled from industry sources, trade journals, company brochures for the benefit of readers, especially, automation companies. Imprint Automation India magazine acknowledges with thanks the authors and publishers of these printed materials. Views expressed in the articles are those of the authors and not necessarily of Imprint Automation India magazine. Imprint is a trademark under registration. The contents of Imprint Automation India magazine are under copy-right registration. All rights reserved. Reproduction by any means in whole or part without written permission is prohibited. Unsolicited printed material is welcome but no responsibility is undertaken for the same and will not be returned. Imprint Automation India magazine does not take responsibility for the absolute accuracy of information published.

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Focus 2025

Manufacturing Automation.

Manufacturing Sectors.

Automation Professionals

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Exhibitor Prospectus

5-6-7 February 2025

Professional Automation Robotics Artificial Intelligence
PARA TECH EXPO

Sourcing Solutions in Industrial Automation

Venue: CIDCO Exhibition & Convention Centre (CECC), Vashi, Navi Mumbai-400703

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Automation Growth Story

Automation growth in Manufacturing, packaging, warehousing is 17-20%. 5G connectivity, IIOT is spurring adoption of automation. Information on cost-effective solutions as well as future-proof solution is imperative.

PARA Tech Expo and ***Imprint Automation India magazine*** is a valid response to an urgent need of Indian industrial automation robotics and artificial intelligence industry to source and connect with the right company for the correct solution.

The India Industrial Automation Market size is expected to grow from USD 13.23 billion in 2023 to USD 25.76 billion by 2028, at a CAGR of 14.26% during the forecast period (2023-2028).

The India Warehouse Automation Market size is expected to grow from USD 267.07 million in 2023 to USD 880.98 million by 2028, at a CAGR of 26.96% during the forecast period (2023-2028).

The packaging automation market is currently valued at US$ 74.53 Bn in 2023. By 2033, demand for Packaging Automa¬tion is expected to reach a high of US$ 161.66 Bn, the report adds.

The Pharmaceutical Automation Market is projected to reach $18.2 billion by 2029 at a CAGR of 12% from 2022 to 2029. The growth of this market is attributed to the increasing adoption of robots in pharmaceutical manufacturing, government initia¬tives to promote industrial development, rising investments in transforming conventional production facilities, and growing demand for safe and digitized production processes.

The growing demand for IIoT in pharmaceutical manufacturing is expected to offer significant opportunities for the growth of this market.

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Highlights at PARA Tech Expo 2025

1. Exclusive Exhibitors only engagement with global pundits of automation. This session will give guidance on impact of latest technology in automation. Where lies the future ? Return on investment. The impact of 5G on remote automation. Artificial intelligence and its impact on machine Learning, IIOT (4.0) and digital transformation.

2. CEO Conclave white paper on March of Automation in manufacturing in India–strategy for government and private industry.

Sector Identification:

1.Pharmaceutical Automation.
2.Packaging Automation.
3.Warehouse Automation.

3. **Pharma Conclave:** Meet Pharma Association to discuss automation initiatives in pharma industry make connection get bussiness.

4. **Packaging Conclave:** Meet Packaging Association to discuss automation initiatives in Packaging industry make connection get bussiness.

5. **Warehouse Conclave:** Meet Warehouse Association to discuss automation initiatives in Warehouse industry make connection get bussiness.

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Pro Automation, Robotics & Artificial Intelligence Exhibition

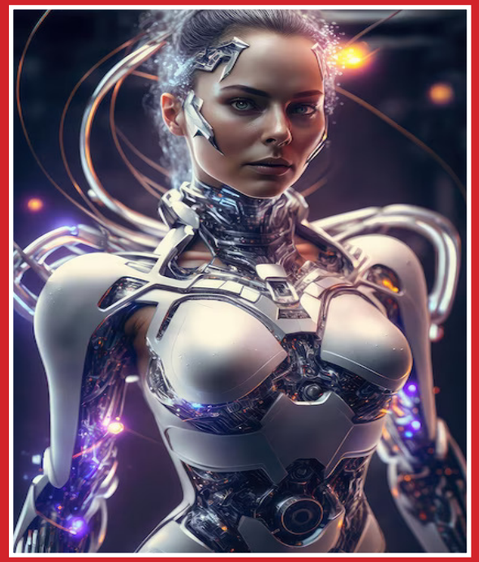
Professional Automation Robotics Artificial Intelligence

PARA TECH EXPO

Sourcing solutions in industrial Automation

HALL 1

- Industrial Automation
- Industrial Robotics
- Machine Learning
- Sensors
- Cobots
- PLCs
- AGV



HALL 2

- Digital Transformation
- Artificial Intelligence
- Edge Computing
- Cyber Security
- Digital Twins
- VR & AR
- IIOT

5·6·7 FEBRUARY 2025

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Exhibitor Prospectus

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Industrial Automation Leads to Excellence

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IIOT	Cobots	Robotics	Automation
AMR	SCADA	VR & AR	Sensors
AGV	Cyber Security	Edge Computing	Digital Transformation
PLCs/DCs	Digital Twins	Machine Learning	Artificial Intelligence

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March of automation in manufacturing

VENUE: CIDCO Exhibition & Convention Centre (CECC), VASHI, NAVI MUMBAI 400703

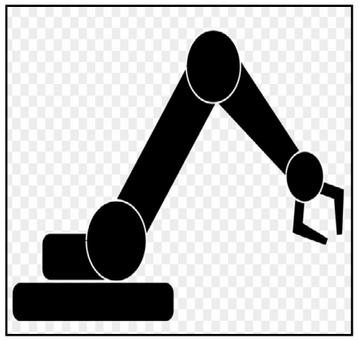
CONFERENCE

3 Day conference with leading speakers on important topics

CEO Round Table Conclave

BOOK YOUR SPACE	Anchal Tiwari 9821135542 anchal.tiwari@imprint-magazine.in
VISIT THE SHOW	Deepali Jaiswar 9821135542 imprintmagazine84@gmail.com

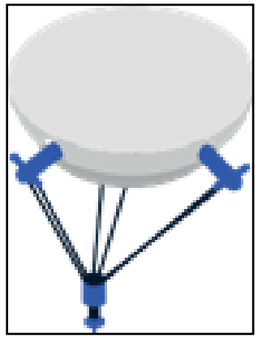
Robots & Cobots at PARA Tech Expo



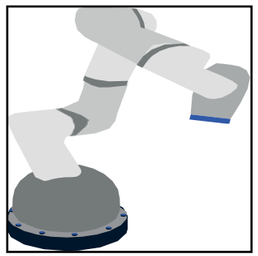
Articulated

Exoskeletons

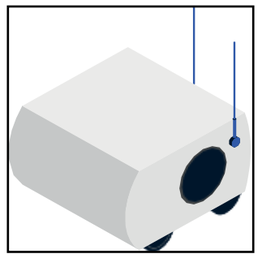
Articulated



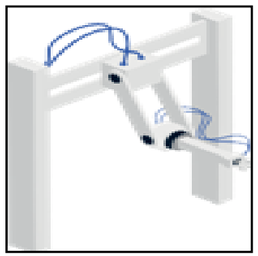
Delta



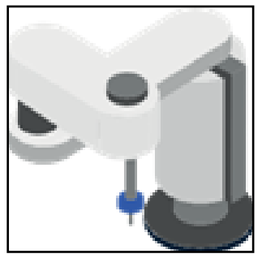
Collaborative



AGVs & AMRs



Gantry/linear/Cartesian



SCARA

Supporting Association

COUNCIL OF VIBRATION SPECIALISTS
C S
INDIA
Diagnostics and Prognostics Practitioners

Mobile robots

MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION
(A Government of Maharashtra Undertaking)

।।उद्यमात् सकल समृध्दिः।।
MIDC

Date: 04/04/2024

To
Shri Anil Chopra
PARA Tech Expo
Infocast Systems Pvt Ltd
6C/5 Sangeeta Apartments,
Revdandkar Marg, off Juhu Tara Road, Mumbai 400049

The State of Maharashtra has established itself as the Industrial Powerhouse of India and has been able to develop integrated ecosystems in Automobile and Engineering manufacturing.

We welcome the initiative of Infocast Systems in organising PARA Tech Expo 2025 at CECC, Vashi, NAVI Mumbai, Maharashtra, which will help contribute to Maharashtra's economy by attracting investment in automation sector to build the momentum to establish Maharashtra as the core automation technology destination in India.

Furthermore, such initiatives will also help build the required skill pool of automation engineering professionals in Maharashtra, thereby developing the ecosystem for automation industry to flourish.

We appreciate this initiative by Infocast and wish them all the best for this endeavour.

Warm Regards,

Dr. Vikas Suryawanshi
General Manager (Marketing)
MIDC HQ, Mumbai

HEAD OFFICE : "Udyog Sarathi", Mahakali Caves Road, Andheri (E), Mumbai 400 093. Tel. No.: (022) 2687 0027 / 52 / 54 / 73 / Fax : (022) 2687 1587
World Trade Centre, Mumbai Office : 4, 4(A), 12th Floor, World Trade Centre, Centre - 1, Cuffe Parade, Mumbai - 400 005. Tel.: (022) 2215 1451 / 52 / 53 Fax : (022) 2218 8203
Website : http://www.midcindia.org

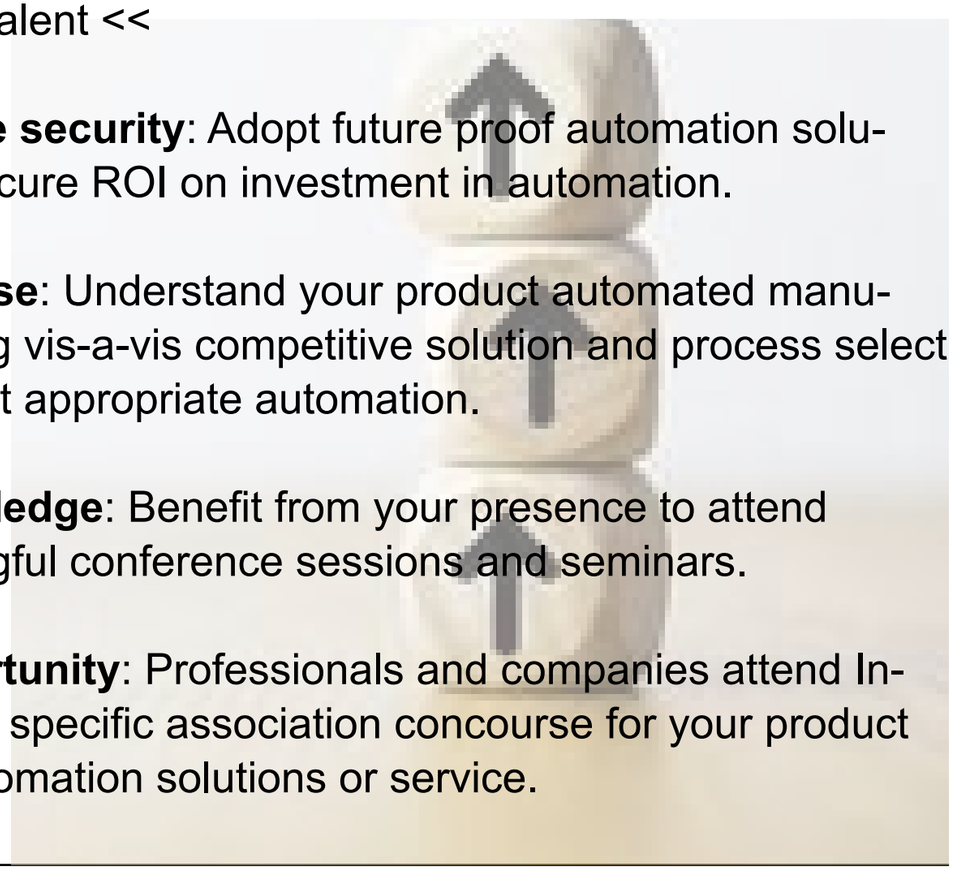
www.paratechexpo.in
www.paratechexpo.in

Benefits of Attending PARA Tech Expo

• **Information**: Latest innovation to assist your solution.

• **Strategy**: Discover strategy to integrate automation in your manufacturing. PARA Tech Expo first mantra >> Industrial automation leads to excellence <<

• **Talent**: Meet professionals with expertise join your company. Imprint alert 1 >> Grave storage of engineers and lack of talent <<



• **Future security**: Adopt future proof automation solutions secure ROI on investment in automation.

• **Analyse**: Understand your product automated manufacturing vis-a-vis competitive solution and process select the most appropriate automation.

• **Knowledge**: Benefit from your presence to attend meaningful conference sessions and seminars.

• **Opportunity**: Professionals and companies attend Industries specific association concourse for your product and automation solutions or service.

Shell Scheme

Area	Table	Chairs	Spotlights	Plug points	Dustbin
9 sq.m	Free As required				
12 sq.m	Free As required				
15 sq.m	Free As required				
18 sq.m	Free As required				
21 sq.m	Free As required				
24 sq.m	Free As required				
28 sq.m	Free As required				

Limited booths for Exhibits.

Book your booth

Confirm your company participation.

Before early bird discount of 5% ends on 30 June 2024.

Each 9 sqm includes complementary:

- 2 conference registration
- 2 lunches
- 1 Full Page Ad. in ***imprint automation india magazine***
- Listing in directory
- Website Company Listing with all links and logos
- Website Product Listing
- Half page Corporate Profile in ***imprint automation india magazine***
- Half page Products Profile in ***imprint automation india magazine***

Raw Space
₹ 14,000 per sqm
$ 170 per sqm

Shell Scheme
₹ 15,000 per sqm
$ 180 per sqm

Industry Sectors

Factory Automation	Warehouse Automation	Cyber Security
Process Automation	Industrie 4.0	Digital Twins
Field Instrumentation	Machine Vision	VR & AR
Valves & Valve Automation	Industrial Automation	IIOT
Turnkey Solutions	Industrial Robotics	PLCs & DCS
Hydraulics & Pneumatics	Machine Learning	AGV
Cyber Security	Digital Transformation	Sensors
Control Rooms	Artificial Intelligence	Cobots
Electric Automation	Edge Computing	

Overview of PARA Tech Expo & Conference 2025

Estimated

Exhibitors **350 +**	**Attendees** **12000 +**	**Technology Companies** **350 +**
Brands **400 +**	**Solutions Providers** **400 +**	**Buyers** **Significant % of Attendees**

Infocast Systems Pvt Ltd

Communicating critical knowledge to Professionals to deliver business. Infocast - Information Casting to industry to build business equitably.

Infocast Systems Private Limited publishes ***Imprint Automation India magazine*** on professional automation, robotics, artificial intelligence. ***Imprint Automation India Magazine*** won the media partner award at PPPA 2024 Meet organized by International Society of Automation, Chicago. ISA maharashtra section Imprint is the strength of purpose driving PARA Tech Expo 2025, International Expo on Industrial Automation, Manufacturing Robotics and Machine Learning Artificial Intelligence. Infocast has a rich history of creating exhibitions which contributed to tremendous growth of the industry. Infocast exhibitions and magazines' mantra is to develop the Indian market with latest technology. PARA Tech Expo aims to impact India's automation industry with this mantra-latest technology. Infocast, Imprint Automation India, and PARA Tech Expo believe Industrial Automation leads to excellence, and goal is March of Automation in manufacturing in India.

Infocast™
Information Casting
Magazine | Expo | Conference

38 years of motivating the market and putting technology in place.

Infocast Systems Private Limited has a rich history of professionalism in organizing trade exhibitions for the pro audio industry, cinema technology industry, optical media manufacturing industry, broadcast industry, computer graphics animation industry. Infocast has a track record of organizing seminars and awards in Dubai which were instrumental is starting production of optical media in Iran, Egypt, Turkey, Pakistan, other countries which relied upon Optical Disc Systems magazine and Infocast Systems seminars.

Technology first is the mantra of Infocast. Our own motivation lies in our pure understanding technology is the key for growth of industry and professionals. Therefore, our first step is to create a magazine that will update professionals and companies on latest technology and innovation. Infocast has been publishing technology magazine and creating trade expos for 38 years.

Infocast and ***Imprint Automation India Magazine*** our younger and determined to do justice to India's automation industry by providing a neutral and independent magazine and trade expo.

Imprint Automation India Magazine

Wow! The Right Catalyst !!

Automation growth in Manufacturing, packaging, warehousing is 17-20%. 5G connectivity, IIOT is spurring adoption of automation. Information on cost-effective solutions as well as future-proof solution is imperative.

Imprint Automation India magazine is a valid response to an urgent need of Indian manufacturing industry to source and connect with the right company for the correct solution.

Mediakit

Contents

Editorial Calender

Automation Trends

Automation Robotics

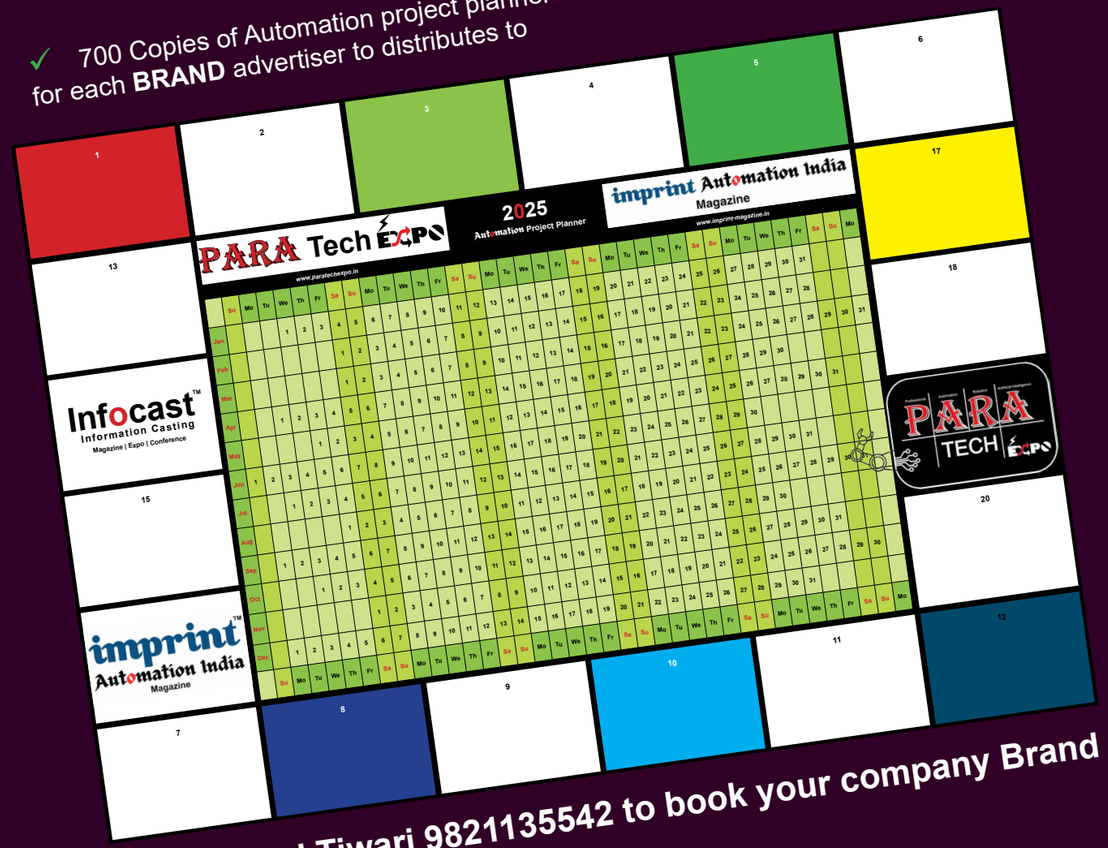
Automation Product News

Industrial Automation Artificial Intelligence

www.paratechexpo.in

Brand Promotion Annual Planner

- ✓ Released in December 20, 2024
- ✓ 20,000 copies distribution with November- December 2024 of Imprint Automation India Magazine.
- ✓ 18 Ads slots for Brand promotion
- ✓ 700 Copies of Automation project planner for each **BRAND** advertiser to distributes to their customers.
- ✓ High ROI on BRAND placement in this unique annual planner
- ✓ Intense and upfront exposure to industrial automation system integrators and consultants + actual users who all will use this project planner.



Contact Anchal Tiwari 9821135542 to book your company Brand slot.

Act immediately. Limited Brand slots.

INR 60,000/- per Brand slot for one whole year of maximum exposure to direct target audience

MobileView Tethered Operator Terminals and Thin Clients

Our MobileView™ Tethered Operator Terminals are mobile devices that help increase operator productivity and provide a safe production environment. The mobile operator interface runs the Windows Embedded Standard 7 operating system, but allows reuse of FactoryTalk® View ME and FactoryTalk View Studio applications to help reduce development costs. Thin Client model also available.

Rockwell Automation
www.rockwellautomation.com

- Provides operator terminal within line of sight of process
- Includes 5m, 10m, or 15m cables with quick connect and mounting bracket options
- Offers software assignable function keys with either a hardwired momentary push button or key switch
- Includes 3-position enabling switches

MobileView Tethered

• Offers 10 in. wide display (1280 x 800) with resistive touch screen for easy viewing
• Features internal SD card for application and data log storage
• Offers an illuminated E-stop, ability to work with the IP65 junction box, and the option to be used as a thin client

3D Laser Processing Machines

Towards a new type of 3D processing. Challenging unparalleled speed and precision

MITSUBISHI ELECTRIC
Changes for the Better
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High-speed processing

Equipped with a Zero-Offset Head with increased critical speeds at corner sections, making high-speed processing possible. The utilization of a new control unit has led to improved processing speeds and faster rotation axes, shortening processing times by up to 40% (in-house comparison).

Shorter processing time

VZ10 Series

Mitsubishi Electric's control system optimizes the laser output power and provides Dross Reduction Control that greatly reduces dross adhesion, minimizing the need for post-processing deburring.

Operability

Simplified teaching box dramatically reduces keystrokes during programming and allows for quicker job setup including program correction

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OMRON HD-1500

OMRON introduces the HD-1500, our newest and strongest mobile robot.
The HD-1500 boasts a payload capacity of 1,500 kg, and allows customers to load and transport the heaviest of objects. Designed for industrial manufacturing, reduce the need for forklifts and do more with less equipment.

OMRON AUTOMATION
www.automation.omron.com

The most customizable mobile solution for your factory
OMRON allows customers more options in terms of customizing a mobile solution, which now includes incorporating the HD-1500, giving customers more choice in developing a customized automated solution. The HD-1500 can be used to create a solution that best meets the needs of every manufacturer. The HD-1500 also takes advantage of OMRON's ability to customize the fleet with accessories that improve performance, such as HAPS and LiDAR. With the industry-leading Fleet Manager, OMRON mobile fleets can be more diverse and still be controlled through the same system, allowing for a completely automated solution.

OMRON HD-1500

Key Features:
− 1,500 kg payload capacity.
− Based on the same proven technology used in our LD series.
− 360° safety coverage with LiDAR technology.
− 35 minutes for full battery charge.
− Sturdier metal skins withstand heavier impacts and more demanding tasks.

AX5118 | Digital Compact Servo Drives 1-channel

The AX5000 single-channel servo drives offer optimal function, flexibility and cost effectiveness. The components required for operation, such as power supply unit, EMC filter and DC link capacitors, are already integrated. The control loop, which has a cascaded structure, supports fast and highly dynamic positioning tasks. Ether CAT as a high-performance system communication enables ideal interfacing with PC-based control technology.

BECKHOFF
New Automation Technology
www.beckhoff.com

The AX5000 drives are available in different current intensities from 1.5 A to 170 A.

AX5118

The AX-Bridge quick connection system enables simple and fast connection of several AX5000 devices to form a multi-axis system. The plug-in supply and connection modules connect power supply, DC link and 24 V DC control voltage. Different types and sizes of motor such as synchronous, linear, torque, asynchronous and voice coil motors can be connected to the AX5000 without additional measures. The multi-feedback interface supports all common standards. The model of sensor less operation of synchronous and asynchronous motors can also be parameterized.

The optional AX58xx enables the typical drive-integrated safety functions and the fulfilment of the requirements of EN ISO 13849-1:2015 (Cat. 4, PL e), EN 61508:2010 (SIL 3) and EN 62061:2005 + A1:2013/A2:2015 (SIL CL3).

The AX5000 has been specifically developed for Ether CAT, as the latter's advantages are optimally exploited in the drive technology. This includes in particular the short cycle time – even in networks with many devices – as well as the synchronicity and simultaneity

The Twin CAT 3 Drive Manager 2 serves as commissioning tool. Thanks to the structured design and the wide range of functions, commissioning of the axis is simple and intuitive.

www.paratechexpo.in

DOBOT CR5

AUTOBOTS INC.

www.autobots-inc.com

Multiple Intuitive & Smart Control Methods

Wi-Fi enabled CR5 connects to the teach pendant or your PCs, allowing for convenient control and fulfilment of various tasks including production and packaging, anywhere and anytime. The cobot automatically runs at adaptive accelerating/decelerating parameters while maintaining optimal performance, requiring no complicated adjustments.

Incredible Expandability Including Google Image & Voice Recognition

CR5 can be integrated with chip implantation such as Google TPU2 and TensorFlow chips for feature extraction, pattern matching and model training, etc. The robot offers dozens of I/Os, free choices of programming languages and a variety of accessories and end tools, in order for users to choose whatever they need for secondary development.

DOBOT CR5

Safe Human-Robot Collaboration & Easy Programming

CR6-5 features sensor-free collision detection to bring people and robots closer, requiring no caging or costly safety measures. Teach & play, teach pendant and intuitive software with a graphic interface make programming less challenging for operators without expert-level programming experience.

Accurate Trajectory Reproduction

CR5 can accurately move along a given trajectory fast or slow, with an accuracy of 0.2mm

JUMO PINOS L02 Calorimetric flow sensor

JUMO

www.jumo.in

The JUMO PINOS L02 flow sensor measures and monitors flow velocities of liquid media. The measurement method is based on the calorimetric measuring principle and does not include any moving parts which can influence the flow profile negatively. The measuring principle is based on the cooling of a heating element. Due to the flow behaviour of the liquid, heat is taken from the temperature probe. The higher the flow velocity, the higher the heat emission of the heating element. The resulting measured value can be output via an analog output of 4 to 20 mA or open or close a switching output. A device version with analog and switching output is also available. Both output variants can be configured for the output of the flow velocity or the medium temperature. The status of the device is displayed using 3 LEDs.

VZ10 Series

The JUMO PINOS L02 can be used for a nominal pressure up to 75 bar and in an admissible flow range of 0 to 300 cm/s.

To allow for simple startup of the flow sensor, it is equipped with a micro-USB interface while a setup program is also available as an accessory. A switching point can be set on-site using a push-button on the user interface. The push-button can also be used for flow calibration if the process requirements (for example, medium, flow velocity) do not correspond to the default settings. Due to its robust design with protection type IP65/67, the flow sensor can also be used in difficult environmental conditions.

The main areas of use are the monitoring of cooling water circuits, pumps, heat exchangers, lubrication circuits, leakage monitoring for process lines, and dry-run protection for pumps.

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www.infocast.in

Automation Product News

Slip ring SR085IE

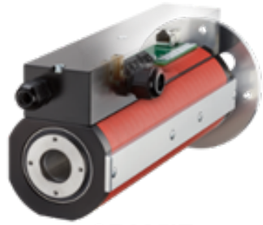
Kübler

www.kuebler.com

Reliable transmission of Industrial Ethernet is now also possible in the 85 mm size. For this purpose, the SR085IE/SR085SE slip rings from Kübler have been expanded with a Fast Ethernet module that enables a transmission rate of up to 100 MBit/s. The connection for data transmission can be made via a shielded two-wire twisted-pair Ethernet cable. Customer-specific special solutions can also be implemented on request, such as M-type industrial connectors.

Features:

- Optional Ethernet module for transmission of all common Industrial Ethernet protocols.
- Robust GFK housing in modular design.
- Reliable transmission of loads up to 25 A.
- Flange mounting or simple plug-on via a hollow shaft



SR085IE

Benefits:

- Transmission of Industrial Ethernet up to 100 Mbit/s
- Fast connection via RJ45 or M12 connector (stator side only) with CAT5e cable
- Quick and easy replacement by user
- Individual configuration for all applications.
- Prepared for a wide range of applications even with high current load.
- The application determines the mechanical connection - the slip ring adapts.

AC500-eCo V3 Starter kits

ABB

www.new.abb.com

Get to know the new economic and compact PLC

Your benefit:

- Quick and easy introduction into PLC programming
- Learn how to create HTML5 web visualization
- Free engineering software

The compact training package includes state-of-the-art hardware and software

AX5118

- Economic PLC to get familiar with the scalable AC500 PLC platform
- Example application for easy introduction into PLC programming
- Simulator for easy verification and simulation of your code
- PLC supports secure IoT, enabled with OPC UA server and MQTT protocols
- Easy-to-use integrated HTML5 web visualization

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Automation Product News

Capvel ICT Indicator Control Transmitter

Capvel is suitable for continuous level measurement and controlling in conductive or nonconductive liquids, granular materials of homogeneous composition that have stable dielectric constant.

Principle

It consists of electronic insert and probe. Probe comprises sense and shield electrodes (reference probe in absence of metallic tank). The probe is mounted on top of the tank. The sense electrode and the tank's wall serve as the two electrodes of imperfect capacitor with service material as dielectric. Change in material level causes a change in capacitance of this capacitor. The electronic insert measures change of capacitance accurately & shows the result in mA.

Measuring System

Capvel is suitable for continuous level measurement and controlling in conductive or non¬conductive liquids, granular materials of homogeneous composition with stable dielectric constant. It consists of electronic insert and probe. Probe comprises of sense and the shield electrodes (reference probe in absence of non-metallic tank). The probe is mounted on the top of the tank. The sense electrode and the tank's wall (reference probe in absence of non-metallic tank) serve as the two electrodes of imperfect capacitor with the service material as the dielectric. Change in material's level causes a change in capacitance of imperfect capacitor. The electronic insert measures the change of capacitance accurately and shows the result on display in mA/percentage form. An external relay can also be operated by feeding the required data. See Figure 2 for reference.

SAPCON
Grown...to meet challenges

www.sapconinstruments.com

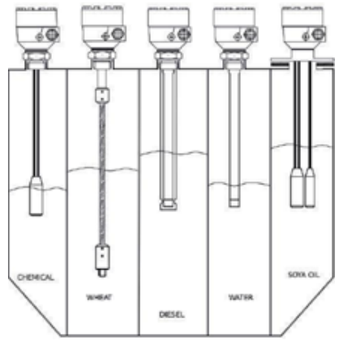

Figure 3: Installation of Various Probes

Capvel

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PARA Tech Expo Automation Webinar

Topic: 9 September 2024

>Imperatives of Pharma Manufacturing Automation<

Synopsis: Dependency on Automation in Pharma manufacturing. Necessity of Automation in pharma production. Importance of chemical ingredient precise accuracy. efficiency, productivity, profitability criteria.

Criticality in manufacturing industries of Pharma processes and packaging needs not only state of the art automation but technology innovations in automation technology as well. It's a need of time to make your footprint on global canvas irrespective

Professional Automation Robotics Artificial Intelligence
PARA TECH EXPO

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of the scale of manufacturing – small, medium or large. Formulations and Process Novelties, Research, Bio-chemical innovations are the key aspects of these industries but the success lies in its implementation sticking to the regulatory guidelines. The new standards in automation demand traceability, paperless logs, remote monitoring etc. for which new technologies in automation and software are helpful. Needless to say, robotics has made its entry. Automation needs of these Pharma, API, Bio-tech industries do not end there but the secondary packaging, supply chain, warehousing are dependent on automation. The world is following sustainability, zero liquid discharge, minimal pollution, green environment, reduction in energy consumption which can be made possible only by way of automation technology and innovations.

Pharma manufacturing involves automation in production and packaging. However small a pharma unit, whether tablet or capsule production, automation is advised. Automation is the answer to achieve accuracy and clean operations in bottling of liquids. Automation benefits include real-time reporting and analytics and optimized supply chain management. Regularly updated automation systems meet regulatory requirements and industry best practices.

PARA Tech Expo Automation Webinar will give you an edge in your business and future strategy.

Moderator: Satish Pathak Founder, Executive Director Samiep Technology Innovations Pvt. Ltd.

Satish Pathak an inventor active over two decades in the field of Industrial Automation has broken the path in valve technology while providing unique tailored industrial automation solutions.

Moderator Satish Pathak

"Digital Controlled Precise Dispensing Valve for Liquids under Gravity Flow"

Samiep Technology Innovations

samiep

www.samiep.com

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ISA Delhi Section PPA Meet 2024 Rocks with PSU Attendance

Key solution providers present in the Exhibition and sponsors

Industrial Automation one would imagine extends into mass manufacturing millions in super high speed with nano second accuracy complicated processes that and inputs that go into the product. ISA Maharashtra Section and then ISA Delhi Section both conferences focus was Petroleum and Power Automation. Evidently Petroleum and Power refineries and plants provide the biggest business in process automation and the stakes are high. High in the sense that refineries and plants are undergoing upgradation with automation of key processes with latest innovation in automation of quality testing and flow process whether liquid or power or data.

PSU key participation

The Conference and exhibition at Eros Hotel was buzzing. It was a full house and delegates representing FDIL, IOC, EIL, HMEL, NTPC, HP, BP, Reliance and major power companies too were participating animatedly connecting with technical decision makers and top management. It was indeed impressive. ISA delivery was indeed splendid. The exhibitors [see photos] were equally spirited.

Sanjeev Sharma IOC as new President

The AGM of Delhi section was held at Eros Hotel alongwith the PPA meet appointing Sanjiv Sharma General Manager IOC, Refineries Division, as President ISA, Delhi Section. [see photo]

All exhibitors at PPA 2024 ISA Delhi section were designated as sponsors. The sentiment expressed by Chirag Patel, Business Unit head, Axis Solutions Pvt. Ltd., Ahmedabad was unanimous.

“This was the best which I’ve seen from earlier years and the PSUs were coming out in a very great way and we have 350 visitors yesterday, the crowd pulling was also good. The topics in the conference selected were from different verticals right like digitalization, products, solutions were there. It was very nice all the way, and it was very helpful. The content was well constructed”

Sanjiv Sharma

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ISA Delhi Section PPA Meet Review

Conference Topics

Every session of Conference has a smart quiz session, which was more a session of getting to the point of the presentations and fun in knowing if the audience paid attention. Very effective.

Pyrotech

1. AUTONOMOUS CONTROL AI THAT ACHIEVES BOTH ENERGY SAVING OPERATION AND HIGH QUALITY PRODUCTION. **Yokogawa India Pvt. Ltd. Mr. Keiichiro Kobuchi Mr. Srinath S**

FORBES MARSHALL

2. IMPORTANCE OF MEASUREMENT OF COMBUSTIBLES ALONG WITH O2 IN HEATERS & BOILERS – IN TERMS OF EFFICIENCY AND SAFETY. **AMETEK Mr. Anantha Kukkuvada**

VERTIV

3. ENSURING PROCESS SAFETY & PRODUCT QUALITY USING H2 , O2 & DEW POINT MEASUREMENT IN WATER ELECTROLYSIS IN H2 PRODUCTION. **AXIS Solutions Mr. Saeed Mulla**

STEAM Equipment

4. WORKSHOP ON A. MASS FLOW METER CALIBRATION SOLUTIONS B. AUTOMATIC PRESSURE CONTROLLER CALIBRATION. **FLUKE Mr. Satyajit Nath**

5. VIBRATIONS ANALYSIS AND DIAGNOSIS WITH AI & ML TO ENHANCE PRODUCTIVITY. **FORBES MARSHALL Mr Hiro Ogasawara, Mr. Nitin Joshi**

6. SECURING TOMORROW'S ENERGY GRID. **EMERSON Ms. Nidhi Chaudhury**

7. HAZARDOUS AREA COMMUNICATION AND SIGNALLING, THE NEW FRONTIERS. **EATON MTL Mr Tarun Nigam**

8. COMPONENT CONSIDERATIONS FOR HIGH-PERFORMING HYDROGEN FLUID SYSTEMS. **SWAGELOK Mr. Parv Sud**

9. SULFUR AND NITROGEN ANALYSIS IN AN EVOLVING LANDSCAPE. **ADAGE AUTOMATION Mr. Karl Kuklenz**

10. SMART MANUFACTURING, TESTING AND CERTIFICATION OF VALVES FOR CARBON EMISSION REDUCTION IN HYDROCARBON PLANTS.

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ADAGE

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ISA Delhi Section PPA Meet Review

AMETEK

ADVANCE VALVES Mr. Bobby Poulose

11. HUMAN FACTORS FOR ENGINEERING CONTROL CENTRE DESIGN. **PYROTECH Mr. Kuldeep Singh Rathore**

12. FTIR - FOR PROCESS AND STACK EMISSION MEASUREMENT. **THERMOFISHER Mr. Bhavya Shrivastava**

YOKOGAWA

WOODWARD

13. COAL MILL OPERATIONS – CHALLENGES ARRIVING FROM BIOMASS ADDITION & LAND'S SOLUTION. **AMETEK Mr. Nitin Gupta**

14. TECHNOLOGICAL MARVELS: A DEEP DIVE INTO PETROCHEMICAL ADVANCEMENTS THROUGH INSTRUMENTATION, CONTROL, AUTOMATION AND IT INTEGRATION. **HMEL Mr. Subir Mondal Ms. Tanu Arora**

FLUKE

ARMTEL

15. HOW IOT-RTLS - HELPING TO IMPROVE INDUSTRIAL SAFETY IN OIL & GAS. **BLACK BOX Mr. Amit Chatterjee Mr. Girish Surshe**

16. REDUCE YOUR PLANTS BREAKDOWNS BY UPTO 37% - A CASE STUDY. **ROTEX Mr. NR Shah**

METRIX

BLACKBOX

17. DESIGNING COLLABORATIVE AUTOMATION FOR NEW GREEN THERMAL GENERATING UNITS OF DEVELOPED INDIA. **NTPC Mr. Sumit Haldar**

18. COLLABORATIVE AUTOMATION FOR ENERGY TRANSFORMATION. **RITTAL Mr. Venkatesh Babu**

19. CRITICAL ASPECTS OF SAFETY VALVES / LUBRICATED PLUG VALVES. **BLISS ANAND Mr. Sandeep Nagpal**

AXIS

20. HIPPS SYSTEMS. **DELVAL Mr. Ravindra Patil**

21. ETHERNET APL AND HART IP-NEXT-GEN PROCESS AUTOMATION COMMUNICATION TECHNOLOGIES. **FIELDCOM Mr. Harish Wadhwa**

22. ALARM INFORMATION MANAGEMENT SYSTEM. **SSM INFOTECH Mr. Rajeev Shukla**

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ISA Delhi Section PPA Meet Review

RITTAL

EATON

AXIS Solutions Ahmedabad bussines unit head chirag patel

PHOENIX CONTACT

Baker Hughes

DelVel

PEPPERL+FUCHS

ROTEX

PARA TECH
WEBINAR

Imperatives of Packaging Automation

Synopsis: Dependency on Automation in Packaging. Necessity of Automation in Packaging. Efficiency is required in a highly competitive market; it's an inevitability. Packaging automation embodies the convergence of speed, precision, cost-effectiveness, restructuring industries. Benefits of automation in profitability due to reduction of costs in labour are immense. Retail and packaging are integrated which demands automation in packaging solutions. Tremendous innovation in pharma is reliant on automation for sophisticated delivery systems.

Main advantages of Packaging Automation include-

- Increased Production Capacity:
- Enhanced Precision and Consistency:
- Reduced Labor Costs:
- Overall Equipment Effectiveness (OEE):
- Enhancing equipment availability
- Enhancing performance
- Achieving better quality.
- Higher overall productivity.

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Moderator and Speakers will be announced soon
Its 500/- paid Webinar.

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Growth Opportunities for Industrial Systems Integrators with universal automation

According to the recent ARC Advisory Group (ARC) report, universal automation, the world of "plug and produce" automation software components, is enabling industrial automation software to become a much more portable asset. With capabilities of boosting the efficiency, resilience, productivity, agility and sustainability of industrial operations, opportunities for industrial organizations are wide open.

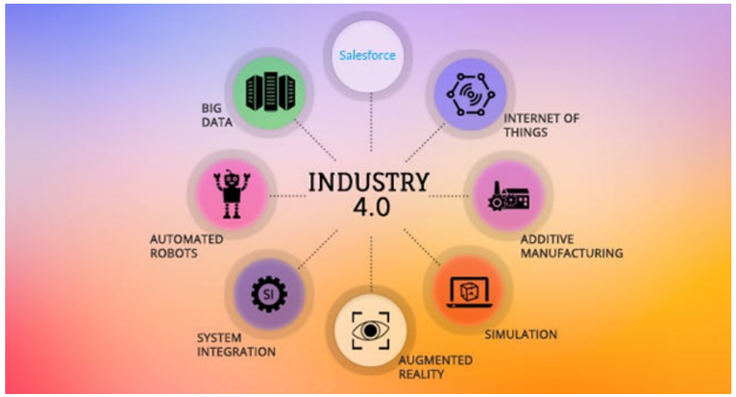
Industrial firms spend millions of dollars each year supporting and servicing their industrial equipment. If a standardized universal automation system were made available to plant engineers and systems integrators who design, link, and support these systems, that spending could be greatly reduced. A platform that decouples hardware from software saves valuable engineering time by eliminating vendor lock-in so system integrators can choose best-in-class components that allows them to configure, rather than program with standard, pretested objects. Leading to unprecedented engineering and commissioning efficiency.

For systems integrators, customer engagements involving proprietary systems are becoming less profitable. These systems require a lot of non-value added, manual activities during integration compared with actual value-added project engineering. Industrial operators are hesitant to pay high rates for work which doesn't add any real value. In addition, end users are also more likely to skip or avoid upgrading these systems because of concerns over high cost, time and risk. For integrators this makes supporting previously installed systems a more difficult ongoing task than it needs to be.

ARC Advisory Group

www.arcweb.com

How to future proof with universal automation



When we talk about modernization and the 4th industrial revolution it might be a little daunting for some industrial companies because it could sound like they need to replace all their automation systems. And then there's the concern that the new technology will be obsolete in a few years anyway. It's bit like replacing your entire record collection with cassettes in the 80s, followed by CDs in the 90s, MP3s in the 2000s, and now streaming. What will be next?

For industrial automation we've designed our technology so you don't need to abandon your proven systems in the name of progress. The latest IIoT solutions allow you to integrate our new systems with your older ones without the need to replace everything. Better yet, when technology advances down the track, you can take advantage without abandoning your current set-up. We call this 'future proofing'.

Future proofing is better for the hip pocket and the planet

There are lots of cases of this already happening throughout our modern world because much of the existing infrastructure has been there for decades, if not centuries. For example, with the advent of electricity, phone lines, and the internet, we didn't simply rebuild everything from scratch with each wave of new technology. That would be costly, impractical, and unsustainable. Instead, we relied on a wrap and replace approach, installing adaptors like modems for the internet so we could continue to use the old analog cables from telephone wires for the signal, or a set top box when digital television (when it first came in).

"Industrial operators are hesitant to pay high rates for work which doesn't add any real value"

Why you don't need to replace your entire automation system

There are a few reasons why it's possible to use this approach with our new universal automation platform, EcoStruxure Automation Expert.

UNIVERSAL AUTOMATION.ORG

www.universalautomation.org

Hardware and software are decoupled

- Imagine if you had to get a new phone each time you wanted to update the software. It sounds like a no-brainer but currently in industrial automation, when the customer wants to update their control systems, both their hardware and software must be replaced. EcoStruxure Automation Expert, our next generation automation system decouples hardware from software, so that when a plant needs to modernize, they can keep their software and application programs and just update their hardware.

Wrap and re-use/replace approach

- With a wrap and replace/reuse approach an adaptor of sorts is attached to legacy equipment and application programs, so that they can be incorporated in new technology platforms. As you can imagine, this is more cost effective, less time consuming, and more sustainable for everyone involved. Conserving our resources is something we must consider at every

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level of operation.

- The right IIoT solution ensures existing industrial equipment can be integrated with the latest technologies more quickly and easily than before. Futureproofing means the same can be done for with future upgrades. This is important because technology is evolving faster than ever. Companies need to be able to take advantage of these new advances to be more competitive in the market by improving efficiency, agility, and sustainability.

"Imagine if you had to get a new phone each time you wanted to update the software"

Invest in an automation system that grows with your business

Investment in capital equipment should perform at state-of-the-art levels of efficiency and agility both now and well into the future. Our partners from Master Systèmes like the EcoStruxure Automation Expert solution because it enables them to offer their customers the best solutions based on currently available technologies thanks to its scalability and upgradability.

Cosmetic ingredient manufacturer Sophim were experiencing strong growth and to meet their production needs had to update their automation system. The design of the existing automation system meant it could no longer be expanded and therefore did not allow for growth, so they needed to modernize the plant simply and quickly with a scalable solution. Using EcoStruxure Automation Expert as the automation platform meant it could connect to and integrate with the existing equipment architectures, allowing Sophim to increase current production, while still having the capacity to grow in the future.

EcoStruxure™ Innovation At Every Level

Modernization doesn't necessarily mean replacing all your automation systems. Our 'future proofing' approach means you can take advantage of advancements in automation technologies without the need to abandon your current systems. That's good news for

New universal automation tools serve as efficiency enablers

Working in an open systems environment, with tools that facilitate universal automation, presents new opportunities for systems integrators to exercise their true expertise in addressing complex hardware and software connectivity challenges. Less time is spent on non-value-added tasks and more time is available for SIs to truly innovate.

Companies, like Schneider Electric, support these efforts by leveraging an existing standard, IEC 61499, to develop open automation systems like the recently released EcoStruxure Automation Expert. This open approach, enables seamless integration and portability, and is designed around an improved user experience and event-driven systems.

Field tests have demonstrated 3 to 4X project engineering, and operational efficiency, gains when compared to standard proprietary systems (see the Schneider Electric white paper "A Quantitative Comparison of Digitized Industrial Automation Systems").

These systems enable software-centric automation, which leads to the following advantages:

- **Hardware is decoupled from software –** Decoupling hardware from software means that the hardware platform can be upgraded as required, and can be changed from platform to platform without affecting the application programmed in software. Decoupling a 'virtual PLC interface', means that systems integrators can view system hardware platforms as both independent and agnostic, and so tasks such as upgrading or changing out controllers will be much simpler.

- **Easy portability –** Upgrades no longer require 'rip and replace' of hardware. Portability of applications between multiple vendors and platforms is much simpler and integration of third-party systems is far less costly and time consuming.

A system like EcoStruxure Automation Expert makes hardware infrastructure less about single function devices (i.e., "this is a drive, this is a PLC, this is an HMI"), and more about devices being managed as processing resources, view resources, or storage resources which are all part of the overall plant control system. As a result, users of the EcoStruxure Automation Expert system can reduce their capital costs and use less time to do more when building new systems.

Why should systems integrators explore the benefits of such universal automation systems like EcoStruxure Automation Expert? By reducing systems integration complexity, overall end user cost is reduced, opening the door to more system integration projects. These new generation industrial automation systems enable more agile, flexible, connected architectures. For system integrators, time and capital cost are reduced, and the time needed to propose, implement and test changes is much lower. Hence the continuous improvement work of the system integrator takes less time, and both system integrators and their customers work within a much more efficient system development and deployment process.

"This open approach, enables seamless integration and portability"

Schneider Electric
www.se.com

To learn more about how universal automation tools help systems integrators to lower project costs while shortening project implementation timelines, download the new Schneider Electric e-guide.

Why Universal Automation Will Deliver New Clients to Systems Integrators

Tags: agility, automation, automation software, Digital transformation, digitization, EcoStruxure, efficiency, IEC61499, IIoT, Industrial Automation, Industries of the Future, LifeIsOn, Make It For Life, Next Generation Automation, open automation, OT, Plug and Produce, Schneider-electric, Sustainability, System Integrator, universal automation.

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Lalit Puri
Head – program Management,
nVent Hoffman

nVent

Imprint Wins Media Partner Award PPPA Meet 2024

Niranjan Bhise - ISA President
Upendra Joshi - ISA Past President

Manish Sharma
Regional Project Manager
Yokogawa

YOKOGAWA

Satish Pathak
Director
Samiep Technology Innovations Private Limited

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ISA CIDCO Conference Attracts Critical Delegates Attendance

ISA Maharashtra Section

ISA Maharashtra Section president Niranjan Bhise and Upendra Joshi did a fantastic job of organizing the PPPA Meet 2024. A wide spectrum of companies, speakers, subjects, and exhibitors were participating in 2 days of bonhomie and camaraderie.

“ Automation Paving the Way for New Era of Industry Excellence” ISA Maharashtra Section

The keynote Address was delivered by Shri. Yatin Mahajan, Director Operations, Worley. Worley is a 50,000 global army delivering datacentric sustainable projects in energy, chemicals and resources. Mr. Alok Sinha Head reliance project management group was a chief guest. Experiencing the flow of delegates, it was evident the automation industry is on an upswing. Automation professionals need to exploit conference opportunities.

The companies and speakers included were Schneider, Emerson, Petronas, Vega, Axis, AIC, SANC, HIKVISION, UNIPHOS, IEEE, CVS, Yokogawa, Siemens, Delval, nVent, Wallmax, Adage, Panametrics, Sapcon, Shrirang, Metrix.

The speakers included so Rohit Chashta, John Rodrigues, Sharul A-Rashid, Arka Mukherjee, C V C Subramanyam, George Thomas, Ravindra Patil, Lalit Puri, Avinash Kumar, Jigar Raval, Vikas Verma, Nitin Jain, Manish Ranjan, Madhu S, Ashwin Palshikar, J. Victor George, Vivek Joshi.

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The program included honors and awards presentation, cocktails and Dinners.

“Launching ***Imprint Automation India Magazine*** at PPPA Meet 2024 was truly fulfilling. The response for the 370+ delegates and 21 exhibitors was very positive. Distributing the magazine through the conference hall and the booth provided by ISA was very motivating. It was very exiting for ***Imprint Automation India Magazine*** being awarded **Best Media Partner** at PPPA Meet 2024” Declared Anchal Tiwari, Content and Business Manager at ***Infocast Systems Private Limited***. Publisher of ***Imprint Automation India Magazine***.

President Shri Niranjan Bhise message to Automation Industry for *Imprint Automation India Magazine*

“ISA Maharashtra Section held Power Petroleum & Process Automation PPPA 2024 Meet at CIDCO Convention and Banquet Hall Vashi Navi Mumbai on 2nd & 3rd February 2024”.

“I am Proud to share glimpses of the very successful event under my leadership as a President of ISA Maharashtra Section supported by Dr. Upendra Joshi - VP Projects Reliance Industries, Mr. Asif Mulla HOD Instrumentation Technip Energies Ltd. Mr. Vaibhav Narkar Regional Manager Vega India Ltd. and Rushikesh Bhagat from Simcon India as core team Member and Special Thanks to Prof. Dattatray Sawant - Asst. professor at Mukesh Patel School of Technology Management & Engineering. Along with core team I have been assisted by ISA

Schneider EcoStruxure End-to-End Cybersecurity

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ISA Maharashtra Section PPPA Meet Review

Maharashtra Section Executive Committee".

"It was very successful event as per the feedback provided by the delegates on LinkedIn Professional social media.
This Event is been supported by around Twenty organization to mention Few of them are Schneider Electric, Yokogawa, nVent Hoffman India, Adage Automation, Emerson India, Axis Solutions, Wallmax, Uniphos etc. and Associate Technical Partners like IEEE Media Partners, ***Imprint Automation India magazine***."

"I have tried to cover most of the presentations which form part of the success story of this Flagship Event of ISA Maharashtra Section. Would like to Thank all of them from Bottom of my Heart for helping ISA Maharashtra Section to Conduct successfully 5th Edition of PPPA 2024 meet."

"Looking forward to have much more successful events conducted by ISA Maharashtra Section which will provide platform for Automation Industry professionals to interact with Engineering Procurement Construction , Project Management Consultants, Original Equipment Manufacturers, System Integrators to get together to share new developments of the Technology with freshers who are starting their professional Journey in Automation Profession , Industry professionals to share and discuss their technical Problems with experts to have technical advice. New advancement in the field of Automation, use of Artificial Intelligence in Process automation which will enhance quality, sustainability of the new technology."

"I sincerely Thank ISA Maharashtra Section to handover me as President for the year 2023 - 24 which was a challenge to maintain the quality of PPPA 2022, PPPA 2023 for PPPA 2024 and I hope the quality of PPPA 2024 indeed exemplified the previous PPPA Meets."

Newly launched Imprint Automation India Magazine was given a booth in the platinum hall with adage, nevent, Schneider, Yokogawa, CVS, IEEE. Imprint was the only Industrial automation technology magazine that was honored with this location. Very surprising but industrial automation magazine 44 years connection with the exhibitors and automation industry completely ignored ISA PPPA 2024. Not the single copy of the magazine at the show. Imprint greatly received the media award for their 14 page editorial and participation in the exhibition and distribution of magazines. The disagree and disrespect soon to ISA Maharashtra section was disturbing. Imprint distributed the magazine to all delegates attending the conference. This created a very positive a buzz. It was after many years a new magazine was launched. On Industrial automation technology. The response to Imprint Automation India Magazine was unanimous. "Wonderful. Another magazine on industrial automation is defenately needed." The Imprint Magazine Booth boasted in a signage the launch of PARA Tech Expo. Delegates were surprised and the response was the same "Wonderful. Another expo on industrial automation needed."

Dr. Pyne

EMERSON

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ISA Maharashtra Section PPPA Meet Review

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Industrial Automation Acronyms

Acronyms in industrial automation will advantage automation engineers as a guidance to understand technical documents properly. Imprint automation india magazine decided to publish acronyms for professional automation engineers as a ready reference despite easy excess of such information on the net. Reason being that reading the written word is best memory tool.

A

ABS – Acrylonitrile Butadiene Styrene

ACK – Acknowledgment

AI – Analog Input

AMD – Advanced Micro Devices

ANSI – American National Standards Institute: http://www.ansi.org

ANSI-C– American National Standards Institute- Programming Language

AO – Analog Output

API – Application Programming Interface

ARP – Address Resolution Protocol

ASCII – American Standard Code for Information Interchange

ASICs – Application Specific Integrated Circuits

AUI – Attachment Unit Interface

ACL – ACCESS CONTROL LIST

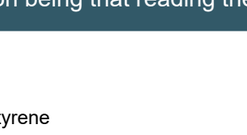
AWG - American Wire Gauge

AV - ANALOG VALUE

ASO - Automated System Optimization

ATS - Automatic Transfer Switch

B



BNC – Bayonet Nut Connector

BOOTP – Bootstrap Protocol

BPA- Business Process Automation

BACNET - Building Automation Control Network

BBMD - BACNET Broadcast Management Device

BI - Binary Input

BO - Binary Output

BV - Binary Value

BDT - Broadcast Definition Table

BTU - British Thermal Unit

BAS - Building Automation System

BMS - Building Management System

C

CAN – Controller-area Network

CDC – Change Data Capture

CFC – Continuous Function Chart

CIP – Common Industrial Protocol

CIP – Control and Information Protocol

CMRR – Common-Mode Rejection Ratio

COB – Communication Object

COM – Component Object Model

CPU – Central Processing Unit

CRC – Cyclic Redundancy Check

CSC – Convertible Static Compensator

CSMA/CD – Carrier Sense, Multiple Access/Collision Detect

CCV - Characterized Control Valves

CIDR - Classless Inter-Domain Routing

D

DCOM – Distributed Component Object Model

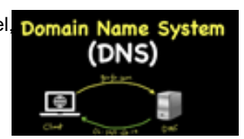
DEC – Digital Equipment Corporation

DHCP – Dynamic Host Configuration Protocol

DIO – Discrete Input/Output

DIP – Dual In-line Package

DIX – Digital Equipment Corp., Intel,



DLL – Dynamic Link Library

DNS – Domain Name Server

DOS – Denial of Service

DOS – Disk Operating System

DCIM - Data Centre Information Management

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Industrial Automation Acronyms

DDC - Direct Digital Controls

DAT - Discharge Air Temperature

E

EBCDIC – Extended Binary Coded Decimal Interchange Code

ECM – Enterprise Contact Management

EDS – Electronic Data Sheet

EIA – Electric Industries Alliance

EMI – Electromagnetic Interference

ERP – Enterprise Resource Planning

ESD – Electrostatic Sensitive Devices

EER - Energy Efficiency Ratio

F

FBD – Function Block Diagram

FDDI – Fiber Distributed Data Interface

FOIRL – Fiber Optic Inter Repeater Link

FTP – File Transfer Protocol

FCU - Fan Coil Unit

FPT - Functional Performance Testing

G

GMII – Gigabit Media-Independent Interface

GND – Ground

GPIO – General Purpose Input/Output

GPS – Global Positioning System

GUI - Graphical Unit Interface

H

HMI – Human Machine Interface

HSSDC – High Speed Serial Data Connector

HTTP – Hypertext Transfer Protocol

HVAC – Heating Ventilation & Air Conditioning

I

IANA – Internet Assigned Numbers Authority

IC – Integrated Chip

ICMP – Internet Control Message Protocol

IDC – Industrial Development Corporation

IEC – International Electrical Commission

IEEE – Institute of Electrical and Electronics Engineers

IETF – Internet Engineering Task Force

IGMP – Internet Group Management Protocol

IL – Instruction List

I/O – Input/Output

IP – Internet Protocol

IPV – Internet Protocol Version

ISA – Industry Standard Architecture

ISDN – Integrated Services Digital Network

ISO – International Organization for Standardization

L

LAN – Local Area Network

LD – Ladder Diagram

LED – Light Emitting Diode

LQFP – Low- Profile Quad Flat Package

M

MAC – Media Access Controller

MAU – Media Attachment Unit

MES – Manufacturing Execution System

MIB – Management Information Base

MII – Media Independent Interface

MMF – Multimode Fiber

MOV – Metal Oxide Varistor

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Connect the Virtual Realm to Physical Manufacturing

SIEMENS

What is discrete manufacturing?

Discrete manufacturing is an approach to industrial production that results in individual final products. This is accomplished by taking incoming materials, parts, components, and/or subassemblies through a series of production steps that may include machining, assembly, etching, fastening, polishing, stitching, packaging, and more. Discrete manufacturing results in final products that are distinct from one another and can be counted. It also typically produces items that can be broken down in their component parts.

These two features distinguish discrete manufacturing from process manufacturing, which produces products typically measured in mass or volume. These products, such as shampoos or fruit juices, cannot be counted individually, and they often undergo irreversible changes that make it impossible to break them back down to their constituents.

Discrete manufacturing examples range from nanotechnologies to airliners. While electronics & semiconductors, automotive & transportation, and aerospace & defense industries represent some of the most prevalent discrete manufacturing examples, a broad spectrum of other industries rely on discrete manufacturing processes to produce their goods. These include:

- Automotive
- Aerospace & defense
- Electronics
- Industrial machinery
- Heavy equipment
- Marine
- Medical devices

Discrete manufacturing creates tangible, countable goods, from individual components like nuts to larger assemblies such as automobiles. These products are easily observed, touched, and counted. It is widely used in automotive, aerospace, defence, industrial equipment, and electronics industries.

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Manufacturing operations management

It should be noted that the manufacture of numerous products involves both discrete and process operations. To make glass bottles, for example, one must create the glass through process manufacturing, then produce the individual bottles through discrete manufacturing.

Discrete manufacturing techniques and technologies have progressed through all four industrial revolutions, advancing from craft manufacturing through mass production and computer automation to Industry 4.0 interconnectivity, real-time data, smart devices, and autonomous systems. Discrete manufacturers sustain or grow their competitive edge today by implementing digital tools and systems through discrete manufacturing software solutions.

Understand the benefits:

Manufacturers in discrete industries leverage discrete manufacturing software to maximize both the productivity of their facilities and the quality of their finished products.

Greater flexibility

Empowering manufacturing processes, discrete manufacturing software enhances efficiency by providing greater flexibility and capacity, catering specifically to the production demands of today's smaller lot sizes.

Better management and control

Empower users to efficiently manage and control complex products and intricate supply chains with precision and ease.

Efficient regulatory compliance and documentation

Streamline and enhance the efficiency of regulatory adherence and documentation processes for seamless and precise manufacturing operations.

Lower production costs

Contribute to lower production costs by streamlining processes, enhancing efficiency, and identifying opportunities for resource optimization.

Improve customer satisfaction

Ensure greater customer satisfaction by facilitating precision in production, timely deliveries, and improved communication throughout the manufacturing process.

Discrete Manufacturing Software

Discrete manufacturing companies have long employed computer-aided design and manufacturing (CAD/CAM) digital tools in their design and engineering efforts, and more recently they have been implementing software that interconnects CAD/CAM tools, as well as enterprise resource planning (ERP) and other business systems, to the manufacturing floor. Manufacturing operations management (MOM) software orchestrates the actual production of a finished product based on business, design, and engineering data. By connecting the virtual realm to the physical manufacturing floor, manufacturing operations management software for discrete manufacturing enables companies to optimize production performance, improve efficiency and flexibility, and maximize on-time deliveries.

Process manufacturing vs. discrete manufacturing software differ considerably when it comes to manufacturing operations management functionality. This is because process manufacturing focuses on formulas, master recipes, and master batches, while discrete manufacturing focuses on materials, machining, and assemblies. The different operational parameters and key performance indicators (KPIs) measured and tracked for the two manufacturing approaches place different demands on manufacturing operations management

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Manufacturing operations management

systems and require software tailored to those demands in order to maximize the benefits of software implementation. To illustrate the differences, discrete manufacturing works-in-progress (WIPs) may be inspected visually, mechanically or electrically, while process manufacturing inspection involves frequent sampling and laboratory testing.

A central pillar of manufacturing operations management software for discrete manufacturing is the manufacturing execution system (MES). MES for discrete manufacturing has become indispensable for a high percentage of discrete manufacturers as they contend with new markets, new materials, and new production technologies, as well as a growing complexity in final products and the supply chain that supports them. Companies must sustain or accelerate plant efficiency and productivity, and also realize extreme flexibility in all manufacturing processes.

Key features of MES for discrete manufacturing include:

• Integration of regulatory and quality requirements into production operations

• Synchronization of production processes across the supply chain

• Shop floor visibility to support real-time quality and efficiency efforts

• Optimized sequencing of manufacturing operations and WIPs

• Instant access to production documentation

Next Issue Industrial Robotics

September – October 2024

EDITORIAL CALENDER

Issue	Overview
January-February	Smart manufacturing (industry 4.0)
March-April	Continuous and batch processing
May-June	Discrete manufacturing and Machine control
July-August	Connectivity And Cyber security
September-October	Robotics
November-December	Material Handling

AMR, AGV, Modular Cobots, Exoskeletons, UR3 arm, Modbot, 3D Printed liquid elastic for soft robotics, robot to adopt handoffs, PRS Tool Changes, RBR 50.

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ANDURIL — www.anduril.com

cruise — www.getcruise.com

COMAU — www.comau.com

www.universal-robots.com

Honeywell Momentum Machine Control

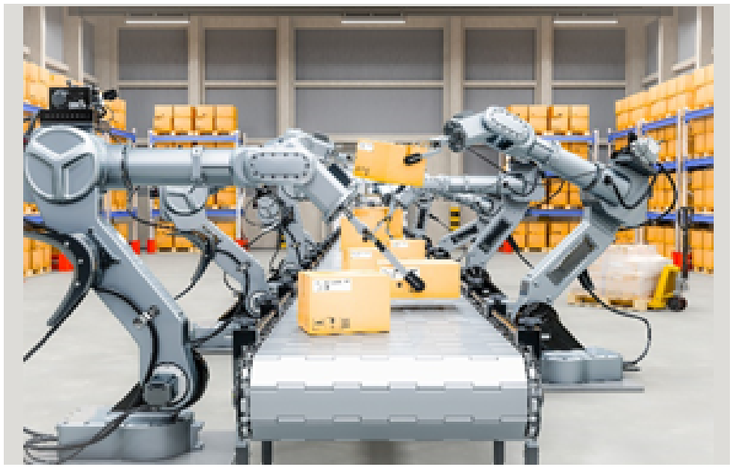
Web-based, Modular and Connected Conveyor Control Combines Sortation, Merges, Gap Optimization and Diagnostics. Honeywell

Finding a machine control solution that maximizes through put without sacrificing accuracy or damaging product is a tall order. It's also critical for these capabilities to be achieved with solutions that are easy to use and maintain, preferably with safeguards to identify maintenance risks before they cause unexpected downtime.

Momentum Machine Control (MC4) combines powerful capabilities to provide a high level of modern, web-based, internationalized, modular and connected solutions for conveyor and sortation control.

While the needs of any given DC may vary, machine control often can be implemented at lower capital and operational costs than other control solutions, while decreasing the cost of delivery for projects of various sizes and complexities.

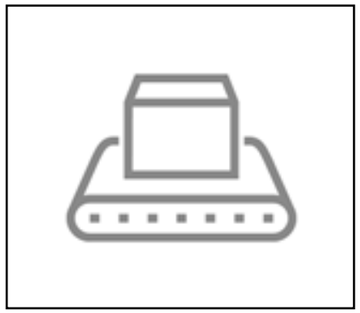
MC4 can offer the same superior merge speed and much of the flexibility of PC-based systems, while retaining the capability to integrate with PLC-driven equipment.



Designed for Flexibility and Reliability

MC4 overcomes the vulnerability of PC-based systems to full-system shutdowns by giving you the option of running distributed controls on an industrially hardened embedded controller with no moving parts. This increases reliability, reduces repair costs, and minimizes upgrade costs by providing a backward-compatible upgrade path. The distributed controls option enables you to have planned or unplanned downtime in an area without affecting the rest of the system. A centralized control option is also available for upgrades of older, centralized sites.

Additional reliability is made possible by running MC4 on QNX, rather than Windows. This allows for greater stability while reducing shutdowns for upgrades and security patches. In addition, the control architecture focuses on configuration instead of custom coding. As a result, projects can be implemented faster with a standardized code base that provides users a more traditional plug-and-play experience.



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Conveyor and Sortation Control

The full MC4 suite of functionality combines the following machine control systems:

- **General conveyor control —** This service manages transportation and accumulation conveyors and handles any events or alarms associated with them.
- **Sortation —** Multiple sortation solutions are controlled, enabling them to run at a much higher rate while decreasing the risk of damaging product.
- **Merges —** MC4 can be configured to control a variety of merge systems with a hybrid logic, allowing lane types to be combined for optimal throughput.
- **Gap optimizer —** The MC4 gapper system measures and adjusts the spacing between cartons, enabling a high-speed merge rate of 400 cartons per minute with gaps as short as 1 inch between cartons. Gapper functionality is also available as a stand-alone feature for any PLC, PC or hybrid system.
- **Diagnostic and calibration tools —** These allow you to set, clear, and verify calibration values for merges and sorters. You'll also get alerts when chain oil runs low or other maintenance is required.

Versatile, Modern Controls at an Affordable Cost

By providing a suite of modular control services in a single package, MC4 controls offer a more flexible and up-to-date user experience, plus superior efficiency. In most DC environments, the system can be implemented at a lower total cost than traditional PLC- or PC-based systems.

MC4 can complement Momentum WES software, and also provides an attractive alternative for high-performance conveyor and sortation control to DCs that don't require the more extensive features of a WES solution. Sophisticated emulation and simulation capabilities make it possible to evaluate the efficiency of different configurations prior to implementation, optimizing the system and reducing commissioning time.

Hybrid Approach Delivers Superior Facility Control

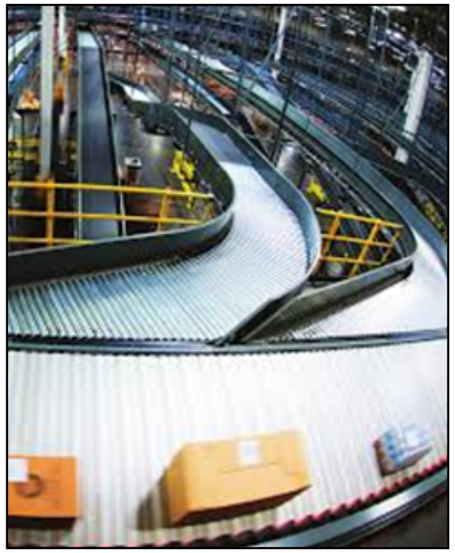
MC4 is a hybrid machine control platform, designed to combine many of the advantages of programmable logic controllers (PLCs), PC-driven solutions and warehouse execution systems (WES).

MC4 — Benefits to Your Organization

Longer Hardware Lifecycle

While many machine control systems require hardware updates every three to five years, MC4 is designed for a robust service life of eight to 10 years.

- Reduces your total cost of ownership by resulting in fewer upgrades throughout its lifecycle
- Combines the strengths of PLCs, PC-driven solutions and WES
- Superior reliability and stability delivered by QNX platform and standardized control architecture
- Fewer shutdowns for system upgrades and security patches



Expanded Capabilities

MC4 seamlessly blends the features from previous Honeywell Intelligrated control systems, including BOSS® and ICW®. You get the best of both worlds in a single integrated system.

- Embedded architecture for longer system life
- Real-time visibility and capabilities keep you informed of the health of your system
- Advanced reporting, diagnostics and calibration

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Conveyor and Sortation Control

- ntuitive human-machine interface (HMI) capabilities
- Easy access to purchase parts with OnTimeParts™ synchronization

Enabling Technologies

MC4 delivers up-to-date, modern capabilities while enabling you to get the most from your existing assets.

- Large-system simulation enables testing and optimization of advanced routing and other upgrades before implementation
- Enables Connected Assets functionalities, including:
  - Industrial Internet of Things (IIoT)
  - Remote monitoring and asset data trending
  - Assurance 360 to collaborate with Honeywell Intelligrated experts and performance specialists to increase site perfor mance
- Modular design leverages existing equipment and enables growth flexibility
  - Increase throughput with gap optimization
  - Adaptive merge capabilities with IntelliMerge®
  - System rate enhancements
  - Seamless integration of future capabilities
- Existing asset utilization is possible, including I/O, conveyors, route engine and more
  - Reduce total capital expenditures
  - Decrease install time

Easy Serviceability

MC4 is designed for easy implementation, upgrades and service without interrupting your normal business operations. You'll also get more of the critical data you need to optimize and troubleshoot your operation.

- 24x7 technical support
- Better visibility for troubleshooting your existing systems
- Expanded diagnostics such as sorter calibration, merge calibration, trace logging, and enhanced drive tests
- Non-invasive installation and upgrade processes work within your existing scheduled downtime

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