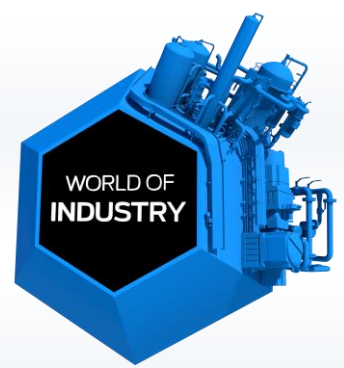


WORLD OF INDUSTRY



EXHIBITION PROGRAM / PRODUCT GROUP

PROCESS AUTOMATION SYSTEMS

Control Systems

DCS; Distributed Control Systems, Process Systems Engineering, Advanced Process Control, SCADA; Supervisory Control And Data Acquisition, PLC; Programmable Logic Controller, MES: Manufacturing Execution Systems, Process Safeguarding Systems, IPC, HMI

Operator Interface Systems

Control Rooms, wireless pads, displays, OTS; Operators Training Simulators

Process Automation Network Systems

HART, Fieldbus, PROFIBUS, PROFINET, ASI, Devicenet, ethernet systems, wireless network systems

Industrial Process Software

Operating systems, database systems, process scheduling systems, modelling systems, engineering systems, PDM; Product/Process Data Management, Datawarehousing, CAD/CAE, business process software, ERP; Enterprises Recourse Planning, SCM, BPM, asset management systems, maintenance systems

Industrial Cyber Security

Industrial System Integration

Energy Management, Plant Asset Management, System Integration Service, system architecture design, system engineering, software application implementation, hardware integration, process optimisation, consultancy

Engineering Software

FIELD INSTRUMENTATION

Flow Meters/Transmitters

Ultrasonic, mass flow, coriolis, magnetic inductive, thermal mass, differential pressure, turbine, float, vortex

Pressure/Differential Pressure Meters/Transmitters

Manometers, tube spring/helical, shell spring, bellows, diaphragm, differential pressure, gas pressure, pressure indicators, seals

Level Meters/Switches

Capacitive, gamma, hydrostatic, radar, ultrasonic, float/displacement, vibration, conductivity

Analytical Instrumentation

Emission, immission, BOD measurement, TOC/TOD measurement, colour, turbidity, pH, oxygen, residual chlorine, gas chromatography, density, conductivity, impedance, ion selective, relative humidity, spectrophotometers, UV/VIS/NIR, viscosity, TDLS

Control Instruments

Control valves (bellows, rotary cone, ball, membrane, needle, knife, butterfly, cone), valve positioners, converters, over-pressure valves, steam control, signal converters, vacuum controllers, safety valves, reducing and solenoid valves cryogenic control equipment, flow/pressure/level/temperature controllers

Handheld Testers

Gas, oxygen, electric, power quality

FACTORY AUTOMATION

SENSORS & MOTION CONTROL

Position Sensors

Linear, rotary, angular, proximity

Accelerometers & Vibration Sensors

Torque, servo, piezo electric, strain gauge

Pressure Sensors

Transducers, piezoresistive

Loadcells

Mechanical, strain gauge, helical, fibre optic, piezoresistive

Color & Object Detection Sensors

Vision sensors, photoelectric sensors

Motion Control Products

Stepper/servo motors/drivers/controllers, actuators & stages, solenoid control electronics, motor feedback systems, power supplies

MECHATRONIC SYSTEMS & SOFTWARE

Vision & Monitoring Systems

Cameras, framegrabbers, data collection

Robotics & Handling Systems

Pick & place, stepper motor systems, gripping systems, conveyor systems, robotics

Automatic Identification Systems

Barcode systems, RFID systems, transponder systems

Machine Safety Systems

Safety light curtains, programmable safety controllers, safety relays, process safeguarding, safety interlock switches

Industrial Cyber Security

Industrial Vacuum Systems/Clean Air Technology

Pumps, blowers, high vacuum, liquid ring, gas compressors, dry vacuum, side channel blowers, rotary vane, filter systems, membranetechnology

Weighing & Dosing Systems

Check weighers, (semi)automatic weighers, weighing stations, modules & loadcells, weighing software systems

Man Machine/Machine Machine Interface Systems (MMI)

Displays, keyboards, monitorscreens, speech systems

Networking & Connectivity Systems

IO-Link, CAN bus, PROFIBUS, PROFINET, remote systems, wireless sensor systems, cabling, connectors, optical fiber, ethernet devices

Machine Control Systems

PLC; Programmable Logic Controller, industrial PC's, data acquisition, Fieldbus communication systems

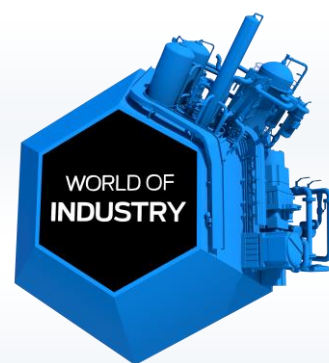
Systems Control

SCADA; Supervisory Control And Data Acquisition, MES; Management Execution Systems

Engineering Software

WORLD OF INDUSTRY

EXHIBITION PROGRAM / PRODUCT GROUP



PLANT ENGINEERING

Asset management

Equipment construction

Pressure equipment, non-pressure equipment

Installation, machine and OEM constructions

Packaging solutions

Process engineering and contracting

Process equipment, various

Absorption systems, filling machines, blowers, briquette machines, condensers, distillation plant, gas scrubbers, granulation plant, hydration equipment, pressure-water plant, impregnation equipment, towers, storage tanks, control panel construction, pasteurisation plant, reactors, scrubbers, steam plant, fans

System integration

COMPONENTS, SERVICES AND SYSTEMS

Compressed air and vacuum technology

Compressors, compressed air accessories, vacuum pumps

Conveyors and conveying equipment

Belt conveyor components, belt conveyors, air duct conveyor, bulk tanker filler, elevators, tubular cable conveyors, chain conveyor, pneumatic conveying systems, disc conveyor, screw conveyor, vibratory conveyor

Cooling and heating

Cooling- and heating conveyors, container cooler- and heater, fluid bed cooler- and heater, infra-red heater, cold storage units, cold stores, microwave heater, microwaves, ovens, plate cooler and heater, tank cooler- and heater, thermal units, screw cooler and heater, drum cooler- and heater, fans with control equipment, heat exchangers

Drying and dryers

Adsorption dryers, conveyor dryers, conical vacuum dryers, drying cabinets, fluid bed dryers, high frequency drivers, crystallizers, microwave dryers, parts and accessories, paddle dryers, pneumatic dryers, plate dryers, screw dryers, spray dryers, drum dryers, vacuum tumble dryers, freeze dryers, heat recovery

Environment, water and recycling

Environment, crushers, recycling, water treatment and purification

Industrial cleaning technology

Degreasing, tank cleaning, product line cleaning, Cleaning In Place

Instrumentation and controls

Bulk density measurement, flow meters, moisture measurement

Logistics, Storage and transshipments

(Sea) containers, bigbags, FIBCs, bulk tanker filler, containers, IBCs, tools and equipment, retaining walls, open storage/mixing heaps, storage sheds, silos/bunkers, hoppers, tanks, barrels and drums, bags and bag handling, packing seals

Machine safety

Maintenance

Mixing, milling, agitating and homogenisation

Mixing and homogenisation, mills and grinding equipment, agitators, coating

Pipelines and fittings

Elbows, tubes and pipes, expansion joints, fittings and flanges, clamps, supports and seals, couplings and fittings, multi-port diverters, seals & gaskets, hoses, two-way valves

Process automation

Pumps

Air pumps, bellows pumps, centrifugal pumps, diaphragm pumps, submersible pumps and dewatering pumps, metering pumps (membrane), rotary lobe pumps, monopumps, peristaltic pumps, plunger pumps, propeller pumps, pinion pumps, vane pumps, screw pumps, screw spindle pumps, gear pumps, turbine pumps, vacuum pumps, venturi pumps, displacement pumps, macerator pumps

Safety

Fire-proof and explosion-proof construction, fire and explosion suppression, fire and explosion prevention, explosion venting, measurements and analyses, personal protection, directives and regulations

Services

Advice and consultancy, certification, facility management, contract work, training

Separation, sieving and filtration

Centrifuges, exhaust systems, extraction, filters, magnetic separators, membrane technology, non-ferrous separators, separators, sieving

Vacuum and dust removal equipment

Valves, cocks and shut-off valves

Shut-off valves, fittings, valves, cocks, shut-off valves

Weighing and metering

WORLD OF INDUSTRY

EXHIBITION PROGRAM / PRODUCT GROUP

ELECTRICAL MOTION & DRIVES

AC motors, DC motors, frequency Inverters, synchronous servomotors, asynchronous servomotors, stepper motors, torque motors, high speed motors, linear motors, piezo drives, DC drives, servo, soft starters, motion controllers, stepper motor controllers, explosion proof drive systems, linear actuators, solenoids

HYDRAULIC DRIVE SYSTEMS

Aggregates, distribution systems, hydraulic cylinders, pumps, filters, hydraulic motors, accumulators, piping, hoses, valves, oil management systems

PNEUMATIC MOTION SYSTEMS

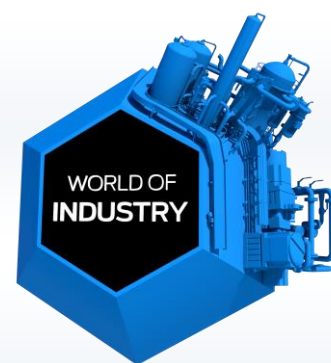
Pneumatic cylinders, valves, linear cylinders, valve terminals, servo-pneumatic systems, rotating pneumatic drives

MECHANICAL DRIVE SYSTEMS

Couplings, brakes, linear guides, bearings, chains, gears, planetary gear boxes, cyclic gearboxes, flexible couplings, angled gearboxes, gearboxes, linear gear systems

INTEGRATED MOTION & DRIVE SOLUTIONS

Gripping systems, conveyor systems, manufacturing robots, pick & place systems, positioning stages, handling systems, X-Y robots, delta-robots



VACUUM AND COMPRESSORS

Compressors, filters, dryers, vacuum systems, vacuum compressors

MEASUREMENT AND FEEDBACK SYSTEMS

Sensors, torque sensors, piezo electric sensors, strain gauges, tacho, angle encoders, magnetic sensors, linear encoders, probes, (Incremental) encoders, accelerometers, motion sensors, proximity sensors, vibration detector, resolvers, safety sensors, light curtains

CONTROL AND NETWORKING SYSTEMS

Industrial Computers (IPC), panel PC, Human Machine Interface (HMI), PLC, control software, CNC, IO-Link, power supplies, emergency stop systems, safety relays, safety systems, communication modules, Ethernet, EtherCat, Profibus-DP, CAN, CANOpen, DeviceNet