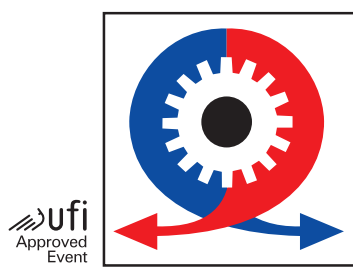
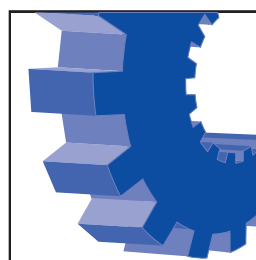


LIST OF NOVELTIES

registered up to 5th September 2016



MSV 2016



IMT 2016



FOND-EX



WELDING



AUTOMATIZACE

www.bvv.cz/msv

► **Advantage-fl.cz s.r.o.**

CZ – Praha 1
Hall F 079

- **OTEC DF 5 HD TOOLS – machine for tow grinding: polishing, deburring, rounding and smoothening**

Area of application

Industrial manufacture.

Benefit for customers

Optimum working result in the form of accurate edge rounding, smoothening or glossy finish in manual enamel quality. Increase of tool life by up to 300 %.

- **OTEC CF 18 – machine for fine turning based on rotating disc principle**

Area of application

Effective procedure for surface finish in mass scale.

Benefit for customers

Effect of centrifugal forces on workpieces and abrasive material causes a very intensive working process which may be up to 20times more effective than traditional vibrators. For the purpose of wet working process a mixture of water and compound washing off residues of the removed material is continuously fed to assure clean and non-corroding workpiece surface.

► **AJP-tech spol. s r.o.**

CZ – Brno
Hall E 043

- **FlyMarker® mini – 100% mobile, quick, permanent and lightweight micro-impact coining device**

Area of application

Coining of metal, plastic and wooden objects. Very broad application across industries from individual piece coining to small series marking. Easy coining of big, non-mobile objects hard to handle.

Benefit for customers

A 100% mobile micro-impact coining device, lightweight and ergonomic embodiment (weights only 2.4 kg).

The device is able to coin letters, numerals, symbols, logos, marks, data matrix codes etc.

Integrated keyboard with a high-resolution colour display.

Work area 65x30 mm with integrated LED lighting.

Easy intuitive control, big internal memory, data import and export via USB interface.

For special applications there are various accessories available in request, such as prisms for round workpiece coining on the front side, a magnetic holder, an integrated barcode reader, a stand and more.

► **AQUASTYL SLOVAKIA, s.r.o.**

SK – Považská Bystrica
Hall F 020

- **Instrument for measurement of radius and shape of bearing rings MPTR - 20PC/AQ**

Area of application

The device is used in measurement laboratories and workshop measurement centre in bearing manufacturing plants.

► **ARC-H a.s.**

CZ – Plzeň
Hall G2 043

• **ARC-BT-ONE – mobile spray nozzle with back-suction and abrasive recycling**

Area of application

Mechanical engineering, automotive, civil engineering and light industries.

Benefit for customers

A lightweight portable spray nozzle, which can be connected to a blasting cabin or, thanks to the integrated back-suction, used for open-air dust-free blasting.

The device contains integrated back-recycling of the abrasive material and air filter. The advantages include usability of recycled abrasive, saving costs of its purchases.

Another advantage is power saving thanks to the pressurised air to which the device must be connected.

There are shaped extension of the blasting head for complex shape blasting available on request.

• **Hypertherm POWERMAX 125 – manual or mechanical plasma system for metal cutting and grooving**

Area of application

All arc cutting of conductive materials.

Benefit for customers

Shorter cutting time. Lower temperature burden of the cut materials.

Long life of consumer parts.

High energy efficiency reduces energy consumption.

• **Fastmig X + RGT technology**

A multi-process welding machine with software allowing for use of welding technology RGT (Reduced Gap Welding).

Area of application

Industrial manufacture.

Benefit for customers

Time and cost saving, higher welding productivity.

• **FastMig x + A3**

A multi-process welding machine in connection with A3 unit allowing for automated welding.

Area of application

Industrial manufacture.

Benefit for customers

Time and cost saving, increased welding productivity, elimination of human error, fewer corrective works.

► **ARGO-HYTOS s.r.o.**

CZ – Vrchlabí
Hall V 167

• **CME demonstrator of sensory characteristics of fluids**

Monitoring of fluids conditions, including saving, displaying and transmission of measured values.

Area of application

- oil or oil-based fluid systems: hydraulic units, hydraulic presses or gearboxes;
- anywhere you need to monitor quality parameters of oils, or equipment wear;
- industrial and mobile hydraulic units.

Benefit for customers

- you get up-to-date and easy-to-read information about the fluid condition, such as: viscosity, relative humidity, ageing, quantity of contaminants, temperature, pressure and oil level;
- you can improve reliability thanks to failure elimination;
- you can optimise the intervals of oil exchange;
- you can archive and evaluate the data.

• **Hydraulic valves, blocks and units**

Management of hydraulic applications for the most discerning customers.

Area of application

- stationary and mobile hydraulic systems;
- hydraulic units for production machinery;
- blocks and valves for mobile applications;
- mining equipment – Atex certified valves;
- proportional equipment.

Benefit for customers

- high flexibility and scope of application;
- standard and customized solutions;
- tradition and quality at a reasonable price;
- high performance and Lightline series (for performance optimisation).

• **New lines of filters for the required oil purity**

Area of application

- hydraulic equipment using suction, pressure, back or back suction filters (hydraulic units or mobile equipment);
- high performance Lightline series (for performance and dimension optimisation).

Benefit for customers

- hydraulic equipment using suction, pressure, back or back suction filters (hydraulic units or mobile equipment);
- high performance Lightline series (for performance and dimension optimisation).

► **ATAS elektromotory Náchod a.s.**

CZ – Náchod

Hall Z 083

• **G42LN – BLDC motor with integrated electronic control**

Area of application

General usage in line with the Industry 4.0 vision.

Benefit for customers

Replacing commutator motors with the requirement for long life and higher efficiency.

► **AUTOCONT CONTROL SYSTEMS spol. s r.o.**

CZ – Ostrava 2

Hall P 014

• **iX TxF-2 – new industrial series of Beijer panels**

A brand new series of industrial panels with state-of-the-art graphic interface offering connection to databases and control systems as an option.

Area of application

Ideal for single-purpose machines such as HMI panel or more complex control and graphic representation.

Benefit for customers

Easy, quick, clear. Thanks to the multiple easy-to-learn functions offering for example connections to various control systems and databases our customers will get complex overview of their monitored process.

► AUTOMATIONSTECHNIK Sp. z o. o.

PL

Hall A2 023

• Pneumatic lifting mechanisms (lifters)

Lifters bring loads to a comfortable working height, thereby creating an ergonomic workplace.

Area of application

Pneumatic lifting mechanisms also available in electric versions are recommended for optimization and improvement of ergonomic of processes in industrial plants.

Benefit for customers

Lifters protect employees health, ensure more efficient assembling or packing processes and reduce handling costs.

► AXA CNC STROJE, s.r.o.

CZ – Hořovice

Open area P 004

• AXA VCC 50 machine tool

A high-performance machine tool for the roughing and finishing of small-size workpieces up to 1300 x 700 x 900 mm.

Area of application

Mechanical engineering, metal cutting.

Benefit for customers

A high-performance machine for force machining of small-size workpieces up to 1300 x 700 x 900 mm.

► AY Heavy Industries Co., Ltd.

KR – Yeongtong-Gu, Suwon-Si, Gyeonggi-Do

Hall Z 067

• Hydraulic Breaker**Area of application**

Durability: Chisel pin, Through Bolt is Bigger than other companies and improved durability. Minimized process of Bracket welding and strengthened durability.

Function: Applied 2 step stroke and Idle blow preventing structure system. Maximized impact power.

Supplementation: Fixed the problem with Chisel pin looseness.

No oil leakage when changing the control valve. Prevention of vibration between power cell and bracket when assembling. Ease of use: simply disassemble and assemble. Control Valve can be replaced on site speedily. Easy maintenance (time and cost saving). Longer lifetime of the parts. Construction.

Benefit for customers

Not to need to disassemble whole parts when the control valve have a problem. So, customer can save time and cost and also the part's life can be extended.

► **BOMAR, spol. s r.o.**

CZ – Brno
Hall F 071

• **Band saw ProCarbide**

High-performance band saw with optional use of bimetal or hard metal saw bands.

Area of application

The machine can be used in the harshest operations. All saw movements are controlled with power units via ball screws for stable and precise working of materials.

Benefit for customers

Effective material processing. Quick and accurate material cutting. Flexibility.

• **Innovated band saw PROLINE 420.350 ANC**

Two-column automatic band saw for perpendicular cuts.

Area of application

Medium to heavy operations requiring automatic material cutting and perpendicular cuts.

Benefit for customers

The machine is provided with a continuous conveyor belt transport system with a new clamping concept thanks to which material residues are minimised.

• **Aluminium 500 Automat**

Automatic disc saw for cutting of profiles and plain aluminium materials.

Area of application

Light and medium-heavy industry with stringent accuracy and quality requirements for aluminium material processing.

Benefit for customers

High-standard cutting of aluminium with low production costs.

► **BOUKAL s.r.o.**

CZ – Litvínov - Chudějřin
Hall P 138

• **Pillar drill Alzmetall ALZSTAR 40/SV**

A professional drill for industrial use, made in Germany of the best cast iron. Life min. 20 years.

Area of application

Accurate engineering manufacture.

Benefit for customers

Accurate drill for frequent use with long, at least 20-year life.

• **Universal cutter Bernardo UWF 130 Servo**

UWF 130 Servo universal cutter with a horizontal and a vertical spindle and a power unit, ideal for mechanical engineering production.

Area of application

Mechanical engineering.

Benefit for customers

Thanks to the power unit the cutter requires minimum maintenance, the X, Y and Z travels are sufficiently effective and regulated. User-friendly operation, all can be done from the control panel. Very affordable price.

- **Flat grinder Bernardo BSG 2040 AHD - a small, accurate planar grinder with hydraulic drive**

Area of application

Automated grinding of small parts, ideal for tool making workshops and mould maintenance.

Benefit for customers

Automated small object grinder. Ideal complement to big grinders for small part grinding. The lengthwise travel is hydraulic, the crosswise travel is equipped with a power unit and the material move is actuated by a servo motor. The grinder can be operated manually or in a fully automated mode.

► **BRIKLIS, spol. s r.o.**

CZ – Malšice

Hall P 117

- **Tilting device VZ 800**

Tilting device with maximum load-bearing capacity of 800 kg, stroke max. 4 metres, power input of 0.75 kW with safety elements, as part of the briquetting press or as a separate component.

Area of application

Unmanned, safe and effective handling of bulk material in containers, for example for briquetting press hopper filling with chips or crushers with clusters of long metal cuts. The device may also be supplied as a standalone component with its own switchboard for connections to other devices. The device is equipped with the necessary safety elements such as drip basins, ramps, anti-slide grilles, safety fences and light gate. The device meets demanding safety standards, can be tailor made according to individual requirements and equipped with various optional accessories.

Benefit for customers

Comfortable and safe transport of bulk materials in containers; the structural design allows for adaptation to customer transport containers; increased workplace safety.

► **BTB TRANSFER SPA**

IT – Bovezzo (BS)

Hall V 046

- **Rotary Table CNC Transfer machine**

Multi station transfer machine with horizontal or vertical axis. Machines are available in standard or special configurations, custom made according to customer's needs.

Area of application

Our machines are primarily designed for the machining of parts for various industry sectors such as: automotive, petrochemical, pipe fittings and valves for domestic and industrial applications, heating and refrigeration, hydraulics and high-pressure components, handles, hinges, locks and keys.

Benefit for customers

Reduction of the cost of production and increase of the accuracy thanks to the possibility to completely machine the part in a single process. Optimization of production spaces and reduction in logistics costs. Wide flexibility in the production of parts even very complex.

► **Camozzi s.r.o.**

CZ – Praha

Hall V 047

- **Series 63 cylinders - aluminium profile**

Single and double-acting, magnetic, cushioned cylinders available as standard, low friction, high and low temperatures versions.

Area of application

A wide range of versions are available (including also special versions) which makes these new cylinders suitable to be used in many sectors and applications.

G variant is mainly used in dusty applications which is highly resistant to dust, cement, resin, mud and wood residue.

Benefit for customers

The new Series 63 pneumatic cylinders which comply with the ISO 15552 standard, have been developed to guarantee high performance whilst also offering significant reductions in weight. The new adjustable pneumatic and mechanical cushioning system ensures that Series 63 also reduce the impact of the piston on the end block. The low temperature version can be used for -40°C and for -50°C whilst in the low friction version, the friction force is reduced by over 40%.

• Series CX multi-serial module

Multi serial module able to interface with all Camozzi valve islands and able to manage several communication protocols (Profibus, CanOpen, DeviceNet, Ethercat, Ethernet IP, Profinet).

Area of application

This multi serial module can be used in every application that required to manage both with the traditional and the new generation communication protocols in order to interface with all Camozzi valve islands.

Benefit for customers

Among the main novelties offered by the Series CX multi serial module, there is the possibility to create a subnet by exploiting special Slave devices, from the bridge module to the Sub-D adaptor modules, owners of the subnet. This solution enables, through only one communication protocol, the management of different valve islands to which several input signals (for instance proximity switches, photocells and so on) are associated that have to manage products with proportional technology, making both the programming by PLC and wiring a lot easier. Furthermore the CX module can be used as a stand alone solution, i.e. valve island including a serial node. Moreover a special software has been realized to guarantees maximum flexibility during the configuration phase of the parameters.

• Electromechanical linear actuators Series 5E

Electromechanical linear actuators where the rotary movement generated by a motor is converted into a linear movement through a toothed bell.

Area of application

The possibility to realize multi-axis systems with high dynamics make the Series 5E particularly suitable for the assembly sector or in applications where speed and repeatability are essential requirements, as in the packaging machine sector.

Benefit for customers

The axes are realized by means of a special square profile, where the components have been completely integrated, assuring a compact design. The presence of a recirculating ball guide grants high stiffness and resistance to external loads, while the profile has been closed with a stainless steel plate to protect the internal elements from potential contaminants due to the external environment. To make the installation easier, the Series 5E axes are equipped with accessories that allow to connect the motor on all four sides.

► Carl Zeiss spol. s r.o.

CZ – Praha 5

Hall F 004

• Contura G2 measuring instrument with DotScan optical sensor

DotScan using a bundle of the polychromatic light beam (white light) for the measurement of distances.

Area of application

Contactless measuring, specially designed for transparent, high-resilience or high-absorption soft surfaces that cannot be measured by contact measurement.

Benefit for customers

DotScan sensor measuring may be combined with other contact or contactless sensors in one CNC programme.

- **ZEISS COMET L3D 2 3D scanner**

A compact 3D scanner using blue light and offering extra flexibility and high measurement productivity.

Area of application

Contactless 3D digitization for the purpose of dimension check, tool repairs, or reverse engineering or automated inspection of parts.

Benefit for customers

The characteristics of the 3D sensor facilitate ZEISS COMET L3D 2 application for various sizes, materials or surface finishes. Special applications may be addressed by using a wide range of accessories, such as rotating tables, tripods, photogrammetry or industrial robots.

- **ZEISS T-SCAN manual laser 3D scanner**

The innovative T-SCAN scanner facilitates intuitive and efficient 3D digitization with the possibility of contact scanning using the T-POINT probe.

Area of application

3D digitization of medium and large size objects, inspection of dimensions meeting requirements for effectivity and simple use.

Benefit for customers

Thanks to its versatility and mobility the solution may be used in various applications facilitating an easier and faster process of part dimension control in different stages of manufacturing.

- **Zeiss Axio Observer 7 materials inverted metallographic microscope**

An inverted metallographic microscope with powered focussing, automated recognition of components, contact control display and optional remote control.

Area of application

An inverted microscope for the research, development and analysis of materials.

Benefit for customers

You save time in your metallographic research thanks to the inverted design and powered components. Stable visualisation conditions even for the biggest magnification thanks to the high-stability mechanical and optical design. Repeatable results and brilliant picture thanks to the well-established Zeiss quality and automated components. Quick results thanks to specialised SW modules, such as for non-metal inclusions, grains, multiphases. The modular system of the microscope can be adopted to any changed requirement.

► CASTOR UNIA GOSPODARCZA SP. Z O.O.

PL – Katowice

Hall E 047

- **VACUUM-CAST 3000 Vacuum Water Washmachine**

Precise cleaning and degreasing parts with complicated shapes, blind holes, high porosity, covered with oils that are difficult to remove, coolants and abrasive compounds.

Area of application

A very efficient system allows for effective drying in a very short time, regardless of the harsh drying conditions (a large number of small elements in compacted form, parts with blind openings etc.) with 10 times lower

energy consumption in comparison to conventional hot air drying. It should be noted that 70% of the capacity of installed power in the blower chamber is just used for drying air heating.

Benefit for customers

Low operating costs due to the high energy saving, low noise level, compact build, small size, high repeatability of the cleanness level. Whole installation works under vacuum. All possible ways of washing (immersion, spraying, ultrasound) are held in a vacuum. This increases the security of the entire process and prevent accidental opening of the working chamber and improves the quality of the cleaning bath by continuous degassing (especially important when ultrasound).

• **ULT-CAST ultrasonic washers**

The manual ULT-CAST tubs are appliances intended for semi-professional washing and degreasing of parts.

Area of application

The principle of operation involves transporting the process baskets with contaminated elements between consecutive tubs in which they are subjected to different processes, including: initial washing, precise ultrasound washing, rinsing with water, rinsing with demineralised water or hot air drying.

Benefit for customers

Our washing stations use modern generators and transducers provided by the German company, Weber Ultrasonics GmbH. The size of the tubs, process parameters, washing agent type and technology may be selected individually depending on the customer's needs.

• **SPRAYING-CAST 3001 Tunnel-cycle washing machines**

The industrial washing machines (3001 series) have been designed for automatic work, with a complete monitoring of washing parameters such as: cycle, temperature in particular zones and liquids concentrations.

Area of application

The device is compatible with zones: preliminary washing, washing, rinsing with tap water, rinsing with DEMI water, anticorrosive preservation, phosphatising, drying with compressed air or hot air. (The washing lines may be expanded on the other zones depending on client needs).

Benefit for customers

Advantages of tunnel-cycle industrial washing machines:

WASHING QUALITY: the washing quality may be additionally upgraded through full stream filtration. Due to this fact it is possible to meet cleanness demands of 1 mg/dm²!

CHAMBERS' LEAKTIGHTNESS: specially tight and simultaneously straight construction ensures constant washing bath parameters through long time period.

ENERGY SAVING: suitably selected sensors of particular zones makes that regardless of the quantity of baskets and parts placed inside the machine in given cycle, the programmer decides about which spraying collectors should be activated.

► **C.I Tech Ind. Co., Ltd.**

KR – Daegot-myun, Gimpo-si, Gyunggi-do
Hall Z 067

• **Aluminium plate saw machine (Automatic)**

- Max. cutting capacity, mm: 5000L x 300H
- Auto-feed distance, mm: 2500
- All type of Aluminium plate shall be available to cut
- Convenient equipment: Turn table and Rollers for plate handling
- Clean-up system: Chip conveyor and vacuum collector

Area of application

Dimension cut Aluminium plate / bar / profile.

Benefit for customers

Price: simplified design to reduce entire cost and to make user convenient to move around machine.

Work efficiency: necessary much less workforce to operate machine.

Easy maintenance: possible to do self-maintenance with short instruction.

• **Aluminium plate saw machine (Semi-Automatic)**

- Max. cutting capacity, mm: 5000L x 300H

- All type of Aluminium plate shall be available to cut

- Convenient equipment: Turn table and Rollers for plate handling

- Clean-up system: Chip conveyor and vacuum collector

Area of application

Dimension cut Aluminium plate / bar / profile.

Benefit for customers

Price: Simplified design to reduce entire cost and to make user convenient to move around machine.

Work efficiency: Necessary much less workforce to operate machine.

Easy maintenance: Possible to do self-maintenance with short instruction.

• **Sliding table saw**

- Max. cutting capacity, mm: 1200L x 100H

- Easy and simple operation: 4 buttons for entire operation

- Pneumatic system clamp (chip flying cover)

Area of application

Dimension cut Aluminium plate / bar / profile.

Benefit for customers

Price: Simplified design to reduce entire cost and to make user convenient to move around machine.

Work efficiency: Necessary much less workforce to operate machine.

Easy maintenance: Possible to do self-maintenance with short instruction.

► **Clean4you s.r.o.**

CZ – Olomouc

Hall A2 036

• **Manual cart with inclined shelves**

A manual cart with inclined shelves for material transport with 5 height-adjustable shelves and variable surface finish to customer order.

Area of application

For industrial logistics, operations, warehouses and other spaces.

Benefit for customers

Simultaneous preparation of more orders reduces operation costs and places minimum requirements for the handling area. The cart ergonomics tailored to the user and the height-adjustable shelves serve for more comfortable goods loading and unloading, easy operation and noiseless run.

• **Shelf cart with deck area 1200x800mm connectable to trains**

A shelf cart with deck area 1200 x 800 mm and variable shelf positions with total load-bearing capacity of up to 350 kg, connectable to trains with travel speed up to 10 km/hr in the straight direction.

Area of application

For industrial logistics, operations, warehouses, retail and other space types.

Benefit for customers

Simultaneous preparation of more orders reduces operation costs. The cart is train connectable for increased effectiveness of transport and reduced costs. The cart ergonomics tailored to the user and the height-adjustable shelves serve for more comfortable goods loading and unloading.

- **Roll container with ESD inserts**

A roll container with ESD inserts in stackable variant, allowing for train connection and variable surface finish on customer request.

Area of application

Safe material transport and protection of the transported goods with the help of ESD inserts for different types of spaces and warehouses.

Benefit for customers

The stackable embodiment saves warehouse space. For increased transport effectiveness the container can be trained. Easy handling thanks to direction locking of the wheels, variable surface finishes.

► **DongWoo Precision**

KR – Uichang-gu, Gyeongsangnam-do
Hall Z 067

- **Hydraulic Relief Valve**

- The relief valves for Main Control Valve in an excavator
- Control the quantity and pressure of oil
- Controls the flow of oil in Traveling / Swing motor
- Well-known and chosen by Volve, Doosan, Hyundai, Flutek, SDLG and SANY

Area of application

- Excavator manufacture
- Construction equipment A/S

Benefit for customers

The quality of relief valves can be guaranteed as the first vendor of volve, Doosan over 20 years.

► **Dürr Ecoclean GmbH**

DE – Filderstadt
Hall E 041

- **ECOCCOMPACT – a compact solution for economic and reliable solvent cleaning**

The new EcoCCompact is a single-chamber device working fully in vacuum, for the cleaning and preservation by using modified alcohols and non-halogen carbohydrates – for economic and reliable cleaning by using solvents.

Area of application

EcoCCompact is a single-chamber device working fully in vacuum, for the cleaning and preservation by using modified alcohols and non-halogen carbohydrates. It offers high-quality cleaning and at the same time short cycle time and maximum flexibility in different cleaning tasks. Thanks to a flexible modular system (option with 1 to 3 tanks) EcoCCompact is easy to adapt to the customer's individual wishes. It is suitable for a wide spectrum of applications ranging from rapid degreasing up to discerning cleaning tasks with specifications for the cleanliness of parts. Choosing between the two sizes of the working chambers you can clean the batches to your customer's specification. This system minimizes the costs per piece.

Benefit for customers

Flexible application possibilities: For various applications ranging from pre-cleaning, partial and final cleaning up to preservation. A concept with certainty for the future: usable with carbohydrates and modified alcohols.

Reduced costs per piece: thanks to the composition of the batches of your parts optimised in terms of volume and high capacity. Optimised technical cleanliness of parts: optimised cleanliness of parts thanks to improved cleaning agent passage and frequency controlled coating.

Intuitive operation: HMI control field with easy monitoring of the process, error diagnosing and display of service intervals, suitable for Industrie 4.0.

► **DWT GmbH**

DE – Bottrop
Hall G2 004

• **Easy-to-Fit tube bevelling machine**

A new solution for the preparation of tube and fittings welds that brings considerable savings in the entire welding process, thus optimising the productivity.

Area of application

In the specific case of automatic orbital welding the requirements for the weld preparation are very complex. The welded joints require a constant gap for U welds and simultaneous internal working. The centring between the tube end root areas needs to be reduced to minimum. This requires high-end working of the tube ends and positioning of the parts.

Benefit for customers

- Reduction of total costs for tube welding
- no need to centre the tubes, they are always "perfect in-line"
- reliable stability of the process and precise repetition
- saving on the welding material
- perfect tube welding independent of the operators' qualification

► **EKO - ŠIMKO s.r.o.**

CZ – Náchod
Hall G2 005

• **EKO ST integrated universal exhaust system**

An exhausting table with an integrated three-step filtration unit the composition of which is derived from the contaminants produced by the customer's technology.

Area of application

The table is used to filter out contaminants to the customer's wish – such as in welding, grinding, soldering, cleaning of parts, laboratory grinding.

Benefit for customers

You will save:

- operation costs (mainly heating costs in winter season),
- room compared to the conventional local exhaust system with a separate exhauster attached to the working table.

• **An exhauster for welding, soldering, and brazing, type SOS SV 567.2/2SH**

A mobile exhauster comprised of a medium pressure ventilator, filtration unit – consisting of an after-filter, main cassette H11 class filter, chemical filter (active coal), control panel and self-supported nozzles.

Area of application

Welding, grinding, soldering, brazing, laboratories – mechanical engineering, electrical engineering, chemical industry.

Benefit for customers

Improved air at the working place, saving on heating and room.

- **Exhauster for dust removal during grinding, type SOS SV 557.1.U/RO/KON**

The exhauster is comprised of a container on wheels, filtration unit (filtration cartridges), and equipment for filtration area regeneration, medium-pressure ventilator and noise damper.

Area of application

All industrial branches, mainly mechanical engineering.

Benefit for customers

Saving on investment costs.

► **Elanview Technology Co.,Ltd.**

CN – Shanghai

Hall A1 030

- **Cicada K**

Cicada K is a revolutionary drone to meet requirements from vast customers. Cicada K is fantastic in image quality and most importantly it is easy to operate by smartphone or R/C & easy to carry.

Area of application

Aero-photography, Sport Selfie, Industrial Inspection, Agricultural Scanning, Geological Researching.

Benefit for customers

Professional Quality Drone with Affordable Price.

Automatically Hovering, No Need to Panic.

Auto Homing.

One Key Take-off.

- **SISKIN**

Quadcopter with Mechanical Gimbal and Auto Obstacle Avoidance. 29mins Super Durable Operational Time.

Area of application

Aero-Photography, Industrial Inspection, Agricultural Inspection, Sport Selfie, VR Gears Carrier.

Benefit for customers

SISKIN is Built with Auto-Obstacle-Avoidance System, Safe is Ensured!

Customer Can Now Carry VR Camera on Board.

29mins Super-Durable Operational Time for Creative Arts.

- **Mantis**

Smart Remote Controller. Compatible for Drones from Many Brands.

Area of application

Smart Ground Station for Drones. Real-time Display for Better Picture Quality

Benefit for customers

Customer can Real Time View What is Recoding by the Drone.

Customer can Also set Way Points to Pre-set the Route Drone Flies.

Customer can Also Control Drones from Other Brands' Drones Other than Elanview.

► **ELEDUS s.r.o.**

CZ – Brno

Hall C 047

- **X-ray for non-destructive testing – SCIOX**

SCIOX – an X-ray for non-destructive testing in the development and production of electronic or mechanical engineering products.

Area of application

The X-ray instrument SCIOX is designed for non-destructive testing primarily in the area of quality inspections of soldered or welded seams. The instrument is also used for inspections of castings, analyses of complete products, investigation of complaints or reverse engineering.

Benefit for customers

The X-ray makes it possible to inspect spots the human eye does not see. Thanks to the X-ray inspection you can detect internal air bubbles in seams (soldered and welded), cracks in castings or any incompliance of the product's internal structure. SCIOX is manufactured in the Czech Republic and its price is very reasonable considering the high resolution it offers.

► **ELOKON POLSKA SP. Z O.O.**

PL – Warszawa
Hall C 014

• **Pedestrian Warning & Anticollision System - ELOshield2**

Proximity detection system: pedestrian alerting, trucks collision alerting and zone alerting - all in one. Innovate solution based on ultra wide band wireless. The most precise and reliable detection and warning system to prevent injuries, accidents and impacts, with optional interaction with truck.

Area of application

Anywhere where forklifts and persons work together in dangerous areas of intralogistics at the same time. Also can be used for avoiding collisions between forklifts in all their operating areas. With the stationary version, for monitoring danger areas such as in crossing areas that are heavily frequented by company-internal traffic.

Benefit for customers

Increasing the traffic safety. Minimizing the dangers during driving operations. Avoiding accidents. Reducing the risk of collisions and the cost of damages. Improving productivity and efficiency. Eliminating expensive repairs and long stop times. Creating better working condition for all users and staff. Fulfilling employee's liability insurance association regulations. Helping to comply with the safety operating regulations.

► **ELYON INDUSTRY Co., Ltd.**

KR – Haeundae-gu, Busan
Hall Z 067

• **Wire**

Copper & Copper alloy, Stainless steel / Duplex Steel, Carbon Steel, Nickel Welding, Connector wire.

Area of application

Spring, Fastener, Stamping, Precision Part, Automotive Part, Lead Frame Manufacture.

Benefit for customers

Proactive, Prompt, Precise, Speedy & on-time delivery, Consistent & reliable quality, Competitive Prices. All our metal products are supplied from manufacturing sites or through supply network, if necessary.

• **Coil / strip**

Bronze, Brass, Copper, Nickel Silver, Cupro Nickel, Beryllium Copper.

Area of application

Spring, Fastener, Stamping, Precision Part, Automotive Part, Lead Frame Manufacture.

Benefit for customers

Proactive, Prompt, Precise, Speedy & on-time delivery, Consistent & reliable quality, Competitive Prices. All our metal products are supplied from manufacturing sites or through supply network, if necessary.

- **Bar / rod**

Bronze, Brass, Copper, Nickel Silver, Cupro Nickel, Chrome Copper, Beryllium Copper, Tellurium Copper.

Area of application

Spring, Fastener, Stamping, Precision Part, Automotive Part, Lead Frame Manufacture.

Benefit for customers

Proactive, Prompt, Precise, Speedy & on-time delivery, Consistent & reliable quality, Competitive Prices. All our metal products are supplied from manufacturing sites or through supply network, if necessary.

► **Festo, s.r.o.**

CZ – Praha 4

Hall V 123

- **Multi-Carrier-System (MCS®)**

A modular transport system allowing for individual control of movement of individual product carriers (acceleration, speed and direction of movement, or potential synchronised run) and technological operation performance in harmony with the progress of the order manufacture.

Area of application

In harmony with automation trends summarised under Industry 4.0 this is a brand new approach to known technologies and their use. In combination with all aspects such as the ability of the manufacture to adapt completely to the coming orders and connection of a physical device by digital means to the data sphere this is a typical cyber-physical system. The system includes condition monitoring, predictive maintenance, energy saving etc.

Benefit for customers

A self-contained movement and yet smooth transfer of product carriers from the existing conveyor technologies to this system. Removal or installation of further carriers without any dismantling operation, like in the case of existing conveyors. Carrier identification with chips for permanent absolute survey of their movements. High accuracy and possibly compactness (depending on specification) allows for application of demanding mechanical operations, even in cooperation with surrounding technologies (robots, handling robots, presses). MCS® is easy to integrate in existing systems of virtually any concept (circulating or passing operation, ...).

- **CP Factory**

A teaching system (a universal research and learning platform) for education within Industry 4.0.

Area of application

CP Factory (a cyber-physical factory) authentically copies stations of real production systems. The individual modules can be used for simulations of for example logistics in autonomous systems, automated and manual assembly, production planning and control etc.

Benefit for customers

For development of expertise in use of and work with state-of-the-art digital technologies within Industry 4.0. The CP Factory system can be set to correspond to the needs of the customer-used technology. Individual module arrangements can be configured in a couple of minutes.

► **FRONIUS Česká republika s.r.o.**

CZ – Praha 10

Hall G2 013

- **TRANSPORT 150 / TRANSPORT 180**

Welding with coated electrode and TIG DC. Welding sources TransPocket 150 and 180 convince with excellent welding results and extended range of functions. The robust, ergonomic coat with integrated plastic legs

serving as edges and slip protection, and sophisticated lamella arrangement protect the whole device from water and impurities.

Area of application

New models of TransPocket 150 & 180 are mainly designed for manual electrode welding and enjoy popularity among users from different fields of human activity. They safely weld vertical welds with coated electrodes with the diameters of 3.2 mm (TP 150) to 4.0 mm (TP 180). Perfect welding results are obtained by use of cellulose electrodes (CEL) assuring the right operation mode. TIG welding with new connection and welding burner offer the following functions: Up/Down, two- & four-tack mode, pulse welding process and stitching function (TAC).

Benefit for customers

The instruments of the new TransPocket series are more stress resistant than ever before and represent an ideal solution for building sites and other harsh working conditions. Users profit from significantly lower power consumption and continuously reduced power costs. The 7segment display provides quick reading of the preset parameters, is easy and intuitive. Thanks to its slight recess the display is well protected against damage.

- **TPS/i CMT manual welding**

The legendary CMT process as an upgrade to TPS/i, including manual and robotised welding.

Area of application

The machine offers to its users the most stable arc of all with the lowest welding spatter which is not “only cold” but allows for heat input regulation from cold to hot.

- **PullMig CMT TPS/I burner**

The welding burner PullMig developed for TPS/i CMT, offering extremely high dynamics, growing structure and ergonomic control. The burner body with the outer tube of noble steel assures maximum stability.

► **GMS velkoobchod, s.r.o.**

CZ – Lanškroun
Hall G1 067

- **FLEXADUR PU-3H SMARTFLEX**

Area of application

Wood processing industry, petrochemical industry and wherever the hose is required to be abrasion and hydrolysis resistant and at the same time flame retarding pursuant to DIN 4102 B1 and conductive $R < 109 \Omega/m$.

Benefit for customers

One type of pneumatic hose able to cover multiple technical requirements.

- **Non-drip joints Mann Tek**

Area of application

High-value, chemical aggressiveness or leak risk media transport. Environment protection especially where the medium is easy to leak. Use in road, air and railway transport, in chemical and petrochemical industry.

Benefit for customers

Occupational safety of bottling in chemical and petrochemical operations.

- **Calortec 140**

Area of application

Cooling and tempering of injection presses in plastic production.

Benefit for customers

Working temperature, short-term raised to $+160^{\circ}\text{C}$, assures long life of the hoses. The hose colour codes help increase occupational safety.

► **Hanshin Chain Co., Ltd.**

KR – Jyeongwhang-dong, Shiheung-si
Hall Z 067

• **RoboChain - HSP Type**

Moving predefined lengths in order to maximize protection of cables and hoses that provide electricity, pneumatic pressure. Easy access and installation of cables and hoses. All parts are made of highly durable engineering plastic.

Area of application

Electronic and electrical machine, industrial robot, machining center and many more.

Benefit for customers

Prolonged durability and use.

Technological advance over 30 years of research and development.

Products go through reliability authentication tests at the Hanshin R&D Center.

• **RoboChain - Racer Plus Type**

Moving predefined lengths in order to maximize protection of cables and hoses that provide electricity, pneumatic pressure. Low noise, low vibration, low particle and many more.

Area of application

Semiconductor industry, electronics, clean room, etc.

Benefit for customers

Prolonged durability and use.

Technological advance over 30 years of research and development.

Products go through reliability authentication tests at the Hanshin R&D Center.

• **RoboChain - HSS Type**

Moving predefined lengths in order to maximize protection of cables and hoses that provide electricity, pneumatic pressure. Made of steel for long stroke and durability in harsh environment.

Area of application

Iron and steel mill industry, Machining center, Industrial plant facilities and for other industrial application.

Benefit for customers

Prolonged durability and use.

Technological advance over 30 years of research and development.

Products go through reliability authentication tests at the Hanshin R&D Center.

► **Havel metal foam GmbH**

DE – Brandenburg an der Havel
Hall V 003

• **Aluminium foam, aluminium foam sandwiches**

Area of application

The aluminium foam can be used everywhere you need low weight and at the same time high mechanical loading capacity along with noise dampening, fire protection, energy absorption and vibration suppression – for example in the railway industry, automotive industry, ship building, medical devices, and architecture. Thanks to its unique structure the aluminium foam is also very popular for design elements.

Benefit for customers

– light weight, high mechanical loading capacity

– noise dampening, fire protection, energy absorption and vibration suppression

– a series of geometrical elements is possible, same as for cast iron

- 100 % recyclable
- extremely light weight, thickness approx. 0.7 g/cm³

► **HEIDENHAIN s.r.o.**

CZ – Praha 10
Hall P 071

• **TNC 640 – CNC control for milling of moulds and rotary parts**

Area of application

Complex control of accurate and high-performance working centres in 5 axes with a focus on manufacture of moulds with high surface quality, manufacture of complex rotary parts by milling and turning technology with use of in-process control of tool blunting and adaptive travel control. The cutting performance is increased and at the same time the cut surface quality improved by the unique CTC and AVD algorithms effectively attenuating vibrations caused by the machine dynamics.

Benefit for customers

Manufacture of expensive and accurate parts in optimum time using the turning technology saves costs of acquisition of another machine. TNC 640 actively watches for tool and workpiece collisions in the work area in operation and test modes. Effective graphics allows for detection of potential surface corrugation caused by CAD calculation and filtering of deviations from ideal tool routing. TNC 640 can be included in computer topology of the user as one of the stations and connected to the programmer or structure with CAD support.

► **HIWIN s.r.o.**

CZ – Brno - Tuřany
Hall V 109

• **6-axis jointed-arm industrial robot, programmable**

Area of application

Automation, assembly plants, light 3D machining, laser cutting, automatic measuring instruments.

Benefit for customers

An open PLC system for an easy integration into complex lines. A user-open system for simulation and robot programming. You can use a master LC system for robot control.

► **Hufschmied Zerspanungssysteme GmbH**

DE – Bobingen
Hall P 090

• **Proto Line: 102AL, HC403, HC453SR – HSC milling cutters for the production of tools, moulds and models**

Area of application

- for aluminium machining
- for the machining of materials in the production of tools, moulds and models

Benefit for customers

- high durability values
- high surface quality
- high cutting speed
- standard product line – a number of sizes is available from stock
- special sizes to the customer´s wish

- **HardLine: HHM915, HC232, HC234, HHM905, HC244, HC245 uvm. – HSC milling cutters for the machining of hard materials**

Area of application

- for the machining of hard materials up to 58 HRC and up to 78 HRC
- for roughing and finishing operations

Benefit for customers

- high durability values
- high surface quality
- high cutting speed
- standard product line – a number of sizes is available from stock
- special sizes to the customer´s wish

► **IBD Wickeltechnik GmbH**

DE – Bad Oeynhausen

Hall C 036

- **CPF sensor roller, overhung**

The CPF sensor roller is used to measure the web tension of machines processing web materials, such as paper, film or textile. This measuring instrument can be integrated in the control circuit for maintaining constant tension of the web.

Area of application

The CPF sensor roller is used for the measurement of web tension in winding, printing, laminating and gluing machines up to the working width of 500 mm and max. web tension of 700 Newtons.

Benefit for customers

Simple control of the web tension during the winding process.

- **SKUBA web guiding system**

The SKUBA web guiding system is used for the positioning of the material web (such as paper, film or fabric) in the machine. A sensor recognizes the web edge and the movable frame will eliminate the errors detected through a sensor.

Area of application

Web guiding systems are essentially used wherever you need to process web materials. It can be web positioning before the printing unit in a printing press or clean winding of a packaging film with even edges, etc. Apart from that, SKUBA may be used in highly dusty environments or where the system is exposed to splashing water.

Benefit for customers

Very high repetition precision in printing, gluing or lamination processes. Top winding quality based on cleanly wound rolls of material.

- **Expanding clamping shaft**

Expanding clamping shafts are used for the clamping of web-fed materials, such as film, paper, fabric or metal webs. We manufacture expanding clamping shafts in the diameter range from 25.0 to 400.0 mm and width from 100.0 to 4000.0 mm.

Area of application

Expanding clamping shafts are basically used wherever you need to process web materials.

Benefit for customers

Simple paper, film or fabric roll handling.

► **igm Robotersysteme AG**

AT – Wiener Neudorf
Hall G2 036

• **igm robotic welding system RTE 400 – igm robotic welding system, type RTE 499-S**

Area of application

A compact robotic welding system for MIG/MAG welding. Working radii of igm robots are from 1500 to 1900 mm.

Benefit for customers

An extremely compact design of this robotic system facilitates flexible production on the smallest floor area. Optional usage of the base plate allows you to move the machine along the production facility. Yet it is a full-valued production system that can be equipped with all process equipment and sensor options.

► **INESA (Group) Co. Ltd.**

CN – Shanghai
Hall A1 029

• **ToLEDo Retro Sylcone**

The new ToLEDo Retro Sylcone is a unique range of hard blown glass lamps combined with innovative LED Filament Clip Technology (FCT).

Area of application

The new ToLEDo Retro Sylcone can provide much needed energy efficiencies while producing unique, creative environments in hospitality and residential and consumer applications. Beautifully designed, it mixes contemporary aesthetics and technology with the popular retro look and feel of incandescent lighting.

Benefit for customers

The ToLEDo Retro Sylcone has a high lumen efficacy of 104 lm/w and is dimmable allowing the end user flexibility to create ambient lighting for every occasion. The color temperature of 2000 K replicates the warm comforting glow of incandescent lighting. However, the benefits of LED technology means there is an 89% energy saving compared to incandescent and a longer lifetime of 15,000 hours (15 years / 2.7 hrs per day).

► **Ing. Josef Šimák**

CZ – Plzeň
Hall G2 053

• **CDi 502 / C06-3 inventor/condenser welding system for bolt welding**

A new-generation HBS welding device for condenser, contact welding of bolts up to M6. The device welds steel copper-plated, stainless and aluminium bolts (screws, pegs, nuts, insulation pins, electric couplings etc.). Revolutionary construction and price.

Area of application

Standard metal manufacture, sheet metal processing and manufacture of sheet-metal parts, repairs of machinery and equipment, car service, repairs and manufacture of HVAC technology, air conditioning, insulation fixing, production of advertisement carriers and signs...

Benefit for customers

A simple and compact device for a wide area of applications at a very affordable price.

► **Ing. Petr Penc - IPP**

CZ – Praha 6
Hall E 030

- **Vapormatt Panther**

A small manual device for wet blasting of abrasive & water mixture for cleaning of small to medium-sized parts.

Area of application

Cleaning during repairs of automotive parts, surface preparation, de-rusting, de-oxidisation, scale removal etc. used in aviation industry, automotive, aluminium protrusion, composite preparation before gluing, in car repair shops, for surface finish of small parts, paint removal etc.

Benefit for customers

This blasting technology is dust-free, very effective, part surface sparing, not clogging blind holes, not destroying threads, low-noise, and surface unifying. Filtration allows for water recirculation, loading and unloading is easy via a side door, the machine can use very fine abrasives and is usable in small workshops – saving hall space.

► **IWZ Industriebedarf GmbH**

AT – Wien

Hall G1 084

- **IWZ Vision**

Central data reading for the measured temperature, pressure, flow and quantity values.

Area of application

Remote control and reading of the control quantities of automatic injection moulding machines and their tools. Recording and control of flow volumes.

Benefit for customers

Instead of a number of individual data by using IWZ Vision and its central control panel you can read and control all the required parameters. You can regulate processes and thanks to WLAN you do not need any cable.

- **TORO Systems Dry Wheel – dryer for plastic granulate**

Area of application

Small quantities and granulates for prototypes are dried in an economic and reliable manner.

Benefit for customers

Electrical energy cost saving. Compact design. Easy to integrate in the existing equipment.

► **JAC Coupling**

KR – Sasang-gu, Busan

Hall Z 067

- **Gear Coupling**

- Smaller and lighter than any other couplings
- Capacity of handling heavy loads
- Without noise and vibration with high speed operation
- Good operation in axial misalignment
- Easy to attach on both sleeve as there are grooves
- No leakage of grease

Area of application

Cranes and hoist, Elevators, Generators, Machine Tools, Compressors, Blowers, Press Printing Food industry, Conveyors, Rubber industry, Paper Mills, Steel Manufacture, Rubber industry.

Benefit for customers

High quality industrial power transmission couplings. Efficient performance.

- **Grid Coupling**

- Quick and easy installation
- Replace-In-Place design
- Wearing member of a Steelflex coupling
- A fraction of the complete coupling cost
- Tapered grids are accessible through the quickly removable cover

Area of application

Cranes and hoist, Elevators, Generators, Machine Tools, Compressors, Blowers, Press Printing Food industry, Conveyors, Rubber industry, Paper Mills, Steel Manufacture, Rubber industry.

Benefit for customers

High quality industrial power transmission couplings. Efficient performance.

- **Disc coupling**

- High reliability
- Easy maintenance
- Additional torque density
- High quality design functions with our current products and already installed Disc coupling

Area of application

Cranes and hoist, Elevators, Generators, Machine Tools, Compressors, Blowers, Press Printing Food industry, Conveyors, Rubber industry, Paper Mills, Steel Manufacture, Rubber industry.

Benefit for customers

High quality industrial power transmission couplings. Efficient performance.

- **Wire drum coupling**

- Designed for installation in drum drive of crane and conveying system
- To be used in the very difficult and rough operating condition of iron and steel work
- To be used in continuous heavy load operation in shore cranes
- Compact design
- Capacity of transmitting large radial load
- Longer life and minimum loss of power
- Angular misalignment can be allowed up to 1.50.°

Area of application

Cranes and hoist, Elevators, Generators, Machine Tools, Compressors, Blowers, Press Printing Food industry, Conveyors, Rubber industry, Paper Mills, Steel Manufacture, Rubber industry.

Benefit for customers

High quality industrial power transmission couplings. Efficient performance.

► **JAP TRADING, s.r.o.**

CZ – Bystřice

Hall V 037

- **Graphite rotor F2 for melted aluminium refining**

Area of application

Part of refining equipment for melted aluminium processing.

Benefit for customers

Extended life thanks to vacuum impregnation with antioxidants.

Shorter refining time thanks to the patented shape.

Effective from 250 rev./min. gas distribution across the pan volume.

- **Briquetted synthetic slag – a briquetted liquidiser of refinery slag**

Area of application

Reduced temperature of melting of basic refinery slag

Benefit for customers

Environment-friendly, no fluorine, ammonia or refining salt residues, high level of Al₂O₃ in the fine-grain corundum mould. Quick decomposition of briquettes and assimilation with refinery slag. Does not damage refractory lining of furnaces and pans.

- **Belzona 9811 – abrasion-resistant ceramic coating**

Area of application

Protection of metal and concrete parts against effects of liquids and gases containing abrasive particles.

Benefit for customers

Easy application, quick hardening without the necessity of heating, high abrasion resistance. Ideal for coating of complex shapes. Resistance against aggressive chemicals. Usable up to 200 °C.

► **KEMPER spol. s r.o.**

CZ – Poříčí nad Sázavou

Hall G2 018

- **AirWatch – AirWatch continuously watches the air quality in production and warehouse facilities**

Area of application

Production facilities, warehouse facilities, logistic facilities.

Benefit for customers

Continuous control - are the legal limits maintained or exceeded?

Safety – detailed and continuous measuring in the facility.

Protection of investments.

Energy cost saving – regulating air to KEMPER AC equipment needs.

► **KOHUT Třinec s.r.o.**

CZ – Třinec

Open area F 007

- **Welding table for rapid formation of a variable welding station, flexible height of the working area (750 mm–950 mm). Load capacity 500 kg, dimensions 1350 mm x 1350 mm.**

Area of application

Suitable for all metal working companies involved in small-series production.

Benefit for customers

- affordable price,
- variable: you can combine the size of the working area,
- openings for fixtures,
- hydraulic height-adjustable table support,
- 2 types: stainless steel or black material.

- **Small press brake of a robust welded steel design, high mechanical strength and extra rigidity.**

Smooth and reliable hydraulic drive. Pressing force 20 t.

Area of application

Suitable for all metal working companies involved in small-series production.

Benefit for customers

- affordable price,
- low operation and service costs,
- product width up to 500 mm,
- compact.

• **Hot-air stove “Pig”**

Hot-air stove, heated space about 100 m³, smoke duct diameter 120 mm, height 500 mm, width 316 mm, length 560 mm.

Area of application

Stove for local heating of small buildings such as summer cottages, cellars, agricultural buildings, garages, huts, workshops...

Benefit for customers

Design, easy installation, wood fuel, quick and direct heating.

► **KUBOUŠEK s.r.o.**

CZ – České Budějovice

Hall F 040

Hall G1 037

• **Metrios – a new universal system for optical measurements offers an all-in-one solution with countless advantages**

Area of application

Metrios considerably shortens measurement time by immediate generation of the protocol for verification of the tested product, trend monitoring, turning centre setting and batch control for downtime prevention.

Benefit for customers

Metrios eliminates the risk of human error and provides accurate results by a single button depression.

• **VICIVISION MTL 1**

MTL M1 is a new optical measuring device for measurement of turned parts. Its innovative embodiment with measurement space lighting provides direct access to the work for practical feeding small and big parts.

Area of application

Thanks to the robust structure, all-metal cover and integrated temperature compensation the machine is ideal for direct use in your workshop.

Benefit for customers

Intuitive MTL software providing all available operator comfort. The main benefit is use of the actual image of the part available for the whole time of measurement result evaluation.

• **Robot Sepro 7X-55**

The 5-axis robots of 7X series represent an ideal next-generation combination of high-performance 3-axis linear robots SEPRO and 2-xes digital rotation (AC) by Stäubli.

Area of application

The 2-axis compact servo-rotators Stäubli assure high precision, high speeds and easy adjustment to most complex applications: feeding, complex extraction routes within moulds, accurate travel defining along curve for flash burns.

Benefit for customers

Thanks to the Visual 3 operating system the robot programming and operation are very easy.

► **Lachant Spring CZ s.r.o.**

CZ – Praha
Hall V 056E

• **Compression, extension, torsion, shaped, and flat springs. Wire and sheet pressed parts.**

Wire springs of wire diameter from 0.16 mm to 6.00 mm. Flat springs of a thickness from 0.2 mm to 3.5 mm.

Area of application

Automotive, aerospace, electrical engineering, building, consumer industry, etc.

Benefit for customers

Production on the state-of-the-art CNC machines of the last generation, in-house heat processing including surface finish Delta MKS. Spring design consulting, 3D product modelling. Production quality control system to ISO TS and LEAN manufacturing.

► **LASCAM systems s.r.o.**

CZ – Praha
Hall C 033

• **CleanLASER MID POWER – universal machine for laser cleaning**

Area of application

CleanLASER is suitable for cleaning of all sorts of materials - wood, moulds for plastic or rubber processing, polymer pieces, wall impurities and other materials. Laser cleaning applications are also used in preparation for technological processes such as preparation of contact surfaces for gluing, evaporation of insulated materials in copper wire soldering, partial surface layer cleaning etc.

Benefit for customers

Laser systems by cleanLASER, the world leader in laser cleaning from Germany, generate ultra-short laser pulses removing impurities without damaging or thermally burdening the substrate. Cleaned metal surfaces are freed of their oxide layer, which allows for creation of direct joints with long strength. Laser cleaning thus represents a breakthrough technology in the sense of the cost to quality ratio and scientifically proven long-term stability of joints.

► **Listemann Polska**

PL – Kraków
Hall G1-I 106

• **Conformal cooling of plastic tools**

Plastic tool inserts are made of 2 or more elements with milled cooling channels. These elements are then brazed and finally machined.

Area of application

Plastic tools forming inserts where cooling was not sufficient or even not possible.

Benefit for customers

Designer of plastic tools can precisely plan course of cooling channels.

Effect of proper cooling is shortening of cooling time up to 40%.

Thermal uniformity of inserts reduces parts distortion and prevents creation of sink marks.

• **Hot runners**

Plastic tools manufacturer can design and machine its own construction of hot runner.

Area of application

When standard commercial hot runners can not be used plastic tool maker can design and machine its own hot runner. After machining elements are brazed, hardened and tempered in vacuum.

Benefit for customers

Possibility to create hot runner exactly for customer's purposes.

► **LNS SA**

CH – Orvin

Open area P 007

• **LNS Barfeeders; Sprint, Express and Alpha families**

LNS Sprint are automatic barfeeders for lathes with a maximum bar capacity of 80, 65 or 45 mm. LNS Express line is especially dedicated to lathes with sliding headstock with a maximum capacity of 12, 20 and 32 mm.

Area of application

The following industries are using our products: Luxury & High Precision, Electronic and Connectors, Transportation etc. Energy, Oil & Gas, Machinery and Production.

Benefit for customers

Automatization is not a mode but mandatory for the future. LNS barfeeders guaranty high rotation speed without vibration. You will see the difference on the quality of the parts and a longer life of your cutting plate and spindle bearings.

• **LNS Turbo, Chips & Coolant Management systems**

Chips conveyors for all kind of chips or for specific quality and shape of chips. MH serie allows to handle all kind of chips including filtration.

Area of application

The following industries are using our products: Luxury & High Precision, Electronic and Connectors, Transportation etc. Energy, Oil & Gas, Machinery and Production.

Benefit for customers

Our wide range of systems carry all shape, size and type of material out of the machine-tools. Integrated in the machine tank we propose a complete high pressure system up to 140 bars including prefiltration down to 50 µm. Our oil tramp separator PHASEP drastically reduces the change of cutting fluid and cleaning the tank.

• **LNS FOX – Air Filtration Systems**

Air filtration in your shop floor. Single unit for one machine-tool or centralized for a complete production cell.

Area of application

Filtration system to clean the dirty air into your machine. Various systems available for mist or dust according to the size of the machine.

Benefit for customers

For health, security and comfort reasons LNS FOX will be of a real help. In some countries, cleaning the mist is mandatory by law.

► **MAXION Jänsch & Ortlepp GmbH**

DE – Pößneck/Thüringen

Hall V 084

• **UNI 2 TAP – UNIMAX 2 universal drilling machines with TAP thread cutting instrument and LED lighting**

Area of application

Permanent drilling performance 18 mm / normal drilling performance 20 mm.

Function of thread cutting up to M16 in S235.

Benefit for customers

You can set the thread depth in the control display.

► **MECAS ESI s.r.o.**

CZ – Plzeň

Hall Z 052

• **IC.IDO virtual reality**

IC.IDO is a powerful software products designed for interactive visual decision-making using virtual reality technologies. The software facilitates realistic visualisation of virtual products and their behaviour in real time and real size.

Area of application

IC.IDO is used for an assessment of engineering designs, evaluation and optimisation of assembly and disassembly procedures, for a verification of technical means and tools for production and maintenance. This solution is used by leading companies in the area of mechanical engineering; another area of application is aviation and astronautics, the automotive industry and production of industrial machinery. Among our clients using IC.IDO are for example AVIC, Bausch + Stroebel, Boeing, BMW, Bombardier, Caterpillar, Ford, Herrenknecht, Jaguar Land Rover, Jungheinrich, Lockheed Martin, Trumpf, Volkswagen and many others.

Benefit for customers

IC.IDO allows you to detect design errors in a very early stage of development. Digital products made in this software environment may be viewed stereoscopically (similarly to a 3D cinema) and also interacted in real time – you can turn them, manipulate with them or change different design alternatives and subsequently evaluate them. It is thus an ideal visualisation and communication platform for a cross-field discussion of experts from various branches, from design through technology, production planning and operation up to training and marketing.

► **METALIS POLSKA Sp. z o.o.**

PL – Dzierżoniów

Hall V 032

• **METALIS Group is specialized in precision stamping, deep drawing and overmolding of complex metal or metalloplastic parts, combining assembly in line into the manufacturing processes.**

Area of application

Components produce by METALIS are used in many markets, like : automotive, machine equipment, aeronautics, energy/nuclear, medical, communication, home equipment, electronic. METALIS has also an important market share in electrotechnic for the construction field or industrial equipment sector.

Benefit for customers

METALIS has the necessary technologies for all kinds of market: progressive tools, multiple-slides machines (Bihler), transfer tools, injection and insert moulding, assembly and finishing. An INNOVATION CENTER and a TECHNICAL CENTER support the team on each speciality, for the design and production of stamping tools. This expert will be able to offer you solutions, meeting your specific expectations. METALIS Group is composed of 8 plants worldwide, located in 5 countries in Europe and Asia.

► **MIRU D&P LTD.**

KR – Guro-gu, Seoul

Hall Z 067

• **CNC Engraving Router MR-1200**

- Precision engraving on various kinds of plates; steel, sus, wood, plastic, aluminum, bronze etc.
- Various component making
- Copper EDM mold, PCB routing
- 2D/3D engraving
- Aluminum extrusion & profiling
- Plastic mold making.

Area of application

- Industrial Front Panels
- Stainless Steel Sheet Machining
- Electronic Manufacturing
- Plastic Industry
- CNC Machining
- Non - Ferrous Metal Mould
- Non - Ferrous Metal Sheet Machining
- 2D/3D Engraving
- Aluminum Extrusion
- Other Various Machining

Benefit for customers

Superb calibre of performance.

Excellent durability: hassle-free operation.

Affordability: Reasonable machine price.

► **Misan s.r.o.**

CZ – Lysá nad Labem

Hall P 139

Hall Z 021

• **OKUMA MU-4000 V-L**

A 5-axis vertical machining centre with turning option, unique geometrical layout of the machine.

Area of application

Small very precise and complex parts for aircraft, automotive and medical applications.

Benefit for customers

Compact working of complex parts per single clamping. Simultaneous movement of the 5 axes allows working of most technologically demanding parts (turbocharger rotors) including turning operations. The machine is equipped with automatic control of geometrical accuracy and its automatic correction. There are also temperature compensation and servo parameter setting features.

• **BROTHER R650X1**

A compact high-speed vertical machining centre with ISO 30 tools and pallet change by a quick-rotating table with pallet size 650 x 400 mm.

Area of application

The machine provides effective working of big automotive as well a multiple small parts in multi-position extensions on both pallets.

Benefit for customers

Maximum utilisation of the machine capacity thanks to the pallet changer and workpiece loading and unloading in overlapped time. Tool change with simultaneous approach of more axes in the speed below 2 seconds (chip /chip).

- **CONCEPT LASER – M2-MULTILASER**

A machine for laser baking of metals with two lasers with the power output of 2 x 400 W and work space for part building 250 x 250 x 280 mm.

Area of application

Additive part manufacture allows for manufacture of parts that cannot be made by the conventional methods. Additive manufacture is mainly used in aircraft and cosmic industry, production of medical implants and in automotive part manufacture.

Benefit for customers

Extra lightweight structures, bionic structures, new product development trends.

► **Mitsubishi Electric Europe B.V.**

CZ – Praha

Hall P 142

- **RV-35/50/70F Robot**

Breakthrough point in Mitsubishi Electric portfolio - MELFA industrial robots with payload up to 35/50/70 kg.

Area of application

With a payload up to 35, 50 or 70 kg and reach of 2050mm the new robot can operate with a variety of tasks including end of line packaging, palletization, welding or material handling application with heavy objects.

Benefit for customers

Programmed by RT Toolbox2 with Melfa Basic compatible to F series robots.

Controller options compatible to CR750 type.

Standalone and iQ-based controller available.

Excellent complement for industrial applications equipped with compact MELFA robots.

- **CNC M80/M800 series**

The cutting-edge CNC control system from Mitsubishi Electric.

Area of application

Thanks to a wide range of controllers and screens M8 series can be used in all type of CNC machines starting with simple lathe and finishing with sophisticated milling machining centers. Highest quality product for a very competitive price let the customer to achieve the best TCO (Total Cost of Ownership) on the market with outstanding cutting edge technology.

Benefit for customers

M8 series is Mitsubishi Electric's first-ever attempt to develop a CNC-dedicated CPU and it opened a new chapter in CNC development. Beside the new CPU, Mitsubishi Electric's first groundbreaking 19" inch vertical touchscreen is the biggest new product launch on MSV 2016. The advanced construction, the sophisticated flat profile and its intuitive smartphone-like operation takes machine design and usability to the next level.

► **m-tec CZ, s.r.o.**

CZ – Zlín - Malenovice

Hall G1 097

- **Homogenisation silo with inside conveyor**

Area of application

Unification of individual production batches or mixing of two or more plastic granulates.

Benefit for customers

High mixing performance thanks to variable conveyor speed regulation. The special shape of the top deflector assures even distribution of individual batches or granules in a homogeneous whole.

► **NAMSUN MACHINERY CORPORATION CO., LTD.**

KR – Daejeon
Hall Z 067

• **SPHINX-5X/30**

- Compact type 5 axis machine
- For watch and medical industry
- High speed spindle (24,000rpm / IBG std.)
- Direct Drive motor (etel) for Table
- Heidenhain system
- Rigid double column machine design
- One piece cast iron for columns and cross beam
- HSK A40 / 24 tools / built in motor / ceramic ball bearing

Area of application

Mold manufacturer, Aerospace / Auto industry, Watch industry, Medical industry, all industry for 5 axis machine.

Benefit for customers

High quality and high performance 5-axis machining.

Satisfied various customers' needs.

Cooperation with Japanese leading machine tool companies.

• **SPHINX-5X/53**

- Box-in-box construction
- high speed spindle (30,000 rpm)
- In-house high quality casting
- Zero Backlash
- HSK E50 / 32 tools
- For mold / auto / tire industry
- Octagonal Ram construction

Area of application

Mold manufacturer, Aerospace / Auto industry, Watch industry, Medical industry, all industry for 5 axis machine.

Benefit for customers

High quality and high performance 5-axis machining.

Satisfied various customers' needs.

Cooperation with Japanese leading machine tool companies.

• **SPHINX-5X/70**

- High speed spindle (24,000rpm / IBG std.)
- Direct Drive motor (etel) for Table
- Octagonal Ram construction
- Zero Backlash
- Tilting / Rotary table
- HSK A63 / 40 tools / built in motor / ceramic ball bearing

Area of application

Mold manufacturer, Aerospace / Auto industry, Watch industry, Medical industry, all industry for 5 axis machine.

Benefit for customers

High quality and high performance 5-axis machining.

Satisfied various customers' needs.

Cooperation with Japanese leading machine tool companies.

► Neuron soundware

CZ – Praha 4
Hall C 051

• Neuron soundware makes and teaches machine-comprehending software

Neuron soundware is a start-up developing a technology of artificial intelligence understanding machine habits. The technology focuses on audio diagnostics of industrial equipment.

Area of application

Neuron soundware has developed a technology of artificial intelligence understanding sounds, able to diagnose and predict technical issues of machines, engines, turbines, compressors and other machinery.

Benefit for customers

Noise and vibrations are often the easiest method of detection of existing or threatening mechanical defects allowing for maintenance cost reduction, remote control of devices, real-time defect detection, smart sound-based alarms.

► Niedax Group

CZ – Veltrusy
Hall C 026

• Cable carrying system of glass laminate reinforced plastic GFK

Extremely strong and highly flexible cable carrying system.

Area of application

Usable in extreme environments with high temperatures, direct sunshine, low temperatures, chemically aggressive environment or direct exposure to sea water.

Benefit for customers

Unique product of highly resistant materials with a wide range of types for any environment.

• Grille tray systems GR, GC, GRC...

A grille cable tray in a wide range of dimensions and with easy assembly.

Area of application

An ideal system for confined areas, areas with increased risk of contamination or areas where cable ventilation is required.

Benefit for customers

Multiple applications, several types of surface finish supplied as standard (galvanised, stainless), easy assembly, continuous improvement and modernisation.

• Cable carrying systems

This system of cable trays offers very flexible and economic solutions with a wide range of surface finishes usable in nearly every environment.

Area of application

Wherever cable cutting in the wall is not needed.

Benefit for customers

The customer can choose from a wide range of dimensions and surface finishes of the product and we are even prepared to meet individual customer requirements for size or surface finish.

► OFAMA Sp. z o.o.

PL – Opole
Hall Z 047

- **Loading car**

Loading car is designed for transport and loading of charges to all induction cast, metallurgic.

Area of application

Overall dimensions of particular elements, such as troughs, charge baskets are adapted in each case to the needs of the customer.

Benefit for customers

Our loading car are very durable, exact, reliable. Customer can use this for foundries. Works well during continuous operation.

► **Olympus Czech Group, s.r.o., člen koncernu**

CZ – Praha 6

Hall C 040

- **IPLEX NX**

Videoscope for industrial use providing high-standard imaging for effective evaluation of the examined sample or environment.

Area of application

IPLEX NX is designed for maximum productivity of controls. Thanks to flexible positioning, clear imaging, optimised control and easy access to the control elements the device fits even very confined spaces. The device offers a number of exchangeable probes with rotary ends. The device allows for comparison of the current and an earlier condition of the monitored object.

Benefit for customers

Exceptional image quality for quick and precise inspections. Various measuring devices for effective evaluation of control. Optional measurement of defect depth by use of stereoscopic imaging. Maximum conform of operation - multi-position design. Simplicity and ergonomics – ideal for time-consuming inspections.

- **Industrial microscopes of BX3M series**

A series of straight microscopes for industrial applications.

Area of application

Straight light microscopes of BX3M series are used for quality control and detailed evaluation of newly developed materials, electronic equipment, metals etc. they are based on modular design for configuration tailor-made according to the individual user and application needs.

Benefit for customers

New contrast methods - flexible setting of various types of sample lighting for optimum imaging.

Simplicity of all processes – maximum time saving and minimum operation demand.

Reliable results – result reproducibility even with manual microscope.

- **CIX90 – new automated system for micro-cleanliness assessment**

Area of application

A quick and accurate automated system for micro-cleanliness assessment for part control in the following areas: manufacture and processing of automotive, aircraft, electronic, plastic parts and components and accurate and medical instruments.

Benefit for customers

A very quick and accurate automated system for micro-cleanliness assessment.

Minimum time demand of assessment thanks to the new patented technology.

High-resolution optics and robust structure for top accuracy and measurement repeatability.

Assessment of particles and fibre on standard and nylon filters.

User-friendly operation including measurement validation option.

► **Optiroad**

KR – Seongnam-Si, Gyeonggi-Do
Hall Z 067

• **Corrugated Optic Duct**

- Optical cable
- Metallic electrical cables
- CCTV
- FTTH cables
- Water supply

Area of application

Electrical Cable protection & Water Supply.

Telecommunication company, Express Highway, Railroad Office, Civil Construction company.

Electric Power Corp, Oil & Gas Company.

Benefit for customers

- Patent registered (45 countries)
- Saving installation cost
- Available to install from narrow place
- Quick Installation
- No need to connect between manhole
- Strength for outer shock or compression

• **Corrugated duct machinery**

- Various extruder supply
- Corrugated duct machinery
- Corrugated flexible pipe machinery
- Silicone coated straight pipe machinery
- Water supply pipe machinery
- Drainage pipe machinery

Area of application

Electrical Cable protection & Water Supply.

Telecommunication company, Express Highway, Railroad Office, Civil Construction company.

Electric Power Corp, Oil & Gas Company.

Benefit for customers

- Patent registered (45 countries)
- Saving installation cost
- Available to install from narrow place
- Quick Installation
- No need to connect between manhole
- Strength for outer shock or compression

• **Corrugated Flexible Pipe**

- Extra high voltage cables
- Drainage
- Manhole

Area of application

Electrical Cable protection & Water Supply.

Telecommunication company, Express Highway, Railroad Office, Civil Construction company.

Electric Power Corp, Oil & Gas Company.

Benefit for customers

- Patent registered (45 countries)

- Saving installation cost
- Available to install from narrow place
- Quick Installation
- No need to connect between manhole
- Strength for outer shock or compression

► **P.E.I. S.r.l.**

IT – Calderara di Reno (BO)
Hall P 116

• **Synchro-Tel**

Synchro-Tel is a mechanical brace system which synchronizes the opening and closing movement of medium sized telescopic covers, eliminating collisions between the boxes. Ideal for high speeds and accelerations.

Area of application

The Synchro-Tel mechanism is used in telescopic covers which protect the guide ways in machines.

Benefit for customers

An economic system which synchronizes the movements of the boxes, thus eliminating collisions between the boxes which reduces the noise emissions. The special shaft system generates minimum stress on the pivots, is very stable while allowing a minimum closed length.

• **Damper-Shell**

New viscoelastic shock absorber that effectively reduces impact noise in large scale telescopic covers, ideal for working speeds up to 80m/min and acceleration up to 1g.

Area of application

Shock absorber used in large telescopic covers.

Benefit for customers

This system opens smoothly during expansion without causing friction on the boxes. Damper-Shell is ideal for long strokes being a silent, durable and reliable solution and has an excellent dimension/cost ratio. Telescopic covers equipped with DAMPER-SHELL require quick and simple maintenance.

► **PFEIFFER Vacuum Austria GmbH**

AT – Wien
Hall Z 090

• **ASI 35 leak detector**

The modular leak detector for easy and quick integration into industrial leak detection systems provides you with high performance, reliable and repeatable testing.

Area of application

Automotive: airbag inflators and ignitors, cooling radiators, fuel rails, and injectors.

Refrigeration and air conditioning: evaporators, compressors, tubes, coils.

Packaging: cans and capsules, tubular bags, blisters.

Mechanical parts: valves, fittings, manifolds.

Benefit for customers

Integral and localizing test (vacuum and sniffing) for both tracer gases: helium and hydrogen.

Short cycle times due to highest pumping speed.

Maximum reliability and robustness for high uptime.

Wide temperature range allows for operation in challenging environments.

Worldwide operation thanks to universal voltage of the electronic module.

- **HiPace 300 H turbopump**

The turbopump with high compression, especially for light gases. Maximum reliability with best performance.

Area of application

With its new HiPace 300 H, Pfeiffer Vacuum presents a turbopump with the highest level of compression available in the 300 l/s pumping speed class. The pump has a compression ratio of 10⁷ for hydrogen, making it ideal for generating high and ultra-high vacuum. The high compression ratio results in a low residual gas background in the chamber, which is desirable for mass spectrometry applications, for example.

Benefit for customers

The highest level of compression, especially for light gases.

Ideal for HV and UHV applications. Best UHV pressures even in combination with diaphragm pumps.

Intermittent mode offers energy savings of more than 90 % without any reduction in performance.

► **Precitec GmbH & Co. KG**

DE – Gaggenau

Hall B 056

- **MiniCutter – a 2D cutting head to be used with a flat bed and 3D for robotic applications**

Area of application

MiniCutter is a real all-round talent. It is compact, light-weight and cuts thin metals by phase controlled laser of up to 1 kW efficiently and economically.

In the 3D application the cutting head warrants quick-response distance regulation, which is especially important for complex-shape parts and constant cutting quality. The lean design facilitates high accessibility for the machining of curved parts. The cutting head offers a number of benefits not only in robotic applications. You can also use the MiniCutter 2D in flat cutting tasks thanks to the compact shape of the sensor adapter.

Benefit for customers

- cutting thin metals efficiently and with low costs
- simple and fast replacement of the protection glass without any tools
- simple setting of the focus position in both lateral and vertical direction
- temperature stable regulation of distance
- Plug & Play system

- **LightCutter – laser cutting by using LightCutter**

Area of application

LightCutter is suitable for integration in small and medium size flat cutting machines. You can cut stainless steel and aluminium up to the thickness of 5 mm, construction steel up to 10 mm with the best cutting quality. A fully sealed beam track will protect the lens against contamination. The system of rinsing air provides protection of the collimating and focusing lens against external effects. Using different lenses the LightCutter may be adapted to different requirements for the laser and the process.

Benefit for customers

- outstanding price/performance ratio
- high cutting speed with the best cutting quality
- simple and fast replacement of the protective glass cassette
- distance regulation, resistant against high temperatures and plasma
- scale for the setting of the focus position at zero
- protective glass over the collimating lens

- **ProCutter – cutting head for all requirements**

Area of application

- light-weight and lean design, dimensioned for high acceleration and high cutting speed

- powered focus setting for automatic re-setting and recessing
- drift-free and quick response measuring of distance
- permanent monitoring of the protective glass
- straight and angled make matching the machine design
- beam track fully dust-proof sealed by protective glasses
- indication of the operation condition by LED
- indication of operation parameters through Bluetooth® and the machine control interface
- monitoring of pressure in nozzles (cutting gas) and the head

- **YW30 welding head**

Area of application

The compact welding head is suitable for all phase controlled laser in solid phase equipment of medium performance and small visualisation ratio. Its modularity facilitates a simple accommodation of the configuration to the application and space for integration. The basic version is very cost effective. The head may be extended for use in fully automatic production with different modules for process monitoring.

Benefit for customers

- for all lasers in solid phase with a high beam quality
- for high laser performance
- stable process management using a top quality lens
- lenses are protected against contamination
- optional extension by process monitoring

- **ScanTracker – high-performance welding head with new parameters**

Area of application

For difficult welding tasks in alternating conditions, especially in the manufacture of car bodies the ScanTracker is your choice no. 1. For the welding quality the supplied track energy and its lateral division is often decisive. Insufficient bridging of the gap with beam impacting butt welds or fillet welds is often a result of a too small size of the point and inappropriate lateral intensity division. In ScanTracker, the programmable scanning mirror ensures the right point size and weld width compliant with the joint, using a high-frequency oscillating movement. The add-on unit assumes the synchronous control of the laser performance needed for the oscillating movement. It is programmable.

Benefit for customers

- compensation of bigger dimensions of the gap by changing the point width
- optional, parameter scanning frequency
- programmable, synchronous control of laser performance

► **PRIMA BILAVČÍK, s.r.o.**

CZ – Uherský Brod

Hall F 010

- **ScopeCheck® FB – fixed portal machines by Werth**

Area of application

The newest generation of ScopeCheck® series instruments with fixed portal and two Z axes performs the required measurements in the multi-sensor mode using both axes. This compact design will assure that the machine base will not be much bigger than in the case of the previous versions of ScopeCheck® machines with fixed portal. The new ScopeCheck® can also be equipped with a single Z axis and optional preparation for the second Z axis. The second Z axis can be installed later at the customer. The maximum permitted tolerance MPE E for these ScopeCheck® FB machines is specified as $(1.9 + L/250) \mu\text{m}$.

Benefit for customers

This machine variant is especially suited for big workpieces or big extensions or rotary, or rotary/tilting axes. For example a mechanical probe can be placed on one of the axes and an optical sensor on the other, or two different optical sensors can be placed on both axes. Further sensor can be added as well.

- **PreciSCAN H330 – mobile and accurate assistant for 3D scanning at reasonable price**

Area of application

- Reverse engineering – creation of parametric CAD models from 3D scanned data
- Quality control – evaluation of deviations from the ideal CAD model
- Design – prototyping, 3D data uploads to various graphic programmes
- 3D print – direct input of 3D data to 3D printers
- Product visualisation and presentation – preparation of product videos, renders and presentations

Benefit for customers

3D laser scanner operation is based on the principle of projection of laser crosses on the scanned object on the surface of which the coming beams are deformed according to the surface curvature. These deformations are sensed by two very quick and precise image sensors and with the help of the triangulation method the 3D model of the scanned object is then automatically calculated. The type series PreciSCAN H330 uses three and the PreciSCAN H771 seven laser crosses. The number of the laser crosses depends on the sensing speed, precision and level of detail.

- **FARO Factory Robo Imager is a fully automated solution combining the optical 3D measurement and the robot technologies**

The combination of these technologies into a mobile cart provides a highly adaptable, safe and automated control solution.

Area of application

- Automated quality control
- Measurements of parts made of different materials
- Reverse engineering
- On-the-spot control
- Defectoscopy and deformation checks...
- Surface geometry inspections

Benefit for customers

- Mobility and flexibility – the mobile station can be easily moved to any place.
- After locking the wheels of the mobile station a stable measurement platform is provided.
- The inbuilt rotary table can be used for measurement of parts that need to be rotated for a complete scan.
- The system is equipped with wireless connection for data transfer to external devices or local network.
- For maximum safety all 4 corners of the cart are provided with LED indicators of system position in relation to obstacles and the system is equipped with an emergency stop.

► PT Couplings

KR – Gwonseon-gu, Suwon-si, gyeonggi-do
Hall Z 067

- **GRID COUPLING**

- Reduce Vibration as much as 30%.
- Reduce shock load for both connected equipment, reduce load & downtime.
- Reduce wear & tear in shaft bearing for both side of connected shaft.
- Reduce time installation & maintenance cost.
- Higher misalignment tolerance.
- Easy installation and Maintenance free.
- Effective functionality yet competitive price.

Area of application

Steel Industries, Oil & Gas Industries, Mining Industries (Pumps, Compressors, Conveyor belts).

Benefit for customers

Originally designed for quality control for power transmission as one of the key items with its long-life cycle. Highly evaluated precision.

• **DISC COUPLING**

- No lubrication / Maintenance free, simple design, light weight and high torque
- Designed to allow axial, angular and parallel and parallel misalignment
- No backlash and high torsional stiffness
- High performance high temperature do not affect the all metal construction
- Easy to mount and dismount/Safety measure.

Area of application

Steel Industries, Oil & Gas Industries, Mining Industries (Pumps, Compressors, Conveyor belts)

Benefit for customers

Originally designed for quality control for power transmission as one of the key items with its long-life cycle. Highly evaluated precision.

• **GEAR COUPLING**

- High torque, Small size, long life and very little loss of transmitting power
- Concave-convex flange design for a easy assembly
- High quality gasket prevent leakage of lubricant
- Gear Coupling permits parallel, angular and end floating misalignments by its crown gear tooth

Area of application

Steel Industries, Oil & Gas Industries, Mining Industries (Pumps, Compressors, Conveyor belts).

Benefit for customers

Originally designed for quality control for power transmission as one of the key items with its long-life cycle. Highly evaluated precision.

► **Rathgeber, k.s.**

CZ – Bystřice nad Pernštejnem

Hall V 102

• **4D Security – a security label with an impressive depth effect produced by a high-safety micro-lens technology**

Area of application

The security element may be combined with 3D stickers. It can be used in IT, electronic appliances, medical devices, spirits, perfumery, branded sports goods and others.

Benefit for customers

Visually effective and more differentiated protection of products.

• **Partially brushed aluminium**

We offer partially brushed labels and/or semi-products. You can choose from a wide offer of designs.

Area of application

For industrial designers, suitable also as a decorative packaging or detail.

Benefit for customers

Unique design, customized design.

► **SEMACO tools and software, s.r.o.**

CZ – Jeseník
Hall P 067

• **Fraisa NVS monolithic milling cutter – a cylindrical milling cutter for a wide range of applications**

Area of application

Especially suitable for the machining of stainless steel, titanium, annealed tool steel, non-ferrous metals and cast iron. A wide range of applications from HPC milling up to groove cutting.

Benefit for customers

Less tools for more operations, longer life, higher productivity and cost saving.

• **CAD/CAM WorkNC V2016 – quick and safe NC data preparation in 2 to 5 axes**

Benefit for customers

Quick computation, multiprocessing = reduction of preparation time, control of the set collision and machining space, including machine travel limit, „Waveform“ high-speed roughing.

• **3D Form Inspect – 3D measuring directly on CNC machines**

Benefit for customers

Real time measuring, „Best Fit“ function – automatic comparison of the reality with the original model including subsequent correction, own measuring cycles, including HW accessories.

► **Shanghai United Intelligence Robotics Inc.**

CN – Shanghai
Hall A1 033

• **Dynamic Lights**

"Dynamic Lights" comprises of hundreds servo-module driven light-balls in a matrix form. Each servo-module utilizes UIROBOT's patented "modular integrated servo system". With merely 4 wires, hundreds light-balls can move harmonically to generate a dynamic 3D image blended with vivid colors and sounds.

Area of application

"Dynamic Lights" provides an effective/creative eye-catching information delivery and advertising method. Hundreds, even thousands servo modules can move harmonically to generate a stunning dynamic 3D image blended with vivid colors and sounds. "Dynamic Lights" is a new generation of high-tech 3D multimedia, can be used at Airport, Train station, Museum, Theater, Performance stage, Ceremony, Club, Window show, Shopping Mall, Hotel, and etc.

Benefit for customers

Effective/creative eye-catching information delivery and advertising method.

High reliability, Simple structure (NO control cabinet, 4 wires), Easy installation, and Minimum maintenance.

Low cost (~20% of competitor's product's price).

Stunning dynamic 3D image blended with vivid lights and sounds based on cutting-edge motion control technologies. User friendly software to convert 3D-Max animation file to "Dynamic Lights" motion code.

• **Personal SCARA Robot**

UIROBOT's personal SCARA robot is an industrial robot arm, but can be DIY and maintained by normal (non-professional) people. Utilizing UIROBOT's patented "modular integrated servo system", the Personal SCARA Robot has NO control cabinet, NO teach pendant (replaced by cell-phone, pad, etc.), and only 4 electrical wires. The entire control code are open sourced and can be downloaded / customized for specific needs.

Area of application

Assembly Automation.

Auto Pick and Place.

Auto Loading and Unloading.

Benefit for customers

Integrated modular structure, only 4 electrical wires, minimum maintenance.

Simplified installation, Open source control code (Windows, Linux, Android), Easy programming.

NO control cabinet, Space saving, Normal people DIY and maintenance are possible.

Intrinsic safety.

High speed, Low cost, High ROI.

• Personal Delta Robot

UIROBOT's personal DELTA robot is an industrial robot arm, but can be DIY and maintained by normal (non-professional) people. Utilizing UIROBOT's patented "modular integrated servo system", the Personal SCARA Robot has NO control cabinet, NO teach pendant (replaced by cell-phone, pad, etc.), and only 4 electrical wires. The entire control code are open sourced and can be downloaded / customized for specific needs.

Area of application

Assembly Automation.

Auto Pick and Place.

Auto Loading and Unloading.

Benefit for customers

Integrated modular structure, only 4 electrical wires, minimum maintenance.

Simplified installation, Open source control code (Windows, Linux, Android), Easy programming.

NO control cabinet, Space saving, Normal people DIY and maintenance are possible.

Intrinsic safety.

High speed, Low cost, High ROI.

► Slováké strojírný, a.s.

CZ

• BUA 25B CNC/750

Plain grinder. A powerful grinding machines, BUA series. PRACTIC and PROFI make.

Area of application

Grinding of rotating parts. Piece and series production.

Benefit for customers

High grinding productivity precision, reliability.

► SOLO Swiss SA

CH – Porrentruy

Hall V 038

• BELL-TYPE FURNACE PROFITHEM P800

Atmosphere heat treatment furnace, exhibits high performance compromise between reachable metallurgical performances (hardness/deformation), load size (up to 750 kg for high temperature applications) and general consumption.

Area of application

Adaptable versions for multiple heat treatment process (carburizing, carbonitriding, hardening, annealing, brazing, etc.) of any types of materials. Suitable for aeronautic, medical and automotive applications.

Benefit for customers

High precision of treatment thanks to fully monitored process meeting the CQI9 and AMS 2750 standards. Fast and easy loading of the furnace. Metallic muffle that lower the gas consumption. Very adaptable product that can be designed to accurately meet the customer needs.

- **TILTING FURNACES 1050 °C KN1050-320**

Automatic tilting furnace, quenching in oil - smallest automatic quenching device on the market.

Area of application

Precise heat treatment of special parts (small series). Heat treatment of small parts up to 1050°C.

Benefit for customers

Very fast quenching (normalizing temperature to martensite start temperature < 2s). Low gas consumption.

- **SOLO Swiss CONTINUOUS FURNACE 302**

Conveyor belt furnace with quenching tank.

Area of application

Adaptable versions for multiple heat treatment process (carburizing, carbonitriding, hardening, annealing, brazing, etc.) of any types of materials. Suitable for aeronautic and automotive applications.

Benefit for customers

Continuous production of up to 350 kg/h in carbonitriding version (case depth 0.1mm) production-integrated technology, fitting the machining flow. High performance isolation that allows for an external temperature reduction of 15°C without using refractory ceramic fibers.

► **SPL Spindel und Präzisionslager GmbH**

DE – Ebersbach

Hall V 085

- **HSC powered milling spindle SPL, type 2742.0**

The precision mounting of this powered spindle features hydraulic pre-stressing and damping, optionally the pre-stressing may be controlled and changed to the speed. This system dampens shocks and/or vibrations caused, for example, by intermittent cuts.

Area of application

Chip cutting machines and machine tools for general mechanical engineering, automotive & aviation industry.

Benefit for customers

The benefits for its users are: longer lasting tools and improved quality of the machined surface.

► **SUNGHUN Universal Joints**

KR – Seo-Gu Incheon

Hall Z 067

- **Universal Joint**

Link axis of movement that are placed relatively farther apart.

Link when the angles of each axis are variable and widely employed in vehicle propeller shafts.

Area of application

- Vehicle propeller shafts

- C.V.joints

- Steering wheel joints

- Cardan shafts for industrial application

Benefit for customers

- Industry wide standard
- Manufactured by Sunghun since 1979
- Wide variety of sizes and options available

- **Tapping Master Spindle for automation tapping machine with master screw spindle**

Area of application

Industrial hardware manufacture.

Benefit for customers

- High precise tapping with angle
- Industry wide standard
- Manufactured by Sunghun since 1979
- Wide variety of sizes and options available

- **Wire Cable for TransMission**

Power transmission without being affected by the angle.

Area of application

For flexible power transmission.

Benefit for customers

- Industry wide standard
- Manufactured by Sunghun since 1979
- Wide variety of sizes and options available

► SVA INFORMATION INDUSTRY CO., LTD.

CN – Shanghai

Hall A1 029

- **43" Outdoor High-brightness LED network media player**

Industrial grade design, continuous work for 50,000 hours. Automatic intelligent temperature control system to save, so that the unit has higher stability and reliability.

Area of application

High resolution, high contrast ratio, superwide visual angle, high brightness Operating system: Android. Asynchronous display of two planes Adopt 3D digital picture processing core to precisely monitor more details. Image signal gain function for more stable and correct image control, achieving true image restoration and improving system reliability. Signal interfaces to support HDMI, USB, SD card, WIFI, 4G and RJ45. Support computer centralized control, and allow to carry out parameter adjustment of spliced unit through computer.

Benefit for customers

Stable performance, energy and protect environmental.

► TECHSOFT s.r.o.

SK – Poprad

Hall C 052

- **IRONCAD – 3D and 2D designing CAD software with a radically new creative approach to designing**

Area of application

For creative 3D design of machine parts and sets with subsequent drawing documentation preparation, ideal for large structural units, sheet metal parts, steel structures and piping, also usable by manufacturers of various configurable units with tools for active cooperation with the customer.

Benefit for customers

Options of parametric and direct modelling and combination of the two methods in a single environment for maximum freedom. Dual ACIS and Parasolid core for independence on the limitations of each individual core. Use of infinitely adaptable "Drag & Drop" catalogues for easy reuse of any geometry. Effective work even when you are not sure about the final structural intention at the beginning of the modelling process. Easy to use, system transparency and high productivity.

► **Tesllon Inc.**

KR – Gyeongsan-Si
Hall Z 067

• **Centrifugal water eSeparator**

Removing moist in a compressor or CNC machine etc.

The world-first Line filter with dual cyclones (Tandem Cyclone) amounted.

Area of application

Any industrial area which needs purification apparatus for compressed air.

Benefit for customers

No additional filter for particle or oil; capable of simultaneously separating mist, oil & various sizes of particle. No pressure loss owing to blocked filter. No air pollution, no accumulation of pollutants.

► **TM Technik s.r.o.**

CZ – Brno
Hall F 031

• **CNC coordinate measuring machine ABERLINK 3D Xtreme**

CNC coordinate measuring device for 3D measurements. Machine accuracy ($3+L/250 \mu\text{m}$), measurement resolution: $0.5 \mu\text{m}$.

Area of application

Accessible in-process part measurement. Measurement temperature compensation within the range of $5-40^\circ$.

For quick and easy part measurement.

Benefit for customers

Accurate results in most demanding production environment.

Multipurpose use – with the potential of replacement of the current single-purpose control units.

Considerable reduction of time demand of controls = for increased work effectiveness.

Intuitive software for quick operator training.

No need for pressurised air supply.

• **Accurate manual measurement technology by MICROTECH**

Area of application

Accurate manual metering tools including non-standard big dimensions (such as micrometers max. 10 000 mm)

Strong support for wireless data transfer to mobile devices.

Benefit for customers

Optional measurement evaluation right in the meter, including process statistics. Smart phone or tablet output via Bluetooth – no additional data output and storage device needed.

• **Measurement arm SPACE Plus**

Measurement arms of various types for coordinate measurements by Italian manufacturer TOMELLERI ENGINEERING.

Area of application

Mobile measuring instrumentation in multiple series depending on the application area, scope and accuracy of measurement. Maximum measurement range 9,000 mm. Optional measurement of accurate bent pipes.

Benefit for customers

Affordable measuring instrument for large part measurement. Contactless scanning option. Lightweight structure for easy handling. Reliable, accurate and flexible use.

► **TYKON stroje, s.r.o.**

CZ – Ostrava 10

Hall B 075

• **Profile rolling machine ZB-60, ZB-80, ZB-30**

The machine is designed for metal profile processing into final shapes by rolling or bending.

Area of application

Manufacture of settle structures, railings, interior elements, pools, pool roofing, glasshouses, skylights, cooling spirals, spiral staircase railing etc.

Benefit for customers

Quality, reliability, endurance, nearly zero fault rate.

• **Pipe bender R2.60.4**

The machine is designed for processing of thick-walled steel profiles into the final shapes by bending.

Area of application

Manufacture of steel structures, railings, interior elements, pools, pool roofing, glasshouses, skylights.

Benefit for customers

Quality, reliability, endurance, nearly zero fault rate, easy operation.

• **Horizontal bender T200**

Bending machine for any metal products – a horizontal hydraulic press with the power of 200 kN (20 t), product series including 10 t, 20 t, 30 t and 50 t.

Area of application

Locksmith's operation, repair shops, steel structure manufacture.

Benefit for customers

Quality, straightforwardness, reliability.

► **UKB - Uwe Krumm Burbach GmbH**

DE – Burbach

Hall B 068

• **UKB special tools – top quality special tools for fast and cheap manufacturing**

Area of application

Brake presses, blades for shears, bending machines, machine parts.

Benefit for customers

UKB - Uwe Krumm GmbH offers 25 years of top-class know-how, precision, quality and state-of-the-art technology.

• **UKB-UNIBEND / UKB-WINGBEND**

For the performance of difficult bends and outstanding results we manufacture our tool systems UKB-Unibend and UKB-WingBend.

Area of application

Short bends, mark-free bending, bending close to openings without deformation, bending of perforated metal sheets, bending of structured sheets, test bends in our production facility.

Benefit for customers

We offer you a flexible solution and we don't want you to be "just satisfied" but "excited".

► URZĄD MIASTA CZĘSTOCHOWY

PL – Częstochowa

Hall V 019

• Invest in Częstochowa

Investments offer of Częstochowa City. Special economic zone status is granted to investment in the areas. There are two zones in Częstochowa: the Katowice Special Economic Zone and Euro-Park Mielec Special Economic Zone.

Area of application

Business contacts, investment areas, international cooperation.

Benefit for customers

Economic benefits from carrying out investments in special economic zones in Częstochowa:

- corporate income tax relief,
- property tax relief,
- attractive land plots with utility and technical infrastructure,
- excellent location and competitive cost of doing business.

► VK LOŽISKA s.r.o.

CZ – Police nad Metují

Hall G1-I 105

• Hydraulic rolls**Area of application**

Moulds for plastic industry, foundry moulds and wherever linear movement is transferred hydraulically.

Benefit for customers

Price competitive to Merkle, Vega HPS and other rolls.

► Vysoké učení technické v Brně

CZ – Brno

Hall Z 033

• Integrated simulation platform of ISP spatial movement of transport means**Area of application**

An integrated simulation platform to support the teaching process of crews both in nominal operation modes and in the critical areas of prevention of entry to unusual positions and training in crisis management where the vestibular system stimulation helps raise awareness of appropriate and inappropriate combinations of control procedures.

Benefit for customers

Loss of steering control is currently the prime cause of catastrophic air accidents. Training solely based on exercise of concentration and prevention has proved insufficient. Faithful simulation as the nearest representation of the cockpit environment provides the crews with an environment for exercise in contact with

true aviation conditions in the course of unusual situations in the course of the flight as support for the teaching process, primarily in the area of prevention of critical mode introduction necessity.

- **Eye Tracking for monitoring eye perception of drivers**

Eye tracking is used for monitoring the driver's look with the aim to find out what the driver looks at when driving and what objects he pays attention to.

Area of application

Eye tracker is used for analysis of visual perception of drivers. Analysis of the driver's sight direction can identify elements in the surroundings of the road that distract the driver's attention from the road, including stimuli from inside the vehicle connected with steering limiting traffic watching by the driver.

Benefit for customers

The visitor can try the simulation and see what he looks at when driving a car or what distracts his attention (for example text message writing while driving).

- **Recuperation module for commercial vehicle fuel saving in the case of frequent acceleration and braking, an accessory device allowing for storage of the movement energy of the braked vehicle with hydrostatic drive and its use for subsequent acceleration**

Area of application

Vehicles with hydrostatic drive, frequent accelerating followed by braking, such as road rolls, communal waste collection vehicles, forklifts, buses of city transport, shunting engines, bridge cranes etc.

Benefit for customers

Up to 15 to 25 % fuel saving, depending on the operation nature, with investment return in about two years.

- **Sci-Trace – instrument for element analysis of a wide spectrum of samples, with surface mapping and deep profiling options**

Area of application

Industrial or research laboratories, industries with the requirement of quick element analysis of specimen, output quality control, sample homogeneity specification, specification of chemical composition of individual material layers.

Benefit for customers

Sci-Trace makes use of the modern method of laser-induced breakdown spectroscopy (LIBS) this offering quick element analysis without the necessity of special sample preparation, with sensitivity to most elements of the chemical table (1-100 ppm). The instrument analyses solids, liquids and gases. The instrument is developed with regard for the experimental site – the individual modules can be reconfigured or the device can be extended with other or in-house analytical techniques.

- **ATEROS – Autonomous-Telepresence Robotic System**

This multi-robotic system for autonomous or supervised research of areas that are dangerous or inaccessible to humans. The system consists of an operator station and several ground and air robots with different features and equipment.

Area of application

The system can be used in the civil sector, in security application and for military purposes.

Typical applications: Automatic/semi-automatic creation of 3D maps, including multispectral, environment contamination detection (CBRN threat), building monitoring – unauthorised access, technological breakdowns, thefts, automatic measurement of environmental parameters in the defined area within defined time intervals.

Benefit for customers

Open system architecture allowing for integration of in-house special sensors of the customer, individual part or the whole robots. Open and variable software with optional integration of customer modules. Test performance options – industrial or MIL-STD. Project team cooperation with many industrial and academic partners.

- **InMoov Human Life Size Robot – 3D printed humanoid robot in human size**

Area of application

For demonstration purpose of the Institute of Electrical Technology of the Faculty of Electrical Engineering and Communication, Brno University of Technology, for presentations and non-commercial 3D print (RepRap), automation, programming and use for teaching purposes.

Benefit for customers

Sample 3D print in the fields of mechanics and cybernetics.

- **Physical model of the lungs for particle deposit measurement**

The model, together with a unique breathing cycle simulator, is designed for measurement of the level of particles deposited in human lungs in the course of various breathing modes. The model geometry is based on CT images of real human airways.

Area of application

Study of penetration of particles of micrometre or nanometre dimensions into the airways (masks, respirators). For pharmaceutical industry – targeted drug supply. Experimental research on aerosol transport in human airways. Computer simulations of aerosol flow and depositing.

Benefit for customers

The same geometry has been used for production of several different types of the physical model (dismountable for particle deposit study, transparent for study of air flow in the lungs and semi-realistic for simplified simultaneous measurement of air flows and particle depositing). The same geometry is also used for computer simulations of particle transport within the lungs. The purpose of this work is to understand and use the mechanisms of aerosol transport within the lungs for health protection (for example for specification of safe concentrations of various types of particles) and also for targeted drug transport in the body.

- **Vibrations – electricity source for modern sensors**

Devices transforming common vibrations of machinery to electricity, especially for powering of low power input electronics for sensing, diagnosing and status monitoring.

Area of application

Autonomous electricity source for wireless measuring equipment without the need for batteries or external power supply. Globally these sources are used for wireless measurements of bridge structures, heavy machinery as well as in automotive and aircraft industry. The only requirement for use of the device is installation in a place with usual vibrations, such as cars, machines, transport structures etc.

Benefit for customers

The user benefits include cheap integration of an autonomous sensor for diagnosing, monitoring or control of electronic devices. Thanks to the electricity generation on the spot costs of batteries or cabling are zeroed.

► **WALMAG MAGNETICS s.r.o.**

CZ – Kroměříž
Hall F 011

- **BM BUX – new battery load magnet**

Energy for operation is supplied by an accumulator. Remote control possible. The brand new control unit opens up unique application opportunities.

Area of application

Handling of flat and circular objects.

Benefit for customers

New functions extending application:

– Variable force mode allowing for magnetic field reduction before handling commencement, such as for picking one metal sheet from a bundle.

- TIP-OFF function allowing for continuous reduction of magnetic force and thus continuous release (dropping) individual metal sheets.
- High level of visualisation and communication with operator.

- **Neomill Compact**

A new, improved series of permanent magnet clamps with high clamping force, intended for milling. The unique compact structure of the pole table has increased stability and life of the product together with bringing other benefits.

Area of application

Milling, power cutting, shaving, drilling.

Benefit for customers

The pole plate made of a single steel piece for maximum compactness and strength. In contrast to the standard layered pole plate structure loosening or fall off of individual lamellas is eliminated. The unique structure improves magnetic force distribution in the clamp area with reach to the very edges. Extended usable area of the pole plate not common on the market over 10 mm. Service bridge for timely plate replacement. Reduced overall weight of the clamp for reduced machine load.

- **Neolift 150, 300, 600**

Permanent magnet for load carrying with increased load-bearing capacity, designed for heavy operations with emphasis on safety and easy operation.

Area of application

Handling of flat and circular objects. Higher load-bearing capacity of the load carrying magnets with preserved sizes and weights of the popular series 125, 250 and 500.

Benefit for customers

Increased safety of operation, 3 safety coefficient is the minimum achieved via an air gap of 0.1 mm.

► **WEICON GmbH & Co. KG**

DE – Muenster

Hall V 191

- **Easy-Mix PE/PP 45**

Methyl-acrylic based adhesive for plastics – for high-strength gluing of low-energy plastics.

Area of application

The PE-PP 45 adhesive is suitable both for individual applications and for small-scale and industrial large-scale production, such as for the gluing and repairs of small machines, labels and displays, loudspeaker parts, battery covers, plastic tanks and many other plastic parts.

Benefit for customers

With the Easy-Mix PE-PP 45 adhesive you can skip the pre-treatment of the surfaces to be glued. The „Primer“ integrated in the adhesive activates the surface and facilitates high-strength gluing. Particularly PE and PP can be glued up to the limit of tearing the material apart.

- **Flex 310 M 2 K**

Gluing and sealing materials for structural and permanently elastic joints in industrial production and assembly.

Area of application

The Flex 310 M 2 K adhesive is applicable in a number of industrial branches. It can be used in metal production, manufacture of tanks and apparatus, manufacture of machines and equipment, furniture industry, ventilation and air-conditioning equipment, electrical engineering, boat and ship building, in many areas of plastic engineering, manufacture of car bodies, vehicles and containers.

Benefit for customers

A two-component system facilitates whole-area gluing of big parts and bridges glued gaps of up to 10 mm as max. Thanks to the safe and pre-defined ageing the 310 M 2 K adhesive is suitable for series production. It will adhere to virtually any materials without primer – such as metals or plastics.

- **W 44 T Multi-Spray with double nozzle**

A multi-purpose product with a special formulation of the active substance featuring outstanding creeping, corrosion protection, water repellence, greasing, preservation and cleaning in one product.

Area of application

W 44 T will loosen jammed screwed connections or valves and penetrate underneath corrosion breaking it loose, too. It repels moisture, prevents stray currents and facilitates the start-up of damp motors. It removes squeaky and screeching noises. It cleans contaminated metal surfaces. It protects, treats and maintains tools and machines in function.

Benefit for customers

The spray can be used for many applications and nearly in any branch of the industry. With the new spray head you can do overhead operations without losing the spraying strength. The user may choose between a wide spray wetting the entire area and point spray by a very precise beam. The spray nozzle will let you reach hard-to-access places.

► **Werkzeug - Eylert GmbH + Co. KG**

DE – Chemnitz
Hall V 089A

- **EYLTOOL – tools and machine tools for the industry and crafts, all industrial facilities and artisans**

Benefit for customers

A very good price/performance ratio, short delivery time, qualified consulting.

- **Machine tools for various machining and production processes for the industry and crafts**

► **WHP TECHNIK s.r.o.**

CZ – Brno
Hall P 070

- **3D CNC multi-sensor measuring device DeMeet 400 v. 2016**

3D CNC measuring instrument with optical and touch measuring, full replacement of touch machine, measuring microscope and optical profile projector, all in CNC mode.

Area of application

The installation of both touch and optical sensing qualifies the instrument for versatile automated operation in different industries. Typical users include manufacturers of plastic, metal, rubber, ceramic and other products. The users will appreciate versatility of the instrument especially if they have a comprehensive manufacturing programme.

Benefit for customers

Automated part measurement with the same measuring procedure. Full replacement of 3D CNC touch instrument, measuring microscope and optical profile projector by a single DeMeet machine. Measurement protocol print for measured parts.

► **WORLDWEL Co., Ltd.**

KR – Dong-gu Incheon
Hall Z 067

• **Inverter TIG Welder**

- Full digital control and user friendly interface
- AC, DC, AC+DC Function
- Digital memory Function
- Ideal For thin plate welding with excellent control of low output current
- Multi functional digital remote controller
- Saving power consumption by high-tech IGBT

Area of application

Broad industrial area with welding & cutting technology. Manufacturing industrial machineries. Manufacturing industrial components.

Benefit for customers

Guarantied and chosen by POSCO, SAMSUNG, HYUNDAI, DOOSAN.

Famous in manufacturing welding machine area though JAPAN, THAILAND, VIETNAM, PHILLIPINE.

• **Inverter MIG/MAG Welder**

- Full digital control and user friendly interface
- Double pulse MIG function
- Saving power consumption by high-tech IGBT
- Welding diameter selection
- Digital memory function

Area of application

Broad industrial area with welding & cutting technology. Manufacturing industrial machineries. Manufacturing industrial components.

Benefit for customers

Guarantied and chosen by POSCO, SAMSUNG, HYUNDAI, DOOSAN.

Famous in manufacturing welding machine area though JAPAN, THAILAND, VIETNAM, PHILLIPINE.

• **Submerged Arc Welder**

- Best welding quality by IGBT Inverter control technology
- Energy saving and high efficiency
- Over-load protect function
- Gouging function

Area of application

Broad industrial area with welding & cutting technology. Manufacturing industrial machineries. Manufacturing industrial components.

Benefit for customers

Guarantied and chosen by POSCO, SAMSUNG, HYUNDAI, DOOSAN.

Famous in manufacturing welding machine area though JAPAN, THAILAND, VIETNAM, PHILLIPINE.

► **WRH Global CZ, s.r.o.**

CZ – Praha 10
Hall A2 012

• **denisort – conveyor system in intra logistics**

Transport, storage, release from storage, consignment completion, goods returns, sorting – all in one.
A sophisticated dual tipping mechanism.

Area of application

E-commerce, mailing, pharmaceutical industry.

Benefit for customers

Three processes (transport, sorting, completion), 1 system and maximum flexibility, high energy saving thanks to the small number of direct drives and reduction of friction resistance.

- **ORBIT WING – humidifying system for HVAC technology**

A system for water micro particle spraying. Patented wing flaps generate fine turbulence in separate routes. Vapour particle whirling assures their short-distance circulation.

Area of application

Air humidification in manufacturing areas. Suitable for installation into existing HVAC and air conditioning systems.

Benefit for customers

Reduces dust and electrostatic discharge formation, reduction of adiabatic temperature, reduction of employee sickness rates, improvement of painting and gluing manufacturing processes, low energy demand.

► **ZELTWANGER AMT s.r.o.**

CZ – Kuřim

Hall C 030

- **ZEDbase+ for optimized leak testing performance and processes**

Area of application

This compact leak testing appliance can be used in labs, assembly workstations, fully automated production lines.

Benefit for customers

This flexible individual appliance with multiple-language touchscreen user interface and intuitive menu prompting makes a big impression with improved user management, comprehensive diagnostic functions and an optional integrated temperature compensation function. A new type of software and extended interfaces enable even more precise measured results. A digital I/O interface permits the free assignment of eight inputs and outputs.

- **ZEDmod for complex multiple-channel leak and function testing**

Area of application

Due to independently operating measuring and test modules, this further development of the MMS enables parallel testing using up to eight measurement circuits, allowing not only stand-alone testing but also multifunctional leak testing within an automated production line.

Benefit for customers

The modules can be configured individually to customer requirements and are available with the following measuring modes.

- **ZEDsatellite for the decentralized close-to-process determination of test values**

Area of application

The ZEDsatellite measurement and testing modules are designed for decentralized installation directly at the test item using a variety of measurement modes: gauge pressure, vacuum, differential pressure, mass flow or flow. Removed from the evaluating unit and so working in close proximity to the production process itself, these ZEDsatellite modules with their short pneumatic lines ensure maximum measurement accuracy and reliability.

Benefit for customers

Simple plug and play installation makes for uncomplicated set-up. They communicate from their deployment position with any central unit from the ZED series such as the ZEDbox over a BUS system, and can be upgraded as required at any time.

Status as of 21st September 2016.