

SPC-LAB: A new way for fastener inspection



Dimac Srl will be presenting the new generation of SPC-LAB – a first piece inspection mobile unit suitable for in process and post process measurements and controls directly on the shop floor – at Fastener Fair Italy.

With a renewed attention on zero defects – a priority Dimac shares with end users – SPC-LAB can inspect any kind of fasteners or mechanical component produced by cold forming, stamping or turning with accuracy of up to 0.005mm. The SPC-LAB has multiple uses: SPC controls and data collection, PPAP and reporting, direct measuring system, as well as manual sorting of pre-series without human errors.

Based on optical non-contact measurements by a high-resolution digital camera, it provides connectivity for USB gauges or high precision callipers, as well as the inspection by attributes such as surface defects, presence of a thread patch, and surface coatings.

Measuring a piece on a SPC-LAB isle unit on the shop floor is very easy and takes only a few seconds. The user simply takes the sample piece they want to measure to the nearest SPC-LAB isle unit and puts the piece into the unit without any clamping tooling. They then scan the operator badge barcode to log in, and then scan the

article barcode to enable the article inspection plan. The measuring features are accessible by icons on the user-friendly unit. The user then simply presses the 'measure' button and all the measurements of the inspection plan will be done in less than a second. SPC data will be collected on the network and will be immediately available to the quality office to be managed by the ERP company process.

The SPC-LAB helps eliminates the need to perform single measurements on a profile projector, and helps to reduce human errors due to the use of manual callipers or micrometers. No skills are required for the operators on SPC-LAB to perform the most complex controls like measuring a radius, checking any thread dimensions, measuring a tapered shape, measuring a length between a given diameter and any shoulder edge on the piece.

SPC-LAB also features a 'direct measuring' option that enables it to perform any measurement on a piece without having registered an inspection plan for that part. +

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ARMA CLAMPS new production facility



ARMA CLAMPS & CLIPS will be presenting its full product portfolio, including DIN 3016-1 retaining clamps, DIN 3017-2 hose clamps, and pipe clamps – all produced in its new 7,000m² production facility in Hadimköy, Istanbul – at Fastener Fair Italy.

Aiso on display will be its range of cable clamps, exhaust clamps, and special metal clips, screw clips, U clips, caged nuts, U nuts, metal brackets, metal stampings and special metal fasteners. ARMA CLAMPS & CLIPS is an ISO/TS 16949 certified company.

At Fastener Fair Italy a self-locking rubber lined clamp will also be on display to potential customers, as well as a special fixing spring part – manufactured for the home appliance industry – from the company's metal clip division.

"The show will be a good opportunity for our customers to see the increased capacity and production efficiency our new facility has enabled," explains ARMA CLAMPS. +

Improving heading processes



Among a wide range of lubricants dedicated to the requirements of cold heading machinery, CONDAT will present new solutions to provide high duty lubrication with optimum safety at Fastener Fair Italy.

The weight reduction in automotive and aeronautic markets has pushed the fastening industry to use new materials. Titanium, inconel, stainless and high strength steel are now commonly used but their forming properties are weak. To reach high productivity, it is necessary to warm the wire before the heading process from 250°C up to 900°C.

For technical parts, with forming ratio higher than 70% and massive parts with wire diameter bigger than 20mm, the internal temperature can easily reach 250°C due to significant material flow. In both cases, the lubricants must be designed to work at very high temperature. From 250°C to 900°C, CONDAT offers solutions to improve processes:

- + **For temperature up to 250°C** – EXTRUGLISS warm green oils avoid degreasing issues due to sticky and burned residues which occur at such temperature.
- + **For preheated wire up to 500°C** – EXTRUDEX warm forming lubricants benefit from high thermal stability, which enhance lubricity performances. They are safe for the workshop environment as they reduce smokes and mist.
- + **For preheated wire up to 900°C** – EXTRUDEX hot forming oils are specifically designed for the aerospace market to work on titanium and nickel alloys. They allow a homogeneous coating on the parts for optimum surface finish and no deposits on dies and punch. These safe lubricants present a very high flash point to reduce the risk of fire.
- + **For lubrication of the cold forming machinery** – GLISS warm green lubricants are specifically formulated to reduce cross contamination issues and keep the long-term performances of CONDAT's heading oils. Available now from 68cst – 220cst viscosity. +