

TOOL INSPECTOR TI-2

TI-2 is the newest version of the system for precise and automated dimensioning of punches and also for die bore wear assessment, which is based on the latest technological developments in the field of optical measurements. The patented algorithm for combining the simultaneous measurement of the synchronous movement in the XY plane enables the determination of the geometric parameters of the most complex pressing parts. Moreover, the presence of a dedicated video system with a resolution of 5 Mpix, on the one hand allows for the facilitation of optical Quality Assessment of the tools, and opens the path to perform the automatic dimensioning of multi-tip punches and die wear assessment.



BASIC PARAMETERS OF THE MEASURING MACHINE:

- fully automatic measurement regardless of the complexity of the tool
- non-contact measurement with a resolution of 0.001mm for punches
- non-contact and tactile measurement of wear with a resolution of 0.001mm for dies
- camera with autofocus and 5 Mpix resolution with illuminator and controllable power and wavelength
- dedicated, built-in controller of the measuring machine with communication interface USB 2.0

BASIC PROPERTIES OF THE SOFTWARE:

- open-architecture application coded in .NET Framework 4.5 technologies
- the ability to run on any PC with Windows 7 and above
- easy and intuitive interface
- automatic loading of the CAD files for the measured tooling
- saving protocols, the possibility of personalization and export to Excel or pdf
- view from the camera with a maximum resolution with the possibility of controlling the position of the punch or die under the camera by using the space mouse, recording of the image to a file
- pairing of punches function
- multilingual application with the ability to quickly add new languages
- open-architecture allows for the expansion of measuring capabilities of the machine by installing new measurement libraries
- adjusted GUI for the user comfort

The machine is supplied with the basic measurement libraries that enable automatic sizing of multi-tipped punches (plus internal die bore profile assessment) of the following standards: EURO-B, EURO-D, TSM-(IPT)-B, TSM-(IPT)-B2, TSM-(IPT)-D, FETTE EU1 441, PHARMA, 20/28, ST-328-2, 25/32, 25/32 SLOTTED, FS12:

- in case of the punches, the basic library enables automatic measurement of geometrical sizes of the following: the total height, L0, working height L1, depth of convex (L0-L1), longer and shorter dimensions A and B of the shape tooling or diameter D for the round tooling and shaft diameter d1, d2
- measuring library for multi-tip punches and dies
- in case of dies the basic library enables automatic measurement the shape of profile of the inner bores
- visual quality control of working part

TECHNICAL SPECIFICATION:

- the supply voltage 110V / 230V; 50-60Hz
- recommended operating temperature 20°C
- available control system languages: English, German, Polish (other languages available as an option on request)
- set of dedicated holders for punches and dies to facilitate work