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PRINT HEAD PARAMETRIC TESTING MACHINE



The Print Head Parametric Testing Machine made by ESC allows to measure the main working parameters of dot matrix print head.

Thanks to a sophisticated force sensor the ESC Print Head Parametric T M can measure the impact force and, thanks to a dedicated electronic Hardware and Firmware developed by ESC, can measure the print head static stroke and the flight time.

A series of safety tests (coil resistance, short circuits, ..) complete the set of test.

By an ESC made software the user can easily select the print head working characteristics (voltage, current, firing time,) and can easily collect, store and print the measured values. An embedded interface can transfer the measured data to an external database.

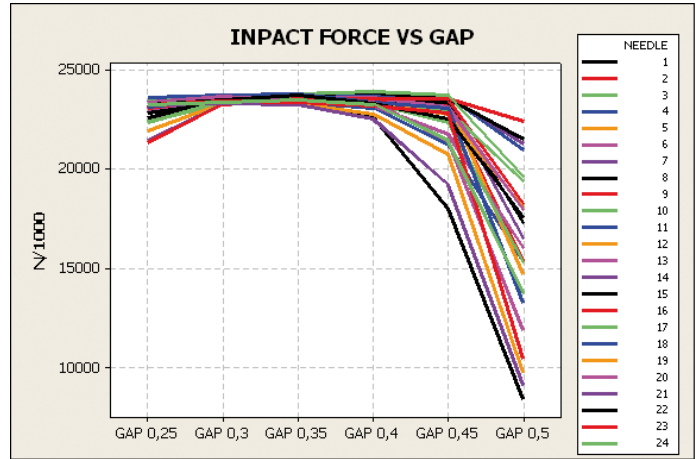
A set of configurable data limits can easily define the GO-NO GO results.

The ESC Print Head Parametric T M is available in 3 different models: 2 for mass production that differ from the print head working voltage (fixed and variable) and one model for R&D that adds to the variable print head working voltage the possibility to connect it to external instrument (oscilloscopes basically) by BNC connectors carrying out some important signal (like the impact sensor response curve).

A set of customizable fixtures, easy to change, and a set of data (stored locally on the connected computer or in a database) easy to retrieve by the software allow to change the print head model to test.

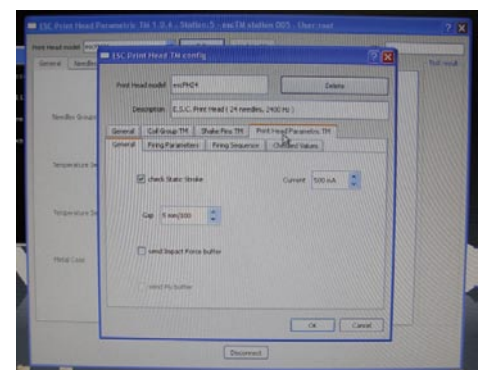
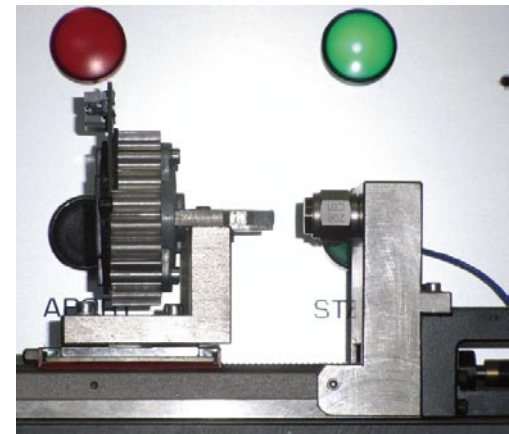


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SPECIFICATIONS

		PTM-2V	PTM-MV	PTM-LAB
MAIN FEATURES				
PASSWORD PROTECTION		2 level: Administrator and User		
PRINT HEAD MODELS		Create, Edit and Erase options		
TEST RESULT PRINT		YES		
EXTERNAL DATABASE INTERFACE		YES		
SHAKE PINS		YES		
SIGNAL OUTPUT		NO		8
GENERAL PARAMETERS				
NUMBER OF NEEDLES	n.	1 to 24		
TEMPERATURE SENSOR	n.	2		
FIXTURE ID		Hardware fixture identification		
WORKING PARAMETERS				
FIRING TIME	microsec	50 to 300		
FIRING CURRENT	mA	100 to 3.000		
FIRING FREQUENCY	Hz	100 to 3.000		
FIRING VOLTAGE	V	24 and 40	10 to 40	
NUMBER OF FIRING SEQUENCE	n	2 to 10		
NUMBER OF FIRE FOR SEQUENCE	n	2 to 100		
DELAY BETWEEN SEQUENCE	msec	5 to 300		
GAP	mm/100	5 to 100		
CONTROL PARAMETERS				
COIL RESISTANCE	ohm/100	100 to 8.000		
T. SENSOR RESISTANCE	ohm	10 to 50.000		
STATIC STROKE	mm/100	5 to 100		
IMPACT FORCE	mN	1000 to 30.000		
FLY TIME	microsec	100 to 500		
MEASURED PARAMETERS				
STATIC STROKE		YES		
IMPACT FORCE		YES		
FLY TIME		YES		
ENVIRONMENTAL LIMITS				
TEMPERATURE				
Operating	°C	20 to 35		
Storage	°C	-10 to 60		
HUMIDITY				
Operating	RH	20% to 80% Not condensing		
Storage	RH	10% to 95% Not condensing		



All specifications subject to changes without notice

The machine complies to the applicable European Directives