RPM Vision +

Robotic Punching Machine

P/N: 01-03-0004

StoneShield
ENGINEERING

The RPM Vision + is a robotic system designed to break plastic pins from connectors **(punching system) in a fast and automatic way.**

It has an integrated vision system to inspect and validate the end results of the punching process.

It ensures high quality and precise results with **burr free cut** and **undamaged connector's vias**, since it has dedicated tools for each vias' pattern.

It allows the **processing of different connectors,** in the same operation.

After the punching pattern is selected using a barcode reader or a network file (KSK server), the operator puts the connectors in the selected nests. The machine will pick the necessary tool and angle and start the punching process.

At the end of the process, the **vision system will check each of the connectors** to ensure that the punching process is accurate and burr free, identifying OK and NOK parts.

Combined with this flexibility, it also has a high productivity, with an average **cycle of 0.7 second per pin.**

Flexibility:
Automatic tool replacement
Any given pattern of pins to be punch out
Assymetric patterns with any given angle
Change of connector's nests

High Precision:
Burr free cut and
undamaged connector's vias
Dedicated punching tool for
each pin pattern

Ensured Quality:
Vision inspection system to
check process and results

Connectivity:
Integrated with KSK systems via network
Automatic generation of production reports
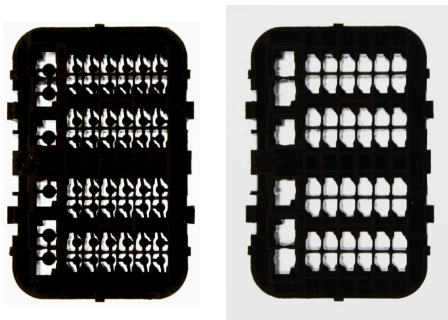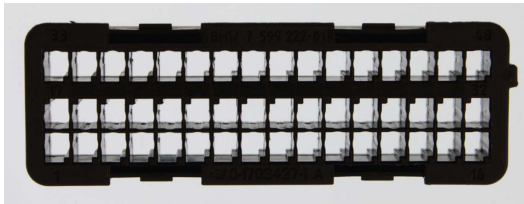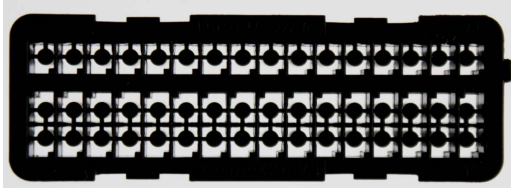
Productivity:
0.7 second per pin

RPM Vision +
Robotic Punching Machine with Vision System

Applications:

Break plastic pins from connectors with vision inspection to validate results

Technical Features:

▶ High quality and precise process: burr free and undamaged connector's vias;

▶ Integrated vision system to detect vias' integrity and burr's presence, with high resolution;

▶ Automatic tool replacement system (up to 5 tools);

▶ Process of different connectors with different pin patterns (any given angle);

▶ Each pin pattern with dedicated punching tool;

▶ Easy reference selection using barcode reader;

▶ References defined locally or remotely via KSK server;

▶ Process of different connectors (each nest with capacity for 2 connectors);

▶ Configuration mode password protected;

▶ Partial and global connector's counters (OK and NOK parts);;

▶ Working time counter;

▶ Automatic production and statistics reports, including image recorded by vision system;

▶ Several system's languages, including English, Portuguese, French, or others;

▶ Easy upgradable software, that can be done through a USB stick.

Technical Data:

Dimensions:

Length:	1300 mm
Width:	850 mm
Height:	2290 mm
Weight:	300 kg

Connections:

Electrical:	230 VAC @ 50 Hz - 1 IEC standard male socket
Consumption:	1.5 kW (peak)
Air pressure:	4.5 to 6 Bar - quick-coupler socket – Ø 8 mm
Interface:	Touchscreen, barcode, 2x USB, Ethernet and tower light.

Industry 4.0 Features:

▶ Network connectivity and remote support and configuration;

▶ Saving of KPIs to USB and/or remote location;

▶ Automatic and immediate error reporting;

▶ Communication with third party machines and servers.

Options:

Punching Tools
P/N: 08-05-0001

Connector's Nest
P/N: 08-05-0002