

# RPM Vision +

## Robotic Punching Machine with Vision

P/N: 01-03-0004



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.

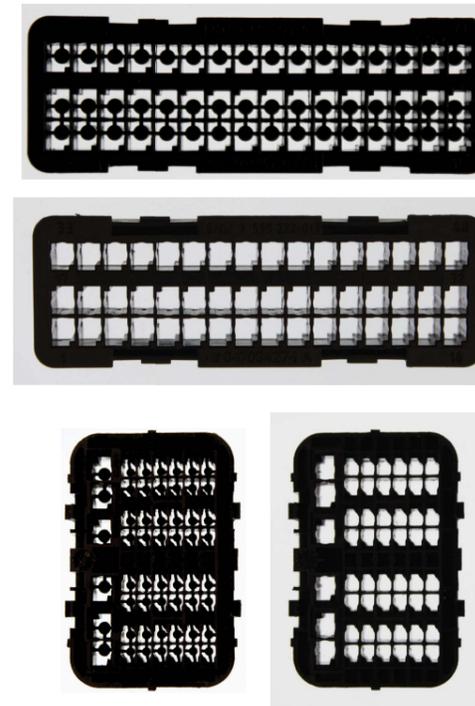
It has dedicated tools for each vias' pattern and allows the processing of different connectors, in the same operation.

After selecting the pattern with 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.

### Applications:

Break plastic pins from connectors



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

### 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.



**Flexibility:**  
Automatic tool replacement  
Any given pattern  
Asymmetric patterns with any given angle  
Change of connector's nests



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



**Productivity and Cost Effective:**  
0.7 second per pin  
No need of setups or tool changes  
One tool is used for many vias



**Connectivity:**  
Integrated with KSK systems via network  
Automatic generation of production reports



**Ensured Quality:**  
Vision inspection system to check process and results

### 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.

### Options:

#### Punching Tools

P/N: 08-05-0001

#### Connector's Nest

P/N: 08-05-0002