

Ultra Precise Granite Base System



For precision assembly of sub-miniature electronic components using the integrated vision system.

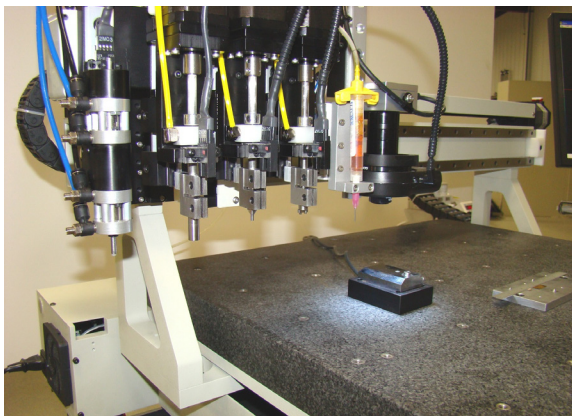
- 24" x 24" x 2.5" thick granite base
- Vision system registers body geometry
- Vision correction for all components
- Corrects for X, Y and Theta (rotation)
- Assembles chip with controlled force
- Records height (date & time) to file

The RPX robot was chosen as the ideal platform. Ultra precision ball slides and leadscrews result in machine tool quality performance with high speeds and payloads to easily accommodate multiple heads and tooling to a fixed accuracy / repeatability.

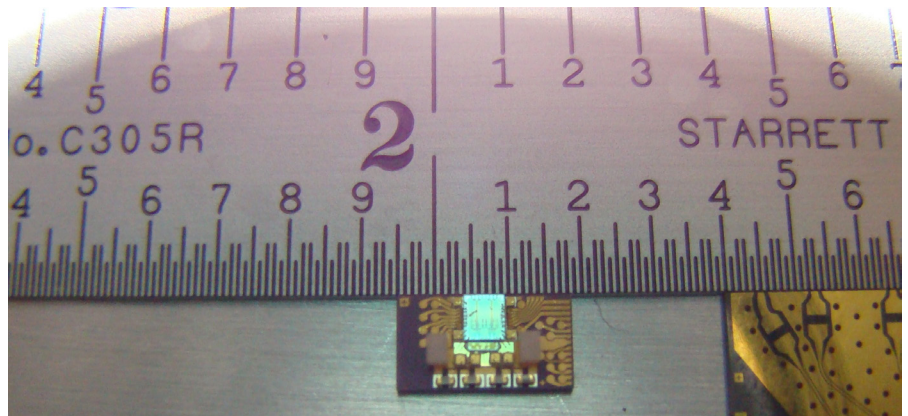
The current date and time is "stamped" to each machine cycle while recording the assembly height within 0.0005".

The RPX Production Robot

Integrated vision system is used for fully automatic pattern recognition, part correction and inspection. The file based system has no limit to number of images, program files, etc. to store.



Multiple pick & place heads, with independent rotational correction and programmable force control are used in the assembly process.



We are specialists in sub-miniature parts handling and assembly. Our AVS vision system is developed / maintained in-house as is all machine control software and firmware.

