

High Precision Docking Robotics

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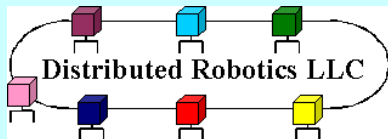
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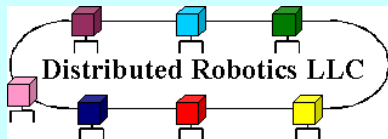
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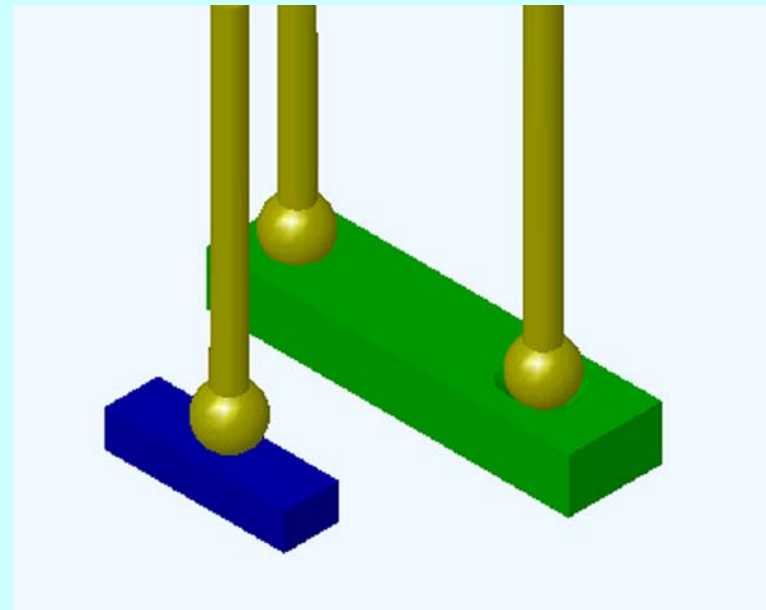
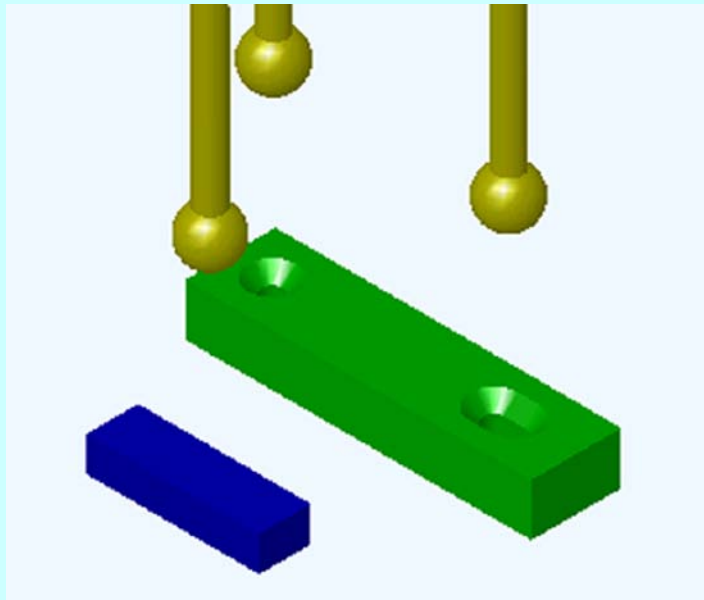


What is Docking Technology ?

Obtaining 1 Micron Precision only where you need it

Obtaining it at a reduced cost

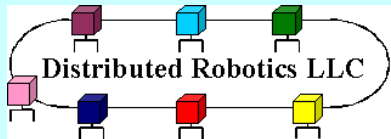


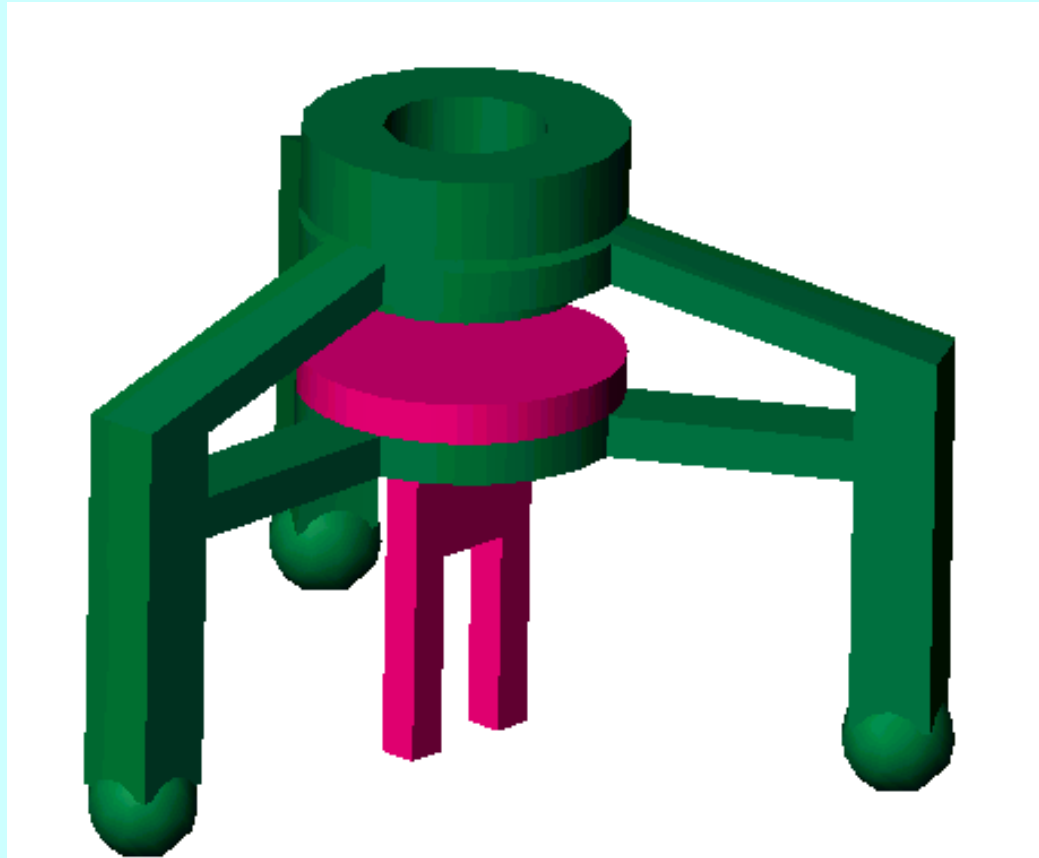


Conical Hole, Slot and Flat Plate

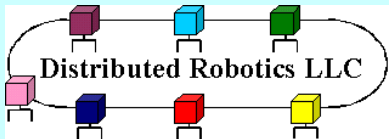
For Robotics End Effector -

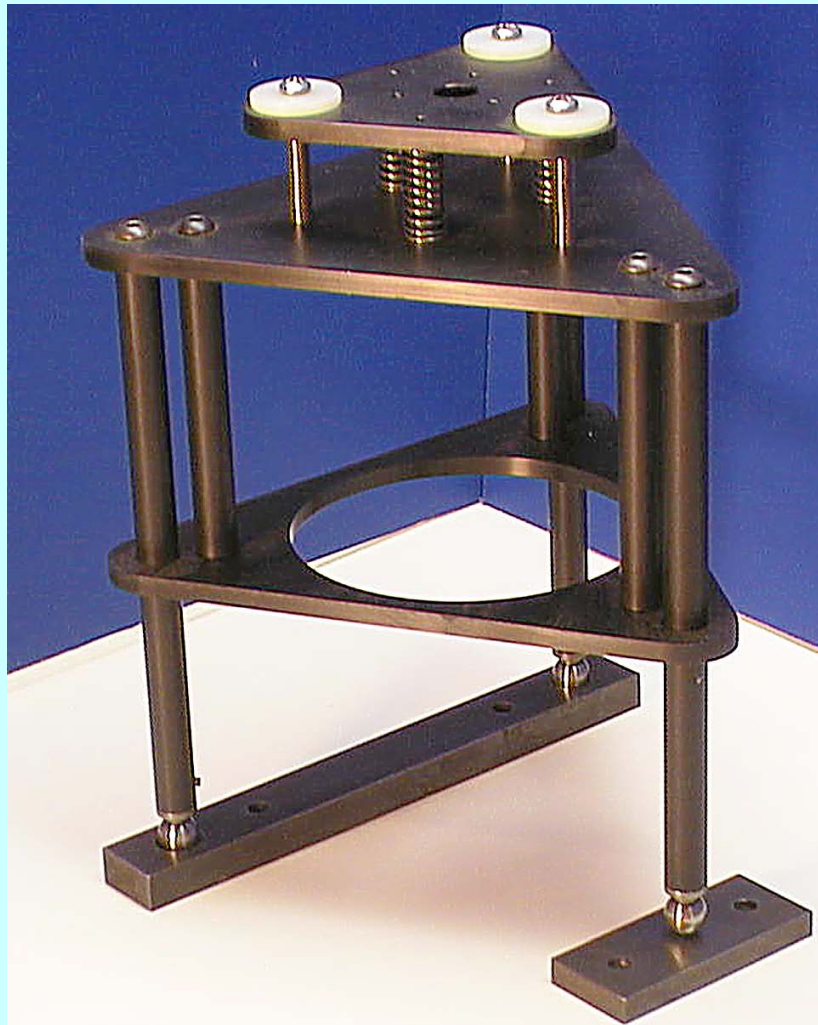
Use US Patent 4,919,586



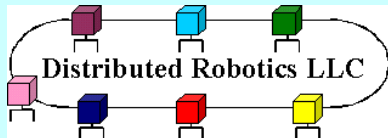


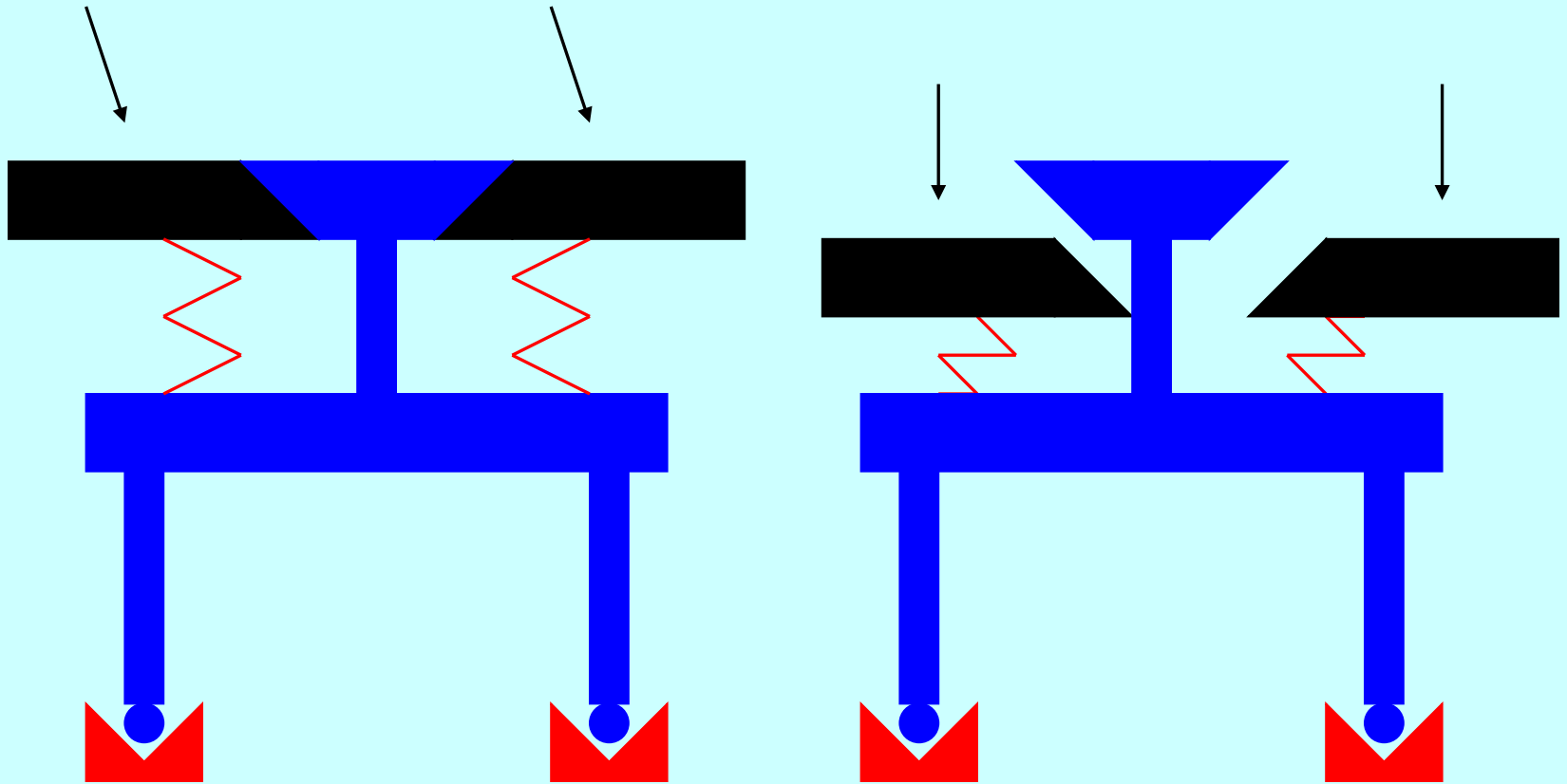
Conceptual Model



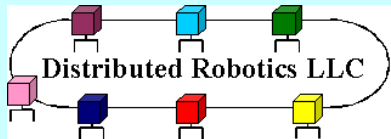


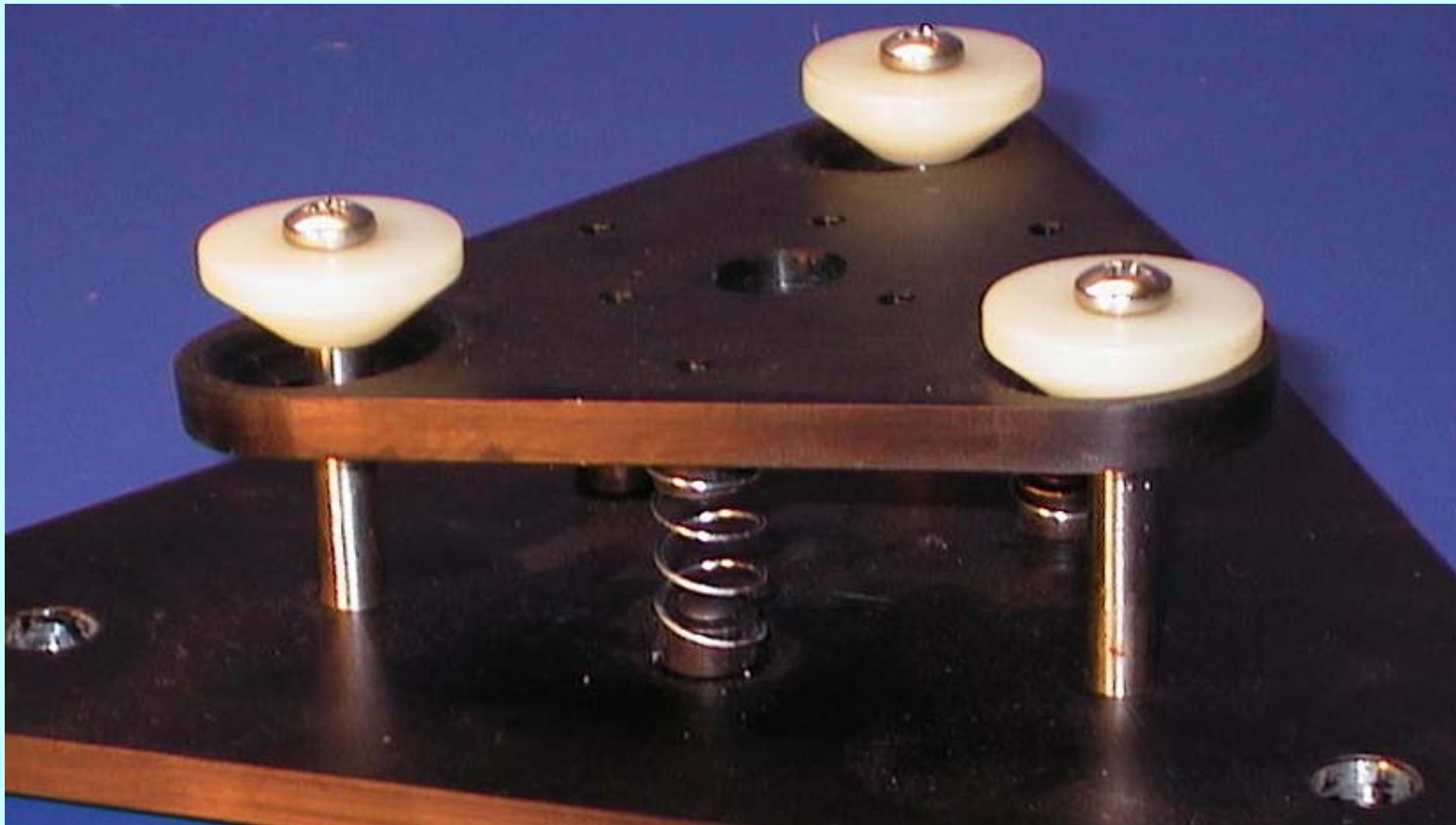
Skeletal Model
Docked Into
Features



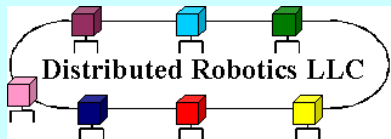


Restoring Compliance – Relieves Stresses

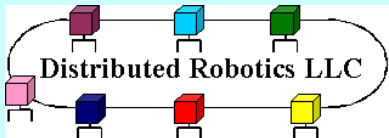
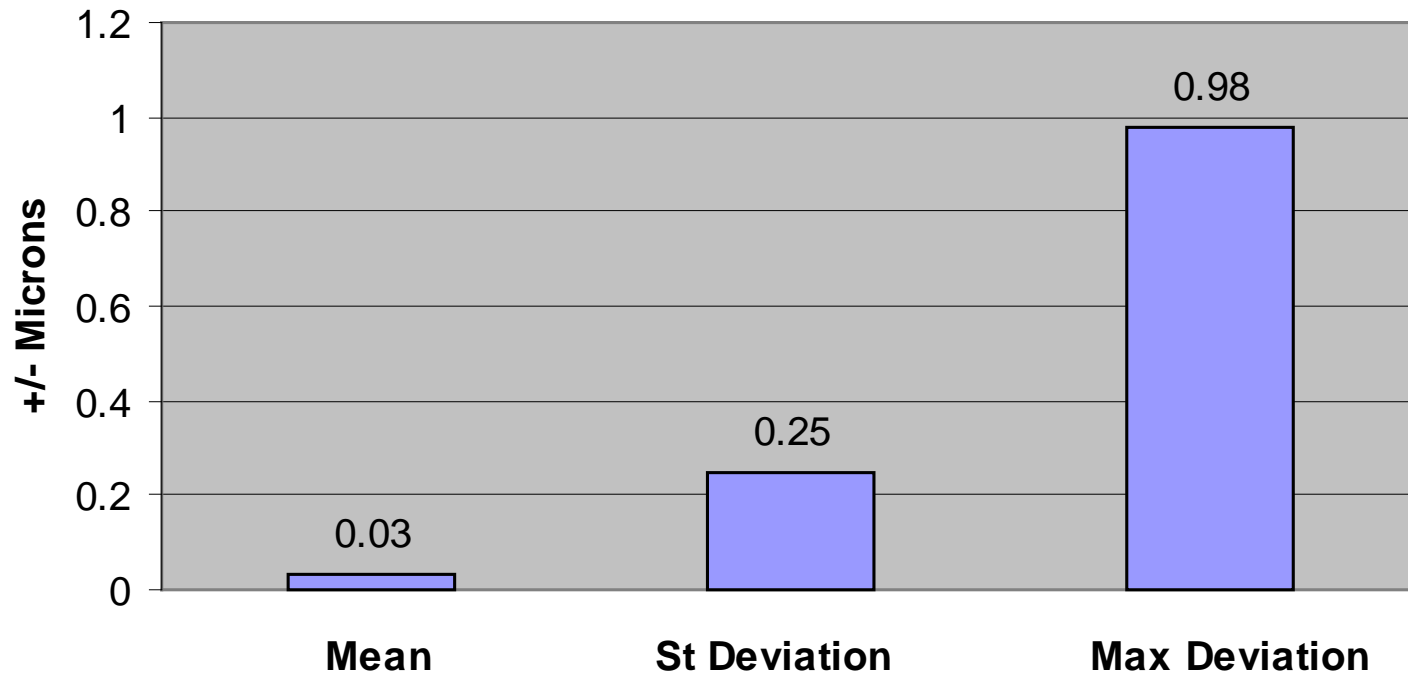


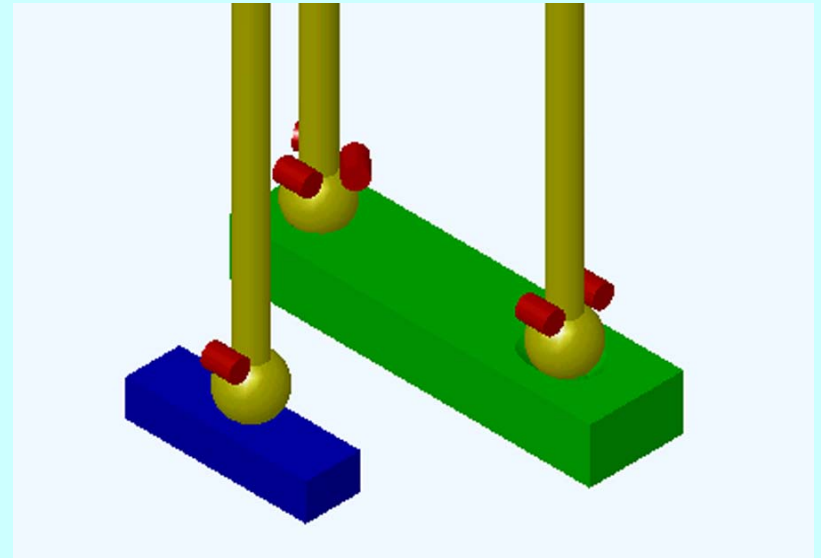
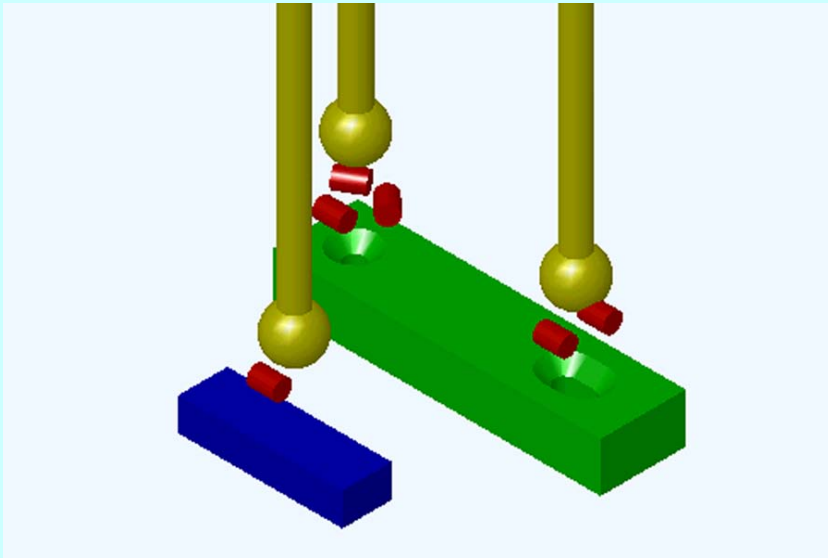


Actual Implementation



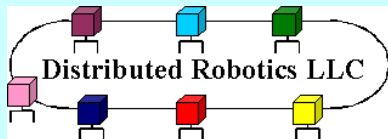
Laser Interferometer Repeatability Test Results

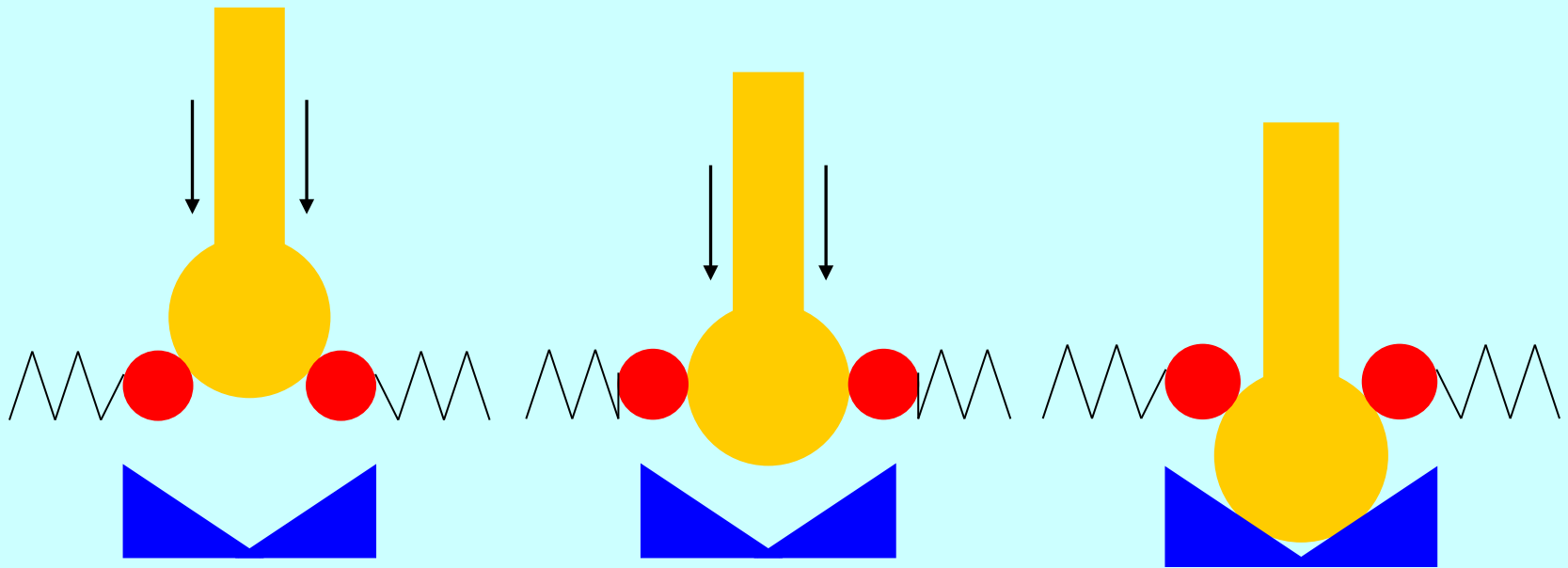




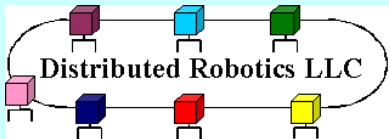
Dockbot™ 's Dock and Lock Feature

No longer need large robot to stay with end effector



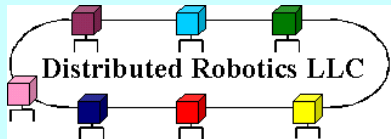


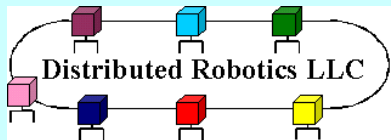
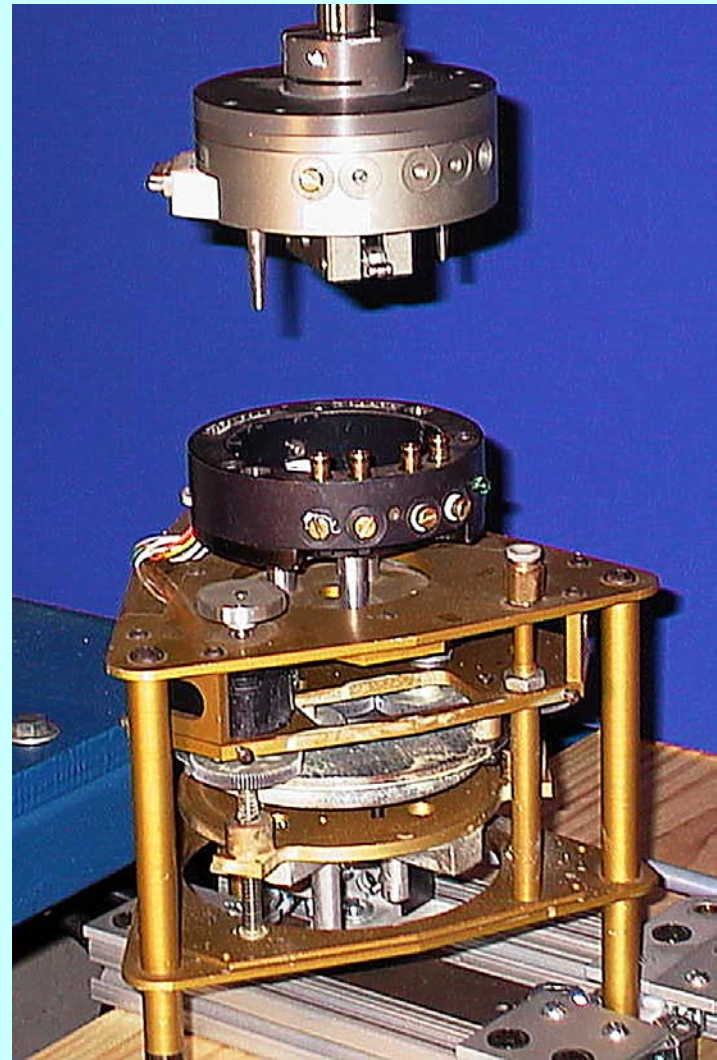
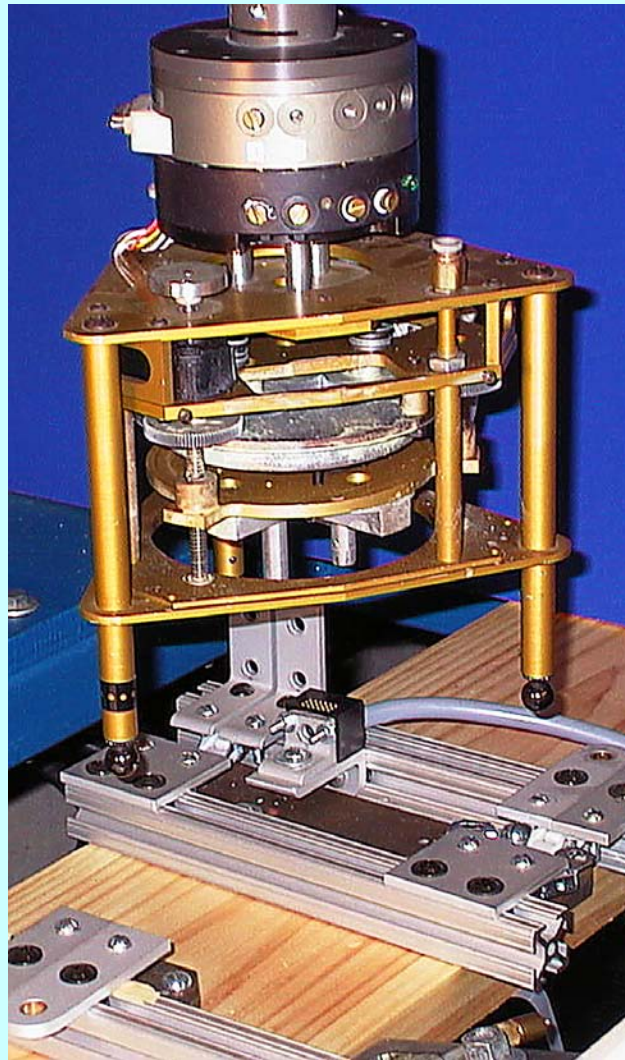
Roller Spring units lock ball feet in place





Prototype Implementation

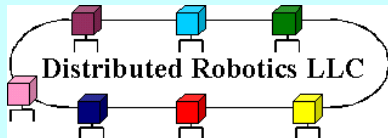




Can dock with

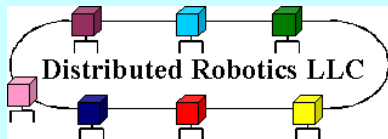
- Work Surface
- Pallets
- Moving XY Stage

One Large Robot can move many Dockbots



Possible Markets

- Electronic Assembly
- MEMS Assembly
- Photonics
- Lab Automation



Distributed Robotics is currently looking for
Technology Partner / Licensing Arrangements

Have recently met with many companies

