

Examples of Industries Served

- Centrifuge Manufacturers
- Pellet Mill Manufacturers
- Heavy Machine Manufacturers
- Irrigation Equipment Manufacturers
- Tool and Die Manufacturers
- Food Service Companies
- Medical Equipment Manufacturers
- Medical Researchers



Case Study

Opportunity:

The manufacturer of high-end speakers contacted Controlled Motion Dynamics with an exceptional challenge. The manufacturer sought to update the workbench used to assemble the speaker units. The existing workbench used a screw and hand wheel assembly to adjust tension as part of the assembly process and also used two wooden 2 x 4 pieces to adjust the height of the center section. The operator would count the number of turns by the hand wheel to reach the desired tension and then turn the 2 x 4 pieces on edge to adjust to the proper height. The speaker manufacturer needed a more precise, replicable way to perform these assembly operations.

Solution:

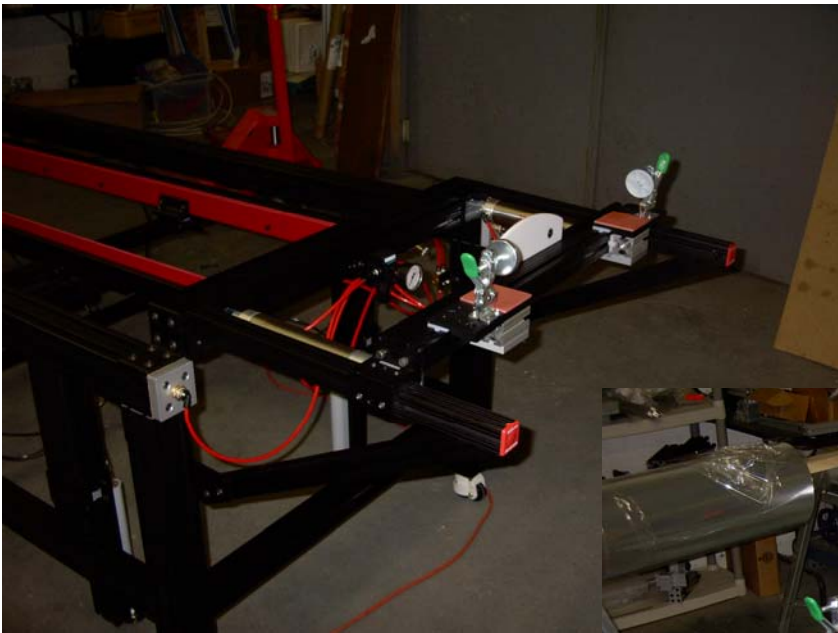
Controlled Motion Dynamics designed and built a new workbench using 80/20 extrusion.

- The tension problem was solved. This utilized the following components
 - Two Humphrey air cylinders
 - Wilkerson filter regulator unit for adjustability and repeatability
 - Gast compressor to provide the air required for tensioning the part
- To adjust the height of the center section of the workbench an electrically controlled Dyna-Lift system was installed.
- The entire workbench was black anodized by 80/20 per the customer's request.



Finished bench construction

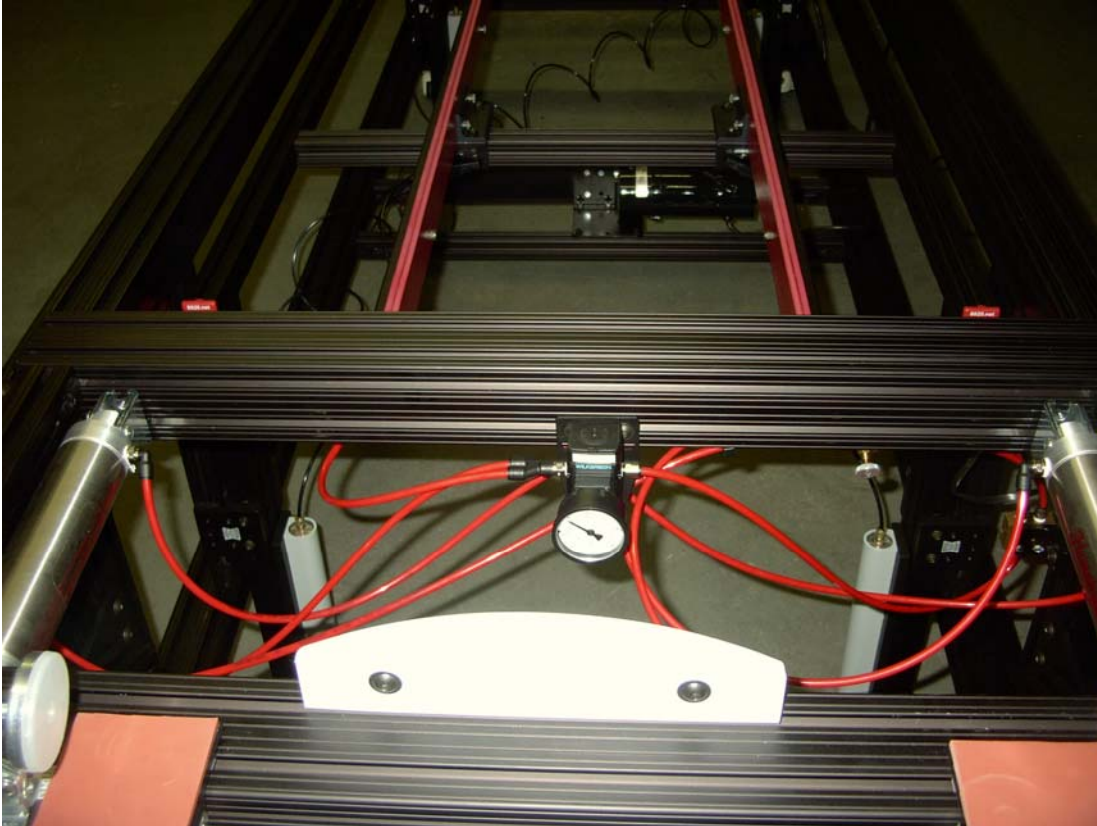
Controlled Motion Dynamics can create a solution to meet customers' specific needs.



The tensioning end



Tension adjustment with a view of the Dynalift in the middle of the bench



The clamp end