

Commercial/Industrial

8-Component Gridlock Arm Assembly Designed for No Secondary Machining

This aluminum robotic gridlock arm assembly holds and allows precision adjustments to accurately position the workpiece for metal fabrication.

The investment caster was challenged by the customer to make eight components that would assemble together and function without any secondary machining. The recently patented assembly is used to robotically hold pipe or other objects and yet be completely adjustable to hold the piece in its proper location for assembly.

The assembly had never been produced before, and was designed as a

3D CAD model. The 7" x 3" x 3" investment casting went from design to completed part in less than three weeks.

The completed aluminum castings were assembled without any machining and functioned flawlessly. After testing, the end

user began construction of permanent production tooling. The caster has perfected its rapid prototyping process to such a degree that many of the more intricate and difficult tooling components will actually have the wax pattern die cavities produced by rapid prototyping methods.

