

# Moving Superchargers in the Automotive Industry with Gorbels G-Force® iQ



Programmable virtual limits for exact positioning for pick and place applications.

In this automotive industry application, Cynergy Ergonomics designed a system to assist operators in the handling of superchargers during manufacturing/assembly through the packaging phase with a single lift assist device.

The tooling is designed to handle the superchargers with varying geometries and also orients the superchargers horizontally and vertically depending on which stage of the manufacturing process they are in.

One system consists of a telescopic rigid mast manipulator using a Gorbels iQ G-Force in a nested trolley configuration; this operates in a double aluminum bridge Gorbels free standing workstation crane system.



The Gorbels force sensing handle is utilized for raising and lowering control; the handle geometry wraps around the mast to facilitate operation from different positions as needed in the various manufacturing phases.

Another iQ G-Force feature is programmable virtual travel limits. This feature is used in conjunction with tooling mounted proxy switches to activate/deactivate preset travel stop elevations, placing the tooling in the exact position needed for pick and place operations.