G-Force® IQ Helps Improve Process and Increase Productivity

Industry:
Gas and Power Generation

Product:
Turbine compressors

The Problem:
Moving parts by hand posed injury and product damage risks

The Solution:
Gorbel G-Force

The G-Force® provides workers with superior control and speed during assembly

When an automobile manufacturer decided to build two different automobile models at one assembly plant in Turkey, they knew they needed to improve their processes. The cockpit installation is one of the most critical parts of the assembly process, and because there are two different cockpit designs, each with different weights and dimensions, workers had to be on their toes.

The workers needed to be able to switch between designs very quickly as the assembly speed required install of nearly 50 cockpits/hour. A solution capable of adapting to the constant changes in the assembly process was crucial. Originally, the company had been using a pneumatic arm manipulator but the poor speed, lack of control, and difficulty adapting to the changing weights of the cockpits left workers frustrated and slowed production considerably.

The company decided on a 660lb. G-Force IQ Intellegent Lifting Device from Gorbel. A custom end tooling solution was created consisting of a G-Force powered, rigid column manipulator with a linear rail for automotive cockpit loading.
The G-Force IQ provides the workers with superior control and speed during the assembly process, and the ease of lifting decreases ergonomic issues that can occur in such a fast paced environment.

The workers response to the G-Force has been extremely positive and the company is so satisfied with the increase in productivity, they have added a second G-Force as a “spare” to insure that they always have this critical device on hand.

“If you try to introduce a solution to a problem, but it actually makes the process hard or slow, workers just won’t use it,” said Diehl. “We’ve had no problems with workers not using the G-Force®. They all think this is the greatest thing.”