



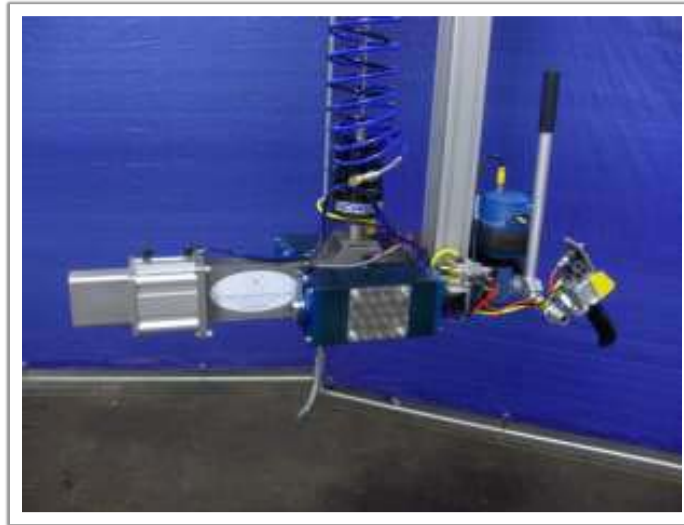
Custom Easy Arm® Helps Assembly and Eliminates Recordable Injuries

Industry:
Automotive Assembly

Product:
Mufflers

The Problem:
Operators were being injured loading 40# motor stators into shipping containers

The Solution:
A Gorbel Easy Arm® with a remote hub force sensing handle



Remote HUB Force Sensing Handle Gives Operator Precise Control

In the original application, an Easy Arm was introduced to assist operators in handling 40# motor stators during the packaging process. They had originally been required to reach over the shipping container and manually set the parts in the bottom of the containers. This was a source of reoccurring operator injuries. The Easy Arm was supplied with a pneumatically operated magnet designed for a horizontal to horizontal transfer of the stators. Recordable injuries were eliminated once the system went into service.

When a new process required the operators to remove the same stators from shipping containers, pitch them 90° and insert them into a press, the customer only considered Gorbel. The insertion process required the operator to reach inside the press and set the stator vertically on a mandrel. Doing this manually wasn't an option. They wanted an Easy Arm for the process.

Because there was no overhead access to the press, a standard Easy Arm with cable mounted tooling wouldn't work. A telescopic rigid mast tool was designed in conjunction with a pneumatically powered magnet end tool. The mast was adapted to an Easy Arm and maintained 360° continuous rotation at the tooling. To address the precise control requirement, a remote hub force sensing handle was used to allow the operator to effectively float the tooling throughout the entire process.

In addition, the new system was equipped with a powered pitching mechanism which allows the operator to reach down into the shipping container, lift the part, rotate it to the proper orientation and place the stator inside the press for insertion onto the mandrel.

The customer was so pleased with the results that the same rigid mast design will be used for another new press insertion application. Because the rigid mast assembly and tooling is designed to adapt easily to the Easy Arm, this new system will use an existing Easy Arm that has been taken out of service and retrofitted for the new requirement.