

Off-Highway Earth Moving Equipment



Challenge

A UK designer and manufacturer of large off-highway earth moving equipment had a recent challenge involving the hoods on some of their larger trucks. The larger earth moving trucks had become so enormous that the engine hood could no longer be lifted by hand.

Key Customer Requirements

After visiting the customer's facility and discussing possible solutions to this problem it was understood that health and safety concerns were of top priority. With that it was important to eliminate the need for truck drivers to climb out of the cab and up onto the truck to open the hood. The idea was to bring motion to the hood and remove the need for any manual labor associated with this task. However, the motion system for this task must still be able to raise or lower the hood manually in the event of a power failure or other malfunction.

Application

First the required load to open and close the hood was calculated. With this information on hand it was decided that the LA 10 series Thomson-Tollo Linear Actuator would be an ideal solution for this application challenge. Furthermore, the hand wind, or HW version of this actuator can still raise or lower the hood manually, even in the event of a power failure or other malfunction.

Thomson Solution

The LA10 series Thomson-Tollo Linear Actuator was a perfect fit for this customer's application as it offered the performance and reliability needed to raise and lower the hoods on these massive trucks. In addition, the HW (hand wind) version of the actuator met the key customer requirement of providing a solution that is able to raise or lower the hood manually in the event of a power failure or other malfunction.