

A Company producing earth work machines was used to have chain hoists for handling hydraulic cylinders at the paint line.

The hoist end effector by a hook presented hazards to safety and ergonomics. The risk of cylinder accidental fall and injure for operators was high. The need for the operator to constantly keep the hoist button pressed for the lifting operation forced him to a non ergonomic, unhealthy position.

The solution required by this Company had to guarantee full safety against load fall and better ergonomics in favour of the operator and at the same time improve productivity in the long run.

An INDEVA Liftronic is the solution that satisfied such a demand.

A zero gravity self balancing system (electronic balancer) with an end effector equipped with pneumatic jaws and 90° rotation device for turning the cylinders from horizontal to vertical position.

The end effector is equipped with ergonomic gripping handles and a sensitive in line force handle that eliminates all inertia forces when moving the tool in both vertical directions.

The operators can handle 180 kg load effortlessly. The jaws are adjustable in order to allow gripping cylinders with diameter ranging from 80 a 170 mm.

Thanks to the **self balancing technology** the operator can handle different cylinders with different weights, with no need for stopping to adjust the load weight setting each time he picks a different cylinder.

The operator can handle cylindres whose weights range from 60 to 350 kg with lengths from 0,7 to 2,0 m effortlessly with the same ease and precise coordination as he were handling loads weighing few grams with his hands only, as a superman.

