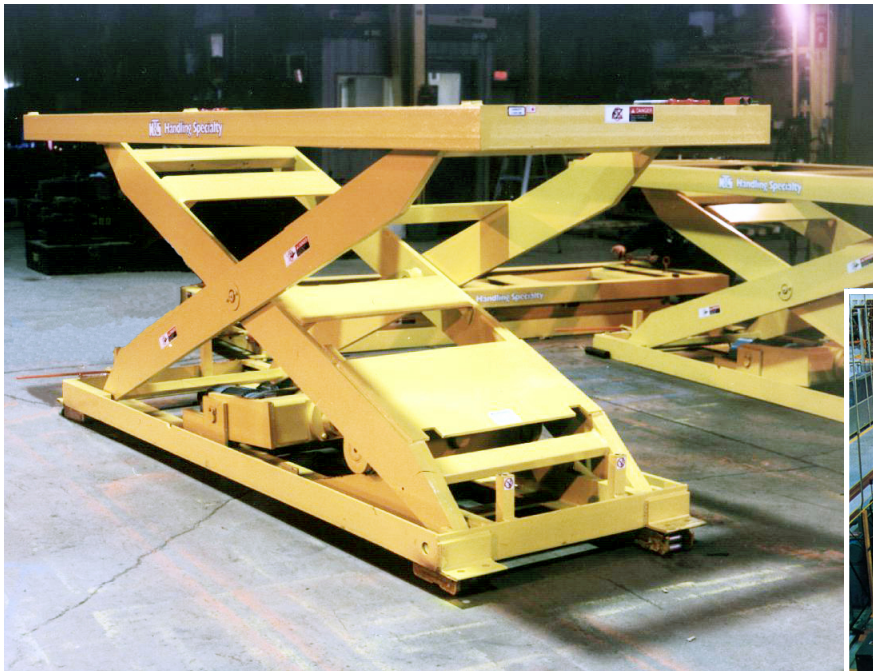


3,500 LB CAPACITY ELECTRO MECHANICAL LIFT FOR AUTOMOTIVE WELDING CELL

SPECIALTY SOLUTION #10

AUTOMOTIVE

- 3,500 lb capacity, mechanical actuation (ball screw drive), 48" vertical travel
- Production lift for precision in robotic welding
- Scissor lift interfaces with conveyor belt for repetitive cycling (40 cycles per hour)
- Excellent repeatability at upper and lower positions
- Constant speed and perfect vertical motion



At an automotive assembly plant in Vance, Alabama, Handling Specialty custom engineered and manufactured lifts that were integrated into the production line for the welding of structural components to automotive bodies. The transfer process in and out of the workstation dictated a change in elevation along with a high degree of accuracy and speed.

Using a mechanical ballscrew drive, the design allows the simultaneous movement of the robot and lift using PLC controls. The conveyor line delivers the body onto the lift via power rollers. The lift then lowers the body onto locating pads and continues its downward motion leaving room for the robot to weld the body. Once welding is complete, the lift raises and picks up the body which is then transferred to the conveyor belt.