



# PANDJIRIS,<sup>®</sup> INC.

#1 in Fixed Welding Automation

**PIPP** PARTNERS IN  
POSITIONING &  
PROFITS

PRODUCT BULLETIN FOR LINCOLN PARTNERS

NOVEMBER 2006

## NEW PLANT FOR BUILDING RAILROAD TANK CARS

**14 - FULLY INTEGRATED CUSTOM CONTROL  
MANIPULATOR SYSTEMS**

**14 - POWER WAVE TANDEM AC/DC SUBMERGED  
SAW PACKAGES**

One of the leading Railroad Tank Car Manufacturers recently built and is operating a new state-of-the-art plant and production line facility in the United States. As a result of the Pandjiris-Lincoln Partnership and their leadership in manufacturing technology, fourteen (14) Fully Automated Manipulator Systems integrated with fourteen (14) Lincoln Power Wave Tandem AC/DC Submerged Arc Welding Packages were built, tested and installed in their new plant facility. The customer's operators and supervisors were trained by Pandjiris' technicians both in the operation of the Power Wave Controls and the operation of the Fully Integrated Manipulator Systems.

The R.R. tank cars range from 90" to 120" diameters, up to 15'-0" per shell section in length and weighing up to 30,000 lbs. Pandjiris provided fully automated heavy duty 1400, 1600 and 2000 Series Manipulator Systems for welding both the longitudinal and girth seams on both the OD as well as ID of the tank shells. As the shells moved from station to station on the two (2) identical production lines, the manipulators' custom controls were integrated to work with the turning rolls, endo line conveyors, and custom built flux belt positioning equipment.

The technology and experience of the Pandjiris-Lincoln Partnership increases productivity, operating efficiency and lowers manufacturing costs for any of your customer's applications. It also creates opportunities for consumable orders for the Lincoln Electric Company.



## 14 - PANDJIRIS FULLY INTEGRATED 1400, 1600 AND 2000 SERIES MANIPULATOR SYSTEMS

### 14 - LINCOLN ELECTRIC POWER WAVE TANDEM AC/DC SAW PACKAGES

- Manual and Power Column Rotation
- Model 815-P 10" x 8" x 8" Stroke Power 3 Axis Slide
- Catwalk, Ladder, Operator Seat
- Weld Engineering Pressure Flux Feed and Recovery System
- Model 60565 VS Car, Track Brushes and Weld Ground
- Model 60565 Machined Rail Track
- Boom Platform, (2) Wire Reel Turntable, Wire Guide Conduit
- Custom Control Integration to Tank Turning Rolls, Endo Line Conveyor Rolls and Custom Flux Belt Equipment

#### FEATURES

- Heavy Duty Box Beam Construction
- Remote Pendant with Joystick Controls
- Precision Machined Anti-Fall Device
- 360 Degree Column Rotation
- Rack and Pinion Drive System for Boom Movement
- Precision Machined Ways

#### BENEFITS

- Consistent Quality
- Increased Productivity
- Cost Savings



*Pandjiris  
Exclusive Flux Belt  
Equipment.*

