

# PANDJIRIS,<sup>®</sup> INC.

#1 in Fixed Welding Automation

**PIPP** PARTNERS IN  
PROFITS &  
PROGRESS

PRODUCT BULLETIN FOR LINCOLN PARTNERS

JUNE 2006

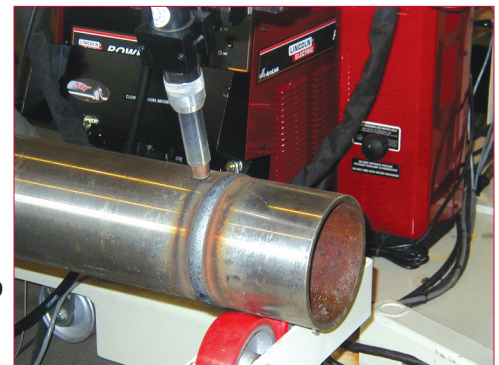
## **AUTOMATED MIG PIPE WELDING SYSTEM FOR PIPE WELDING FAB SHOPS AND MECHANICAL CONTRACTORS**

The sales and technical teams of both Lincoln Electric and Pandjiris coordinated with various mechanical contractors throughout the U.S. and Canada in successfully developing an automated MIG Pipe Welding System for welding steel pipe. These mechanical contractors were looking for an economical system to perform the root pass, fill passes, and cover pass on pipe that would consistently produce a quality finished product and increase productivity and operating efficiency. In conjunction with Lincoln Electric, proven welding procedures were developed and completed welds were tested with successful results.



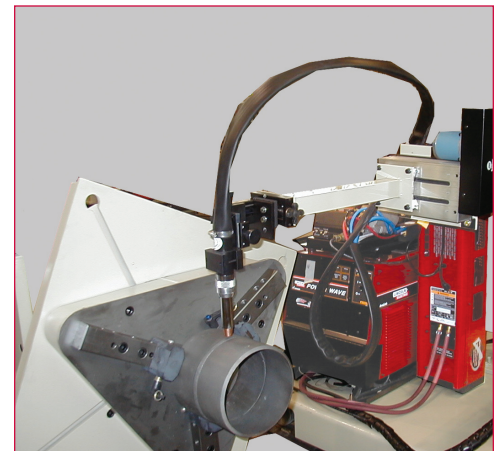
A Pandjiris cantilevered positioner with a quickset gripper were interfaced with the Lincoln Power Wave/STT weld package to replace stick welding in a manual operation. With the definite improvement in productivity, the contractors were looking to step up to full automation. This brought about the inclusion of a Pandjiris manipulator and new linear mechanical oscillator.

This basic package system is called the Delta MIG Pipe Welding System. It includes the ability to adjust torch position for lead/lag angle, impingement angle, height and cross seam positioners. The torch is mounted on an extension arm from the face of the oscillator to allow access in tighter locations during the part rotation.



As a result of the development work on the Delta System, Pandjiris has released a new product, a linear mechanical oscillator. This new Pandjiris Model PL-50 and PL/160 oscillator includes a PLC control with multiple procedures. The slide for the oscillator can be ordered as standard duty (MIG and TIG applications) or heavy duty (SAW applications).

This Delta MIG Pipe Welding System using The Lincoln Electric's Power Wave/STT weld package integrated with Pandjiris' positioner and manipulator equipment combines simplicity and flexibility and brings an economical approach to automatic pipe welding in all pipe welding fab shops.



Call or contact Pandjiris Application Engineering Department for automated positioning solutions and systems to meet your customer's application

## DELTA SYSTEM FEATURES

### Model 30-6 MVRMTAB Positioner

- 3,000 Pounds Capacity @ 6" Overhung and 6" Eccentric
- Provides 0.07 to 1.40 RPM Rotation Speed
- Motorized Tilt through 135 Degrees
- Includes 600 Amp Welding Ground
- Includes OS-15 Outboard Stand on Casters with Track, 1,500 Pound Capacity

### Model A Quickset Gripper

- 1-1/2" to 27-5/8" O.D. Gripping Capacity
- 5-1/2" to 31-1/4" I.D. Gripping Capacity

### EZ Link Series Controller

- PLC Based System Control
- Provides Central Control for Weld Start/Stop and Positioner Rotation
- Allows Setting of Rotation Speed Based on Part Diameter and Surface Speed

### Series 600 Manual Manipulator

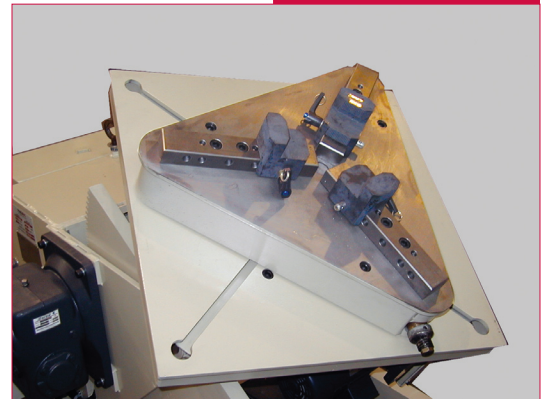
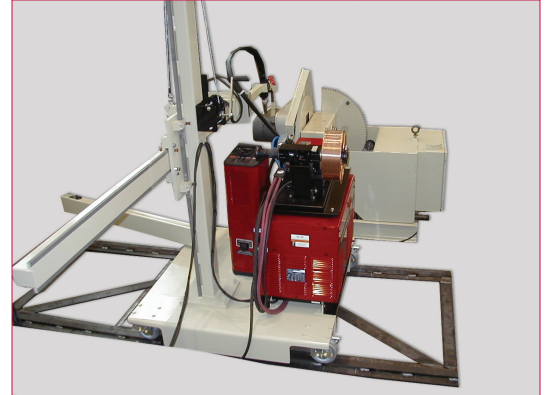
- Includes Manual Travel Car and "V" Track
- Provides 6' Travel both Vertical and Horizontal
- Rack and Pinion Boom Drive

### Mechanical Linear Oscillator - PL-50 and PL-160

- Pandjiris Design
- PLC Based Control
- Multiple Schedules
- 6" of Linear Travel
- Supports 50 Pounds @ 6" Overhung - PL-50
- Supports 160 Pounds @ 6" Overhung - PL-160

### Lincoln Power Wave/STT Weld Package

- Standard Includes Single Wire Drive (Optional Dual Drive)
- Water Circulator
- Water Cooled Torch



*Pandjiris (NEW!)  
Model PL-50 Oscillator*