

Manufactured in U.S.A.

# PANDJIRIS,® INC.

#1 in Fixed Welding Automation

## PIPP

PARTNERS IN  
POSITIONING &  
PROFITS

PRODUCT BULLETIN FOR LINCOLN PARTNERS

March 2007

## FULLY AUTOMATED HEAVY DUTY SIDE BEAM SYSTEM WITH POWER WAVE AC/DC SAW WELDING PACKAGE

The Pandjiris/Lincoln team dedicates itself to building partnerships with its customers in the welding industry by providing quality automation solutions; solutions designed to lower the customer's manufacturing costs. Recently this teamwork produced another success story combining the latest welding technology and state-of-the-art fixed automation equipment into another value-added turnkey solution.

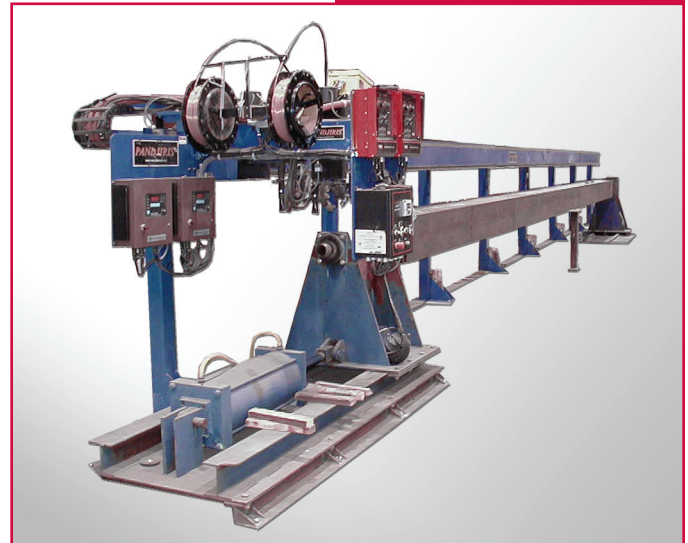
A major U.S. railroad manufacturer was looking for an automated system to provide increased productivity and improved product quality in the welding of center sills for railcars. The Lincoln Electric Company hosted the end user in demonstrations of the Power Wave AC/DC submerged arc equipment in Cleveland, Ohio. In tandem with these efforts, Pandjiris worked with the end user's engineering group to layout a dual weld head configuration which would simultaneously weld the 5/16" fillet welds. Pandjiris designed and manufactured a pair of custom torch bodies to allow feeding the 5/32" diameter wire into tight joints which were 13" apart. Tactile seam trackers were utilized to track the two weld joints. Weld Engineering's hopper mounted flux recovery systems were used along with two floor mounted pressurized flux feed tanks.

The system controls were mounted at the end of the weld head support arm. Included were the Power Feed 10 Controllers, Seam Tracker Controllers and a Pandjiris EZ Link® Series Controller. The EZ Link® Series Controller included the capability to program weld travel distance with the inclusion of an encoder on the Pandjiris Model VSC-21-12 Carriage.

A 57' side beam was supplied by Pandjiris to provide up to 53' of weld travel distance. The side beam is mounted on support stanchions. Cables and hoses for the carriage, weld heads and controls are encapsulated in a power cable track.

The Lincoln and Pandjiris team members are engineers and technicians and continue to partner together to produce welding and positioning solutions backed by years of experience. It also creates opportunities for consumable orders both in the U.S. and throughout the world for the Lincoln Electric Company.

Contact Pandjiris Application Engineering Department for Automated Positioning Solutions to meet your customers' applications.



# PANDJIRIS® SIDE BEAMS & CARRIAGES

## HEAVY DUTY SIDE BEAM TRACK WITH RACK & PINION DRIVE CARRIAGES AND NEW EZ LINK® SERIES CONTROLLERS

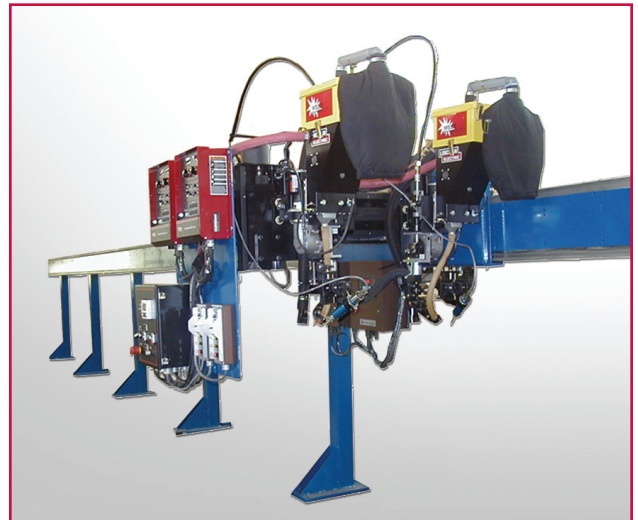
Utilizing Pandjiris' heavy duty side beam and rack and pinion carriage, Lincoln can provide their customers a fully integrated and automated turnkey system for increasing sales of both equipment and welding consumable products.

### SYSTEM FEATURES

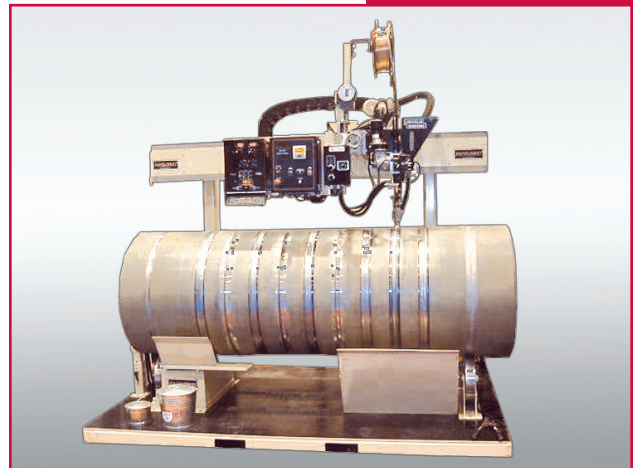
- Adaptable for all Lincoln's welding processes: Sub-Arc, Mig, Tig (single, tandem, and triple arc).
- Any length side beam system can be provided for applications.
- Positive rack and pinion drive carriage to provide smooth travel and eliminate slippage.
- Three (3) sizes of variable speed carriages (see below)
- Pandjiris EZ Link® PLC-Based Controllers for automated equipment control function; weld start/stop and auto travel integration.
- Carriages can support accessories such as heavy duty slides, controls and flux recovery systems.
- Pandjiris stanchions for side beam support. Manual or powerized height adjustment available.
- Power cable track for cables and hoses available.

### BENEFITS

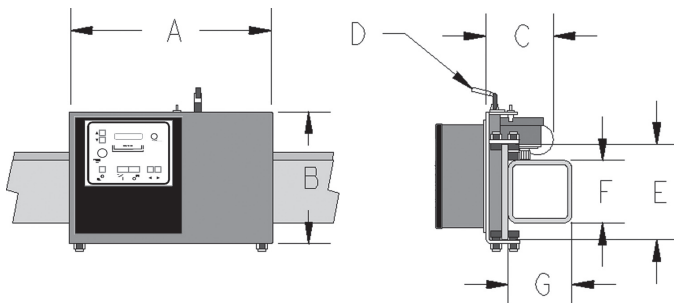
- Unmatched single source solutions and systems
- Turnkey capability for both the customer and distributor
- Complementing the latest welding technology with state-of-the-art positioning equipment
- Increases productivity, operator efficiency and lowers manufacturing cost



*Pandjiris Side Beam and Carriage System*



*Pandjiris Side Beam System integrated with Lincoln Powerwave AC/DC SAW Weld Package*



	A	B	C	D	E	F	G
VSC-15-3	26-1/4"	17"	8-1/2"	Disengage Lever	12"	8"	6"
VSC-21-12	26-14"	17"	10"	Optional	12"	8"	6"
VSC-40-12	48-3/4"	20"	6-5/8"	N/A	14-1/2"	10"	10"