LINCOLN ELECTRIC WELD SEQUENCER CASE STUDY

NEW ASSEMBLY TRAINING METHODS

- On-the-Job Training
- Weld Sequencer Software
- Paper Instructions

Participants were divided into three groups and assigned a training method. Each training group was provided a one-time assembly demonstration.

NEW ASSEMBLY TEST PIECE

- Hidden Welds
- Multiple Weld Procedures
- Various Material Thickness
- Specific Assembly Order
- Assembly Error Possible
- No Welding Fixture

NEW ASSEMBLY TRAINING

INITIAL TRAINING TIME

- On-the-Job: 8 Min.
- Paper: 12 Min.
- Sequencer: 16 Min.

Avg. weld cycle per assembly

INITIAL TRAINING COST

- On-the-Job: $0.10
- Paper: $0.20
- Sequencer: $0.30

Total cost ($) of new assembly training

POST-TRAINING PRODUCTIVITY

ASSEMBLY ERRORS

- On-the-Job: 24 Errors
- Paper: 12 Errors
- Sequencer: 0 Errors

Avg. assembly errors - post training

WELD CYCLE TIMES

- On-the-Job: 15 Min.
- Paper: 10 Min.
- Sequencer: 6 Min.

Avg. weld cycle per assembly - post-training

Results based on data gathered at Lincoln Electric’s facility. Customer results may vary based on particular circumstances.