

Case Studies: Nitrogen for Wave Solder Processes—Cost of Ownership



Case Study 1: Newbridge Networks Corporation

Kanata, Ontario, Canada

- Exceeded Goal of 42% Total Quality Improvement
- Dramatic Defect Reduction
- Lower Cost of Ownership

Figure 1: Lead configuration per assembly group

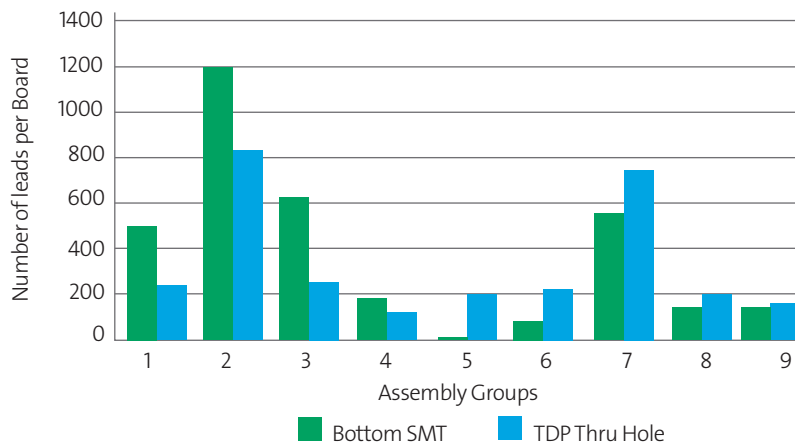
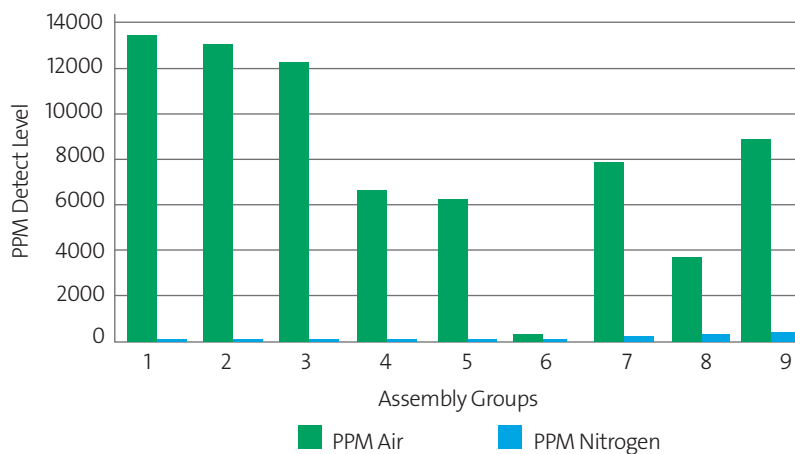


Figure 2: Wave solder defect reductions



Average number of boards per assembly group—300
Inspection criteria—10% of assembly group

Case Study 2: Matrox Corporation Dorval, Quebec, Canada

- Rework Costs Reduced
- Reallocation of Workforce
- Improved First Pass Yields
- Defect Reduction
- Solder and Dross Reduction Equals Materials Cost Savings

Figure 1: Labor cost reductions

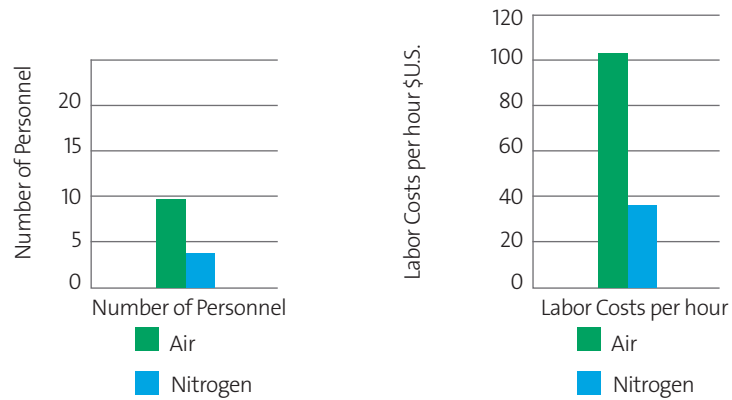
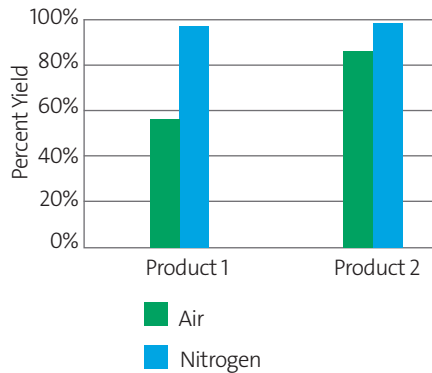
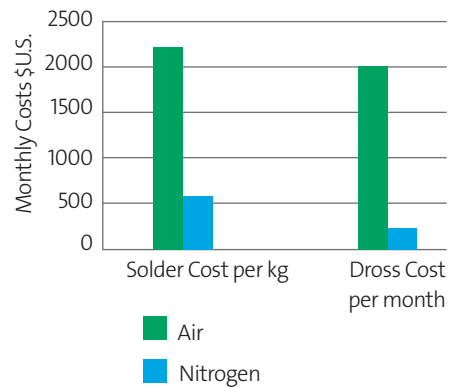


Figure 2: First pass yields



Production rate = 360 boards per hour per project
Average number of leads per product = 1200

Figure 3: Solder and dross cost reductions



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