

## SOLUTION BRIEF

## The Top 6 Errors That Cause Manufacturing Defects & How Poka-Yoke Fixturing Prevents Them



*Increasing cost and time-to-market pressures make preventing defects critical to manufacturing success. Whether errors are caused by workers or machinery, they can lead to reworking or recalls that use up precious resources, time and money. Using preventative quality control processes - such as poka-yoke fixturing - will save time, stress, money and causes for customer dissatisfaction.*

*At ALTEX, one way we build quality control into our processes is through fixturing, or “mistake-proofing.” Fixturing guarantees both our people and processes work right the first time, eliminating the following top six inadvertent mistakes that lead to costly defects.*

### 1 Processing Omissions

In this instance, a step may have been forgotten along the line, either due to human error or incorrectly established manufacturing processes.

*The Fixturing Solution:* With fixturing devices in place, each phase of the manufacturing process must be completed correctly before the next phase can begin, thus eliminating the possibility of forgotten steps.

### 4 Specification Errors

Even if all parts are ordered, they may not always be the correct dimensions or meet the specifications necessary to manufacture a product according to code.

*The Fixturing Solution:* Fixturing allows for prompt feedback and immediate action when parts do not meet exact specifications. Inspection at every step guarantees 100 percent quality assurance.

### 2 Assembly Omissions

Whether a part did not get ordered or was simply forgotten along the assembly line, a missing part can mean major reworking and time (and money) lost.

*The Fixturing Solution:* Just as with processing omissions, fixturing assures production cannot continue until each and every part is assembled, which safeguards you against any part omissions.

### 5 Equipment Errors

Improper or infrequent equipment maintenance can cause defects even when all other procedures are followed exactly.

*The Fixturing Solution:* Fixturing safeguards against machine error by ensuring equipment is functioning properly according to the necessary specifications.

### 3 Operational Mistakes

Any time proper procedures are not clearly established or followed precisely, you could be looking at costly mistakes or unacceptable gaps in quality.

*The Fixturing Solution:* Fixturing perfects procedures and ensures manufacturing best practices are followed by preventing process, machine and human error.

### 6 Preparation Mistakes

Errors in preparation of tools and parts not only cause quality errors and decreased efficiency - they also can be dangerous to workers.

*The Fixturing Solution:* Fixturing itself is a form of preparation and preventative quality assurance, which ensures every piece of equipment, all parts and the entire staff is poised to efficiently and effectively manufacture products.

For more information about how ALTEX's fixturing practices improve production, visit [www.altexwireandcable.com](http://www.altexwireandcable.com).