



BIF – Factory Acceptance Tests

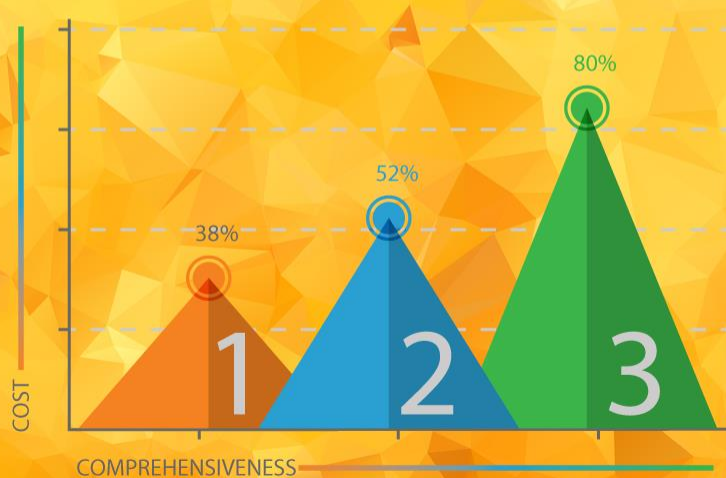
Presented at BEMA's Annual Meeting

June 24, 2015

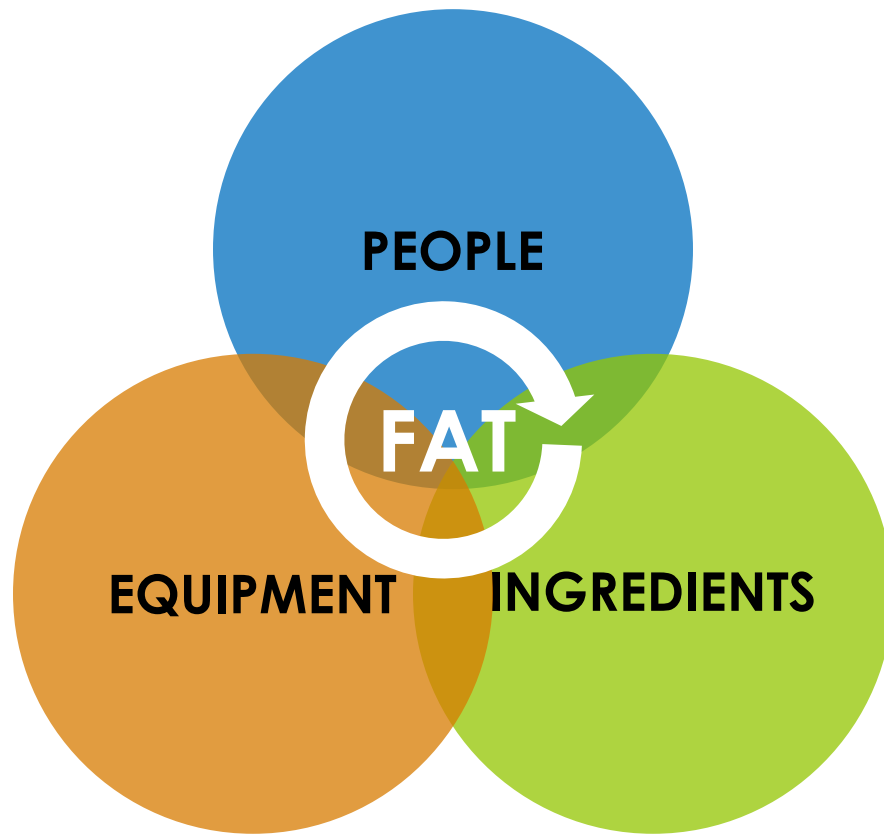
by: Mike Pierce

Sponsored by:





factory acceptance testing



GET



CRAZY-FRANKENSTEIN.COM

EAT



phát

F.A.T.

- What does F.A.T. really mean?
 - Factory Acceptance Test ←
 - Field Acceptance Test
 - Final Acceptance Test
 - Functional Acceptance Test
 - First Article Testing



BASICS ► What questions need to be answered?

- Why do a FAT?
- Who will do it?
- What will be tested?
- When will it occur?
- Where will it be?
- What will it cost?



BASICS ► What needs to be measured?

factory
acceptance
testing

Why do a F.A.T.?

- To ensure that the equipment/system being purchased meets the agreed upon design specifications before shipping to the Baker's plant.
- Allows any identified issues to be corrected at the Vendor's location to:
 - Realize the technical expertise and resources of the vendor
 - Minimize potential cross-contamination from entering the customer's plant
 - Get the best product delivered to the customer

factory
acceptance
testing

F.A.T.

- Who Should do an F.A.T.?
 - Bakers
 - Participation varies on F.A.T. Level (More to come on that)
 - Plant Support – Engineering/Maintenance/QA, Corporate Engineering
 - Equipment Manufacturers (Suppliers)
 - Designer/Manufacturing Representatives/Sales



BASICS ▶ What does it all mean?



Level 1 Details

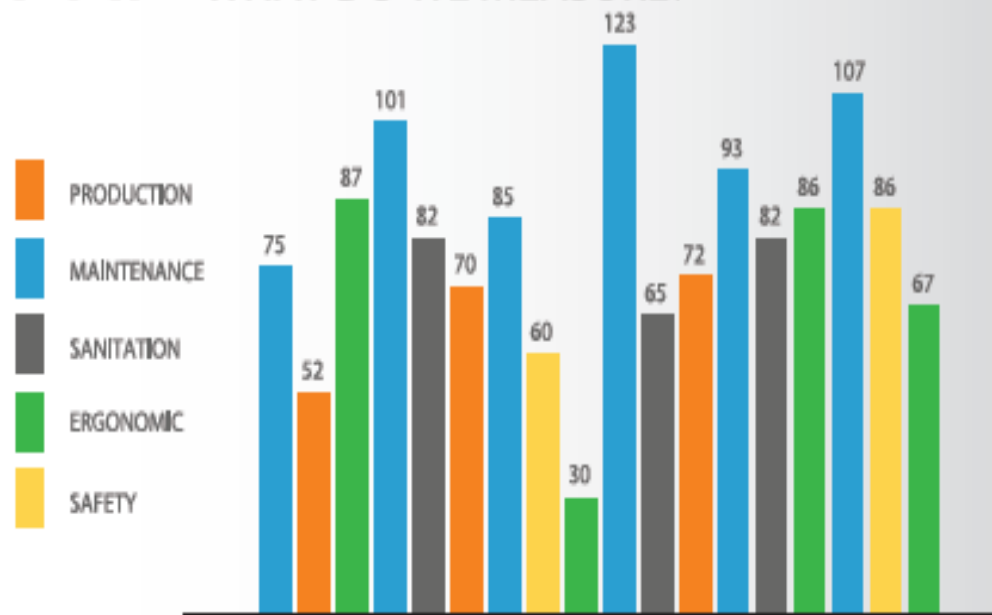


Level 2 Details



Level 3 Details

BASICS ► WHAT DO WE MEASURE?



KEY PERFORMANCE INDICATORS

Determine Key Performance Indicators for testing the production readiness of the equipment during the FAT. KPI's should relate directly to specific production or plant requirements as needed.



Level 1 FAT



Level 1 FAT

- Most Basic Level
- New Vendor
- Simpler systems / Equipment
- Introduction of simple to moderate new technologies in the plant



Level 1 FAT

- Checklist part of the contract
- Occurs 1-2 weeks before shipment
- Fit / Finish
- Safety
- Electro / Mech systems
- Overview of PLC Program



Level 2 FAT



Level 2 FAT

- Level 1 - Plus
 - Research, training, product development
- Custom designed equipment, new technologies
- New Products, Formulations
- Significant change in production procedures



Level 2 FAT

- Clear expectations in contract / PO
- Requires significant planning
- May require temporary installation of utilities at OEM location
- Ingredients/supplies shipped to OEM well in advance
- At least 2-4 weeks before shipment
- Added cost to OEM, should be negotiated into PO



Level 3 FAT



Level 3 FAT

- Level 2 - Plus
 - Total Commissioning
- Occur at OEM location or Plant
- Requires complete physical , mechanical and electrical installation
- Produce acceptable product



Level 3 FAT

- Cost is dependent on complexity of systems, amount of time required, location, number of personnel needed
- Level 3 FAT can cost as much as 10% to 25% of the cost of the equipment and installation



1-2-3's of FAT Testing



- Plan- understand what is going to be required and plan for it
- Perform tests
- Assess results
- Take action as needed
- Sign-off





factory acceptance testing

Presented at BEMA Summer Convention 2015

Who Should the Customer Send to the FAT?





Where to find the poll





factory acceptance testing

Presented at BEMA Summer Convention 2015

What percent of bakers travel to the equipment manufacturers locale to view equipment prior to shipping?





Where to find the poll





BEMA