The 9 Key Elements of Successful Plant Commissioning

Element 2 - MECHANICAL COMPLETION -

Definition
- Checking and testing of equipment and construction to confirm that the installation is in accordance with drawings and specifications and ready for pre-commissioning OR commissioning in a safe manner and in compliance with project requirements.

Example 1

What is included?
- Visual inspection for complete and correct installation
- Verification of name plate details at tanks, vessels, rotating equipment and other machines
- Internal inspection of tanks and vessels
- Hydrostatic test of vessels and tanks
- Vendor representatives for large and/or complicated equipment
- Dimension control
- Bolt tensioning
- Preservation
- NDT done (nondestructive testing)
- Pipe supports completed
- Removal of all items subject to damage during flushing, cleaning and pressure testing
- Blowing
- Flushing
- Chemical cleaning
- Drying
- Preservation
- Reinstatement
- Bolt tensioning
- (Insulation)
- (Flow coding)
- Inspection of all supporting structure
- Megger testing
- Cable tray supports
- Cable tray fill
- Cables
- Bend radius
- Wiring
- Termination
- Grounding
- Cable trays
- Cable tray supports
- Cable tray fill
- Cables
- Bend radius
- Wiring
- Termination
- Grounding

Example 2

As per contract!
Can vary from client to client and plant to plant!