

Guiding principles for Assets and Operating Locations

Operating Locations

- Location
 - A physical location where assets are installed
 - Fixed or constant
 - Process or functional identifier, defines the business requirement or process of associated asset
 - Cost Centers
 - Processes and sub-processes
 - Systems
- Work orders can be written either against the location or against the asset
 - Locations accumulate history (costs and events) of all assets assigned
 - Locations are typically assigned a G/L account, all assets attached to that location then inherit that GL
- Needs to be
 - A logical hierarchical structure that enables operations or maintenance to drill down to an asset
 - Should support financial GL, Cost Center structure
- CANNOT be moved but can be reassigned a new parent
- Naming convention options for the Location ID (the Location ID creates the list order in the drilldown)
 - Auto-number – system generated
 - 'Smart number'
 - Cascading ID, where child hierarchy level contains the parent
 - 10 – Steelmaking
 - 1010 – Furnaces
 - 101010 Furnace #1
 - 101020 Furnace #2
 - 101030 Furnace #3
 - 20 – Finishing
 - 2010 – Finishing sub-process #1
 - 2020 – Finishing sub-process #2
 - Based on P&ID, example for a boiler feed pump location: 01-BFP-P-11

Location Hierarchy

- Organizes locations and assets into a logical hierarchy that defines how costs and activities are accumulated and summarized
- Enables you to quickly see current WO's and PM's for any level
- Enables you to quickly find an asset, its specifications and its maintenance history
- Provides the foundation for asset maintenance history
- When considering the hierarchy, ask "at what level do I need/want to define maintenance history (regulatory and repairs)"

Asset

- A specific repairable equipment record. When maintained, the unit is repaired, not replaced
- The equipment can be uniquely identified (ex: by serial number or asset tag)
- The unit has tangible PM-PdM activities associated with it
- Can have spare parts associated with it
- Can associate with a WO
- Can define attributes with the asset catalog
- Is associated with an Operating Location, can be moved from location to location
- Can be structured into a hierarchy with other assets

Spare Parts – Inventory Items

- Parts used for maintenance activities
- Usually consumed and replaced, not repaired

Rotating items

- A rotating item is a serialized asset, such as a pump or motor defined with a common item number. Designate an item as rotating because it shares properties of both items and assets.
- A rotating item can have an inventory value and an issue cost. A rotating item is an inventory item with a generic item number, a current balance, and multiple instances (assets) that can be used in various locations around a plant. For example, you might track 10 individual five-horsepower pumps with the single item identifier PUMP-5HP.
- A rotating item is tracked both by its item number in Inventory records and by its asset number in Assets records. An item cannot be both a spare part and a rotating item.

Summary of Capabilities

	Operating Location	Asset	Inventory Items	Rotating Item
Movable?	No	Yes	Yes	Yes
PM's	Yes	Yes	No	Yes
Associate with WO's?	Yes	Yes	No	Yes
Spare Parts?	No	Yes	No	Yes
Stocked in Inventory?	No	If Rotating	Yes	Yes
Maintenance Costs Accumulate?	Yes	Yes	No	Yes
Purchasing Cost	No	Yes	Yes	Yes
Unique Asset # (Serial number)	No	Yes	No	Yes
Track Specifications	Yes	Yes	Yes	Yes
Failure Reporting	Yes	Yes	No	Yes
G/L Accounting	Yes	Yes	No	Yes
Meters	Yes	Yes	No	Yes
Routes	Yes	Yes	No	Yes