Tool Box Talk – Accurate Equipment Bill of Materials

(BOM - Bill Of Materials)



"Identifying the Right Part at the Right Time"

Why Have an Accurate Bill of Materials?

There is an inherent disconnect built into the relationship between the procurement department and the maintenance department. The maintenance department possesses detailed technical knowledge and specifications related to the assets under their care.

While somewhat lacking in this asset-specific knowledge, the procurement department maintains skills in supply chain management, consolidation of purchases, financial negotiation, and inventory control that are outside of the skill set of the maintenance department.

It is only through a closely managed marriage between these two departments and their particular areas of expertise that success can be achieved. The great equalizer in this situation is the Bill of Materials.

What Is a Bill of Materials?

A Bill of Materials (BOM) is a listing of the component parts that make up a particular asset – how complete of a listing is a matter of extreme effort. These component parts are described in the following manner in the BOM:

- Asset Number and description
- Internal Item Number and description
- Specific technical information (size, speed, etc.)
- Manufacturer (OEM) name and Item Number
- Quantity used by the asset
- Description of where the part is used on the asset (for example, tail shaft thrust bearing)
- Potential vendors and Vendor Item Number

Items listed in the BOM may be either "stock" items that are maintained in the storeroom or "non-stock" items, which are designated as used by an asset but not physically stocked in the storeroom and must be ordered from a vendor when needed.

You will notice that there are potentially three or more designations for an individual item:

- <u>Internal Item Number</u> Generated locally by your organization
- OEM Item Number Specific to the OEM
- Vendor Item Number Designated by the particular vendor from which you are purchasing (sometimes the OEM, but not always)

Why Put the Effort into an Accurate BOM?

There are many reasons to establish an accurate BOM. Listed below are just a few:

- 1. Eliminates duplicate items in the Storeroom
- Facilitates accurate parts retrieval from the Storeroom when planning work, as well as during repairs
- 3. Ensures accurate purchasing of required spare parts
- Assists in establishing Minimum/Maximum quantities by making calculations easier (number of machines, the quantity in each machine, and an expected rate of failure based on FMEA studies)
- 5. Provides some level of benefit when craftspersons perform troubleshooting and repair activities
- 6. Allows for removal of obsolete parts when assets are decommissioned and removed

How Much Is Enough?

Building accurate BOMs is a career-long commitment – one that is never complete. Particular focus on this element during capital expansion and construction allows for quick wins, but this takes discipline and hard work. The best practice is that 100% of the assets deemed critical have an accurate Equipment Bill of Material (EBOM) entered in the computer system.

