

A large industrial scene showing a massive, dark, spherical ladle being tilted by a crane. A stream of bright, molten aluminum is being poured from the ladle into a long, rectangular mold. The mold is supported by a complex metal structure. The background shows a large industrial facility with various pipes, beams, and structural elements.

MRO Master Data Analysis
Case study:
Middle East Aluminum

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MRO Master Data Analysis

An Aluminum smelter plant in the middle east faced the following issue with their MRO Master Data:

- They had created a stocking procedure which stated that all spare parts must have:
 - A category code
 - A criticality class
 - An ABC class
 - A demand class.
- They had initiated a scope of work to carry out the above to comply with their procedure.



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MRO Master Data Analysis

An initial audit was carried out to identify the quality of the existing MRO Master Data in the CMMS. The result from the findings are:

- Only a long text description had been populated in the CMMS
- The long text descriptions were inconsistent, many did not follow best practice, and they did not use any standard abbreviations in the descriptions
- In the sample items reviewed, many of the items only had the vendor or OEM P/Ns
- No stock movement data
- No BOM data was available in various formats and did not include the stock number, there not possible to match spares to asset data

Based on this initial audit, our consultant proposed the following scope of work in 12 steps see next slide

- The initial scope of work was for 2 activities, we have now proposed 13 activities



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Revised Scope of Work

- Step 1** Populate the Spare List with the Classification Noun and Qualifier
- Step 2** Create field and populate where possible the Manufacturer and Manufacturer's P/N
- Step 3** Create a new short part description)
- Step 4** Identify and report on Duplicates (based on Mfr's P/N, other duplicates are only identified with consistent short descriptions
- Step 5** Agree Categorisation and Classification Requirements
- Step 6** Classify each spare part as per Step 2 where possible
- Step 7** Review and comment on the stocking procedure, with suggested improvements and incorporate Step 2
- Step 8** Develop BOMs for the Most Critical Assets and then for lesser equipment



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Step 9 Assign Asset Criticality from BOM data

Step 10 Conduct demand and issue analysis based on movement data download outputs Demand Class, % of items with movement, first issue date, last issue date

Step 11 Assign Part Criticality

Step 12 Review existing stocking strategies and stock levels

Step 13 Review for standardisation and rationalisation opportunities

