Case Study

Supply Chain Management

Woodside Energy Limited

Reliable Materials Management (RMM) Project

K2 was engaged to identify spare parts associated with equipment identified by the client as safety- and production-critical in operation across five facilities. The primary objective was to ensure that the critical equipment across the five facilities had a structured catalogued parts list (Bill of Material) identified in the Computerised Maintenance Management System (CMMS) SAP.

K2 was provided with the equipment tag data on which to conduct the review and network access to the client's various databases to assist with identifying equipment make and model information for the chosen facilities.

Bill of Material (BOM) data was obtained from:

- Client SAP production system;
- Client document management system;
- Client project spare parts records;
- Client SAP table data provided in MS Access format; and
- Vendor datasheets and recommendations.

Where data availability permitted, BOM data was populated by:

- Identifying and assigning a make and model to equipment;
- Assigning existing BOMs, where possible, to equipment that was without BOMs;
- Copying other facility BOMs for identical equipment; and
- Creating new BOMs where no other BOM could be found by:
    - Using the existing client material catalogue for material numbers;
    - Cataloguing materials for new items that were not previously catalogued; and
    - Spare Parts Interchangeability Records (SPIRs)

Data was captured in K2's Asset Data Analysis and Management (ADAM) software with separate ADAM databases created for each facility. Utilising the various network tools provided, K2 personnel collected equipment make and model data to build BOMs and record the materials data in ADAM.

The K2 BOM build team consisted of a spares engineer, a mechanical engineer, an electrical engineer and a technical assistant.

Where data was available K2 achieved an average of approximately 30 BOMs per day.

The reviews were conducted in the K2 Perth office with the exception of 24,574 tags that were physically verified on site under the direction of K2 and the data returned to K2's office. K2 personnel then uploaded the verified make and model data into ADAM and identified and catalogued spares for the relative equipment.

New materials identified were catalogued in ADAM and assigned to the relative BOM.

On completion of the review for each facility the ADAM data was exported to the client's upload templates, error checked and submitted for loading into SAP.

A total of 58,025 equipment tags and 7,425 BOMs were reviewed and information corrected.