## **20 Questions to Answer When You're Ordering New Equipment**

Reliability Engineers need to get involved with new equipment as early as possible with a cradle-to-grave mentality. Ask these 20 questions – focused on optimizing reliability and maintainability of new equipment – to prevent the negative consequences of late engagement: chronic reliability problems, high cost, and short useful life.

| 1  | Have the equipment<br>specifications been<br>provided to the vendor<br>yet?            | 2  | What is the criticality of the new asset?                    | 3  | What are the functional<br>requirements of the<br>new equipment?  | 4  | What are the reliability<br>requirements?                                  |
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| 5  | What is the life<br>expectancy of the new<br>equipment?                                | 6  | What are the likely<br>failure modes for the<br>asset type?  | 7  | Is the asset designed<br>with maintainability in<br>mind?         | 8  | What are the<br>estimated lifecycle<br>costs?                              |
| 9  | What is the experience<br>and reputation of the<br>equipment<br>manufacturer/supplier? | 10 | Is the application of<br>this technology well<br>understood? | 11 | What are the factory<br>acceptance testing<br>(FAT) requirements? | 12 | What are the<br>commissioning<br>requirements?                             |
| 13 | How will the equipment be operated?  | 14 | How will the asset be maintained?                            | 15 | What are the training requirements?                               | 16 | What information is<br>needed to set up the new<br>equipment in your CMMS? |
| 17 | Will the asset use<br>smart PdM devices?   | 18 | What are the spare parts requirements?                       | 19 | What are the plans for<br>continuous<br>improvement?              | 20 | Is there a plan for<br>decommissioning and<br>disposal?                    |

As a reliability engineer you already have enough to do without adding bad actors to your workload as a result of poor planning and misuse of resources. Ask – and answer – these 20 questions to ensure high reliability, minimum costs, and long equipment life.

For more details, read **20 Critical Questions You Should Ask to Optimize the Reliability and Maintainability of New Equipment** by Michael Blanchard, P.E., CRE, Life Cycle Engineering

