Equipment criticality assessment is a key process in the development of any maintenance and reliability process. It provides the basis for determining the value and impact that specific equipment has on the manufacturing or production process, as well as the level of attention that equipment requires in terms of maintenance strategy and tactics.

A practical means of conducting such assessments is i-Quantum Solutions' Visual Risk tool—*which is being used by companies across the globe for equipment criticality reviews*. This innovative software solution not only provides a structured and standard method for completing this critical activity, its approach is highly interactive and engages the operational and technical staff in the process.

How Visual Risk Works

An asset register or equipment list can be exported from any maintenance management system and uploaded via Microsoft Excel to the Visual Risk Tool. ISO 14224 equipment classes and types taxonomy is provided. The tool's risk consequence and likely calibration scores and descriptions can be constructed easily for any plant (and for several risk criteria specific to an individual operation or corporation). The risk matrix display of equipment risk is viewed online for workshop reviews and interaction. The quality and data security of the criticality assessment is significantly improved—*i.e., error-free*—with the internal data checks that are performed. Typically, more than 200 equipment items can be reviewed in a day with the multidiscipline group (which makes the best use possible of personnel's time and effort).

Any applicable technical drawing or document of the equipment and system can be uploaded to the application and displayed during the review process. Reports are automatically generated in the following forms: risk matrix, risk pareto graph and criticality ranking tables. Data can be exported straight to Microsoft Excel for offline review or for upload of information into the client CMMS.

Cloning of similar equipment and associated risk scores significantly reduces the time to perform the criticality review process. A maintenance ranking and prioritization matrix can be incorporated to provide a direct link from the criticality assessment to the maintenance activity. Visual Risk can directly interface with other available analysis modules such as FMEA, FMECA,

Spares Criticality, Maintenance Tactics Review and Maintenance Task Selection. **MT**

To learn about i-Quantum's practical performance improvement processes and innovative solutions, visit www.i-qs.com , or email: enquiries@i-quantumsolutions.com