



## Integrated Manufacturing Management

Operating a synchronised IT environment; linking the top floor directly to business activities helps us to execute the manufacturing process more effectively and efficiently. This starts in the planning process office with full ERP, CAD/CAM and APS systems, and continues through to the shop floor where we electronically distribute and collect all process data.

This closed loop approach gives us full visibility and control of the entire manufacturing process and enables our customers to receive accurate data in the progress of their orders. It also provides a comprehensive history of the production process to satisfy customers' traceability requirements.

## Performance Management

Kenard is very much a Process Metrics driven business. This places great emphasis on our software applications to track Key Performance Indicators (KPIs), both financial and non-financial measures, and create an information rich environment. We benefit from a dedicated IT/Software Development department, which has allowed us to evolve an integrated and tailored approach to the collection and distribution of business and manufacturing intelligence data. Such a detailed approach helps us to align execution to strategy by closely monitoring and controlling the entire decision making lifecycle.

As a process metrics driven business our integrated manufacturing systems help us turn data into knowledge.



All processes and systems are underpinned by our four business pillars



#1 Choice for customers, investors and employees

Our thorough and analytical approach to the entire manufacturing process ensures that the integrity of your original design is maintained and products of the highest quality are delivered when you require them. The main driver for the adoption and development of new and innovative technology has always been to enable us to provide a better service to our customers.



# Knowledge is a Quality

At Kenard we have always embraced advances in technology and as digitisation takes hold of the manufacturing industry we are well placed to take advantage of the proliferation of smart manufacturing technologies. We use technology as a key enabler to support informed, event-based decision making, transparency and regulatory compliance. Manufacturing data is therefore one of our primary business assets. The British Standards Institution describes knowledge as a quality, something that you can trust and safely base far-reaching decisions on. At Kenard we have taken information and knowledge sharing to the next level with our in-house developed KIDS ERP and Electronic Batch Card software.



## KIDS ERP & Electronic Batch Card System

**Visualise** – Operators are presented with clear, prioritised and colour coded instructions for each operation. Bar chart style timelines display the live progress of planned vs actual times for each operation. Furthermore, each operation is linked to a complete document information pack, BOM, QC Pack and Work Queue for the machine. This level of information sharing between the office and shop floor empowers the operator to monitor their own progress and take action to improve performance.

**Control** – Once the Batch Card has been released to the shop floor, the software aids in the definition, standardisation and enforcement of procedures by ensuring the criticality and competence levels defined in Planning are adhered to. It is also used to trigger actions such as email alerts, in response to deviations from standard. Containment actions are taken on any rejected parts to ensure absolute quality. This level of control helps to ensure each component conforms to the exact customer specifications and quality standards.

**Integrate** – The Batch Card software is directly integrated to our KIDS ERP system. In addition to typical ERP functionality, KIDS goes one step further with a complete employee, asset and maintenance inventory to create a holistic view of our manufacturing capability. We also make this information readily available and accessible via the company intranet. By communicating this knowledge to a wide group of people simultaneously, it strengthens the connections between processes, business units and people.

**Trace** – Every stage in the manufacturing process is managed and monitored via our integrated manufacturing systems. On the Batch Card, the required skill level and approved operator ID is displayed. This content is linked directly to a detailed employee profile that, so that when an operation is stamped the system captures not only the date and time but also the operator profile for full traceability.

**Prevent** – As well as controlling and monitoring processes, the systems support the lifecycle management of our resources to minimise preventable downtime or machining errors. This includes full usage history of fixtures, machine maintenance records and instructions, all of which is auditable. The system is also configured with usage limit thresholds so when a fixture comes within this threshold email alerts are sent to appropriate personnel to inform them that it is due for inspection.

**Perform** – All the data collected throughout the production lifecycle is monitored and analysed at every level within the organisation. Key Performance metrics have been identified and are measured against for each of our four business pillars – Customers, Employees, BMS Processes and Financial. The ongoing process of analysis and review ensures that we are able to take a knowledge driven approach to continuous correction that results in real benefits for our customers.