PURE
MANUFACTURING

Pure Manufacturing is a suite of web-based applications providing the ability to easily plan, optimise, control and track the progress and status of production jobs progressing through your manufacturing shop-floor in real-time.

IMPROVES

- Productivity
- Efficiency
- Resource Utilisation
- Quotation Accuracy
- Customer Service
- Job Visibility
- Status Reporting
- Process Control

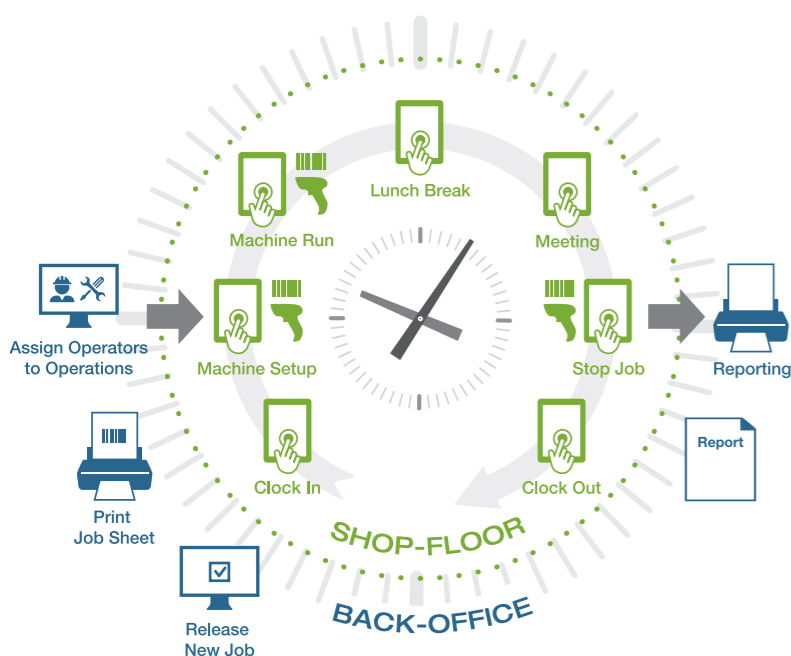**DiS**

PURE MANUFACTURING

Why Real-Time?

Manufacturing is highly dynamic, **urgent jobs are constantly received, priorities constantly change,** work scheduled to run on specific machines at specific times often does not go to plan due to many reasons including capacity constraints, overruns by other jobs, machine breakdowns, lack of tooling and materials etc.

By collecting information as it happens, **you can see your jobs flowing through production,** can be alerted when an exception occurs such as a job remaining stationary for a long time, and can gain the ability to become more proactive by taking action before an exception becomes an issue.

It is easy to determine the current loading on the shop-floor, who is working on each job, what time they started and finished a job, the quantity they completed, how many they scrapped, what their next job will be, and much more.

Who is it for?

Designed by manufacturing people for manufacturing people and intended for discrete manufacturing, engineering, service & repair businesses who are seeking to optimise their manufacturing operations through improved shop-floor planning, execution and control.

Why do we need it?

The production shop-floor is the beating heart of any manufacturing business, and its ability to produce the highest quality products at the lowest possible cost and in the shortest possible time, is key to the company's success and growth.

A closed-loop feedback system that enables accurate measurement of the actual against the planned is essential in optimising any process. The effects of adjustments are easily seen, and the ability to learn from this historical data helps to more accurately plan future work.

Pure Manufacturing plans, controls and collects real-time information directly from the production shop-floor, enabling you to become more proactive, make better informed decisions and able to 'keep your finger on the pulse of your business'.

How does it work?

It is a closed-loop, real-time system that **comprises of two major components, the back-office software applications used to plan, measure and monitor production, and the shop-floor touch-screen kiosks** used to collect the real-time status and progress of each job.

The back-office applications run on full sized desktop PCs and provides the functionality typically used by Planners, Engineers, Supervisors and Managers.

Shop-floor production operators record the time they spent working on jobs and on other indirect activities such as machine setup, meetings and cleaning, by using wall-mounted industrial touch-screens located conveniently around the production shop-floor.

Why Touch-Screens

It is often not practical to use desktop PCs on the shop-floor due to the harsh, dusty and oily environment. It is also essential that **shop-floor operators spend less time navigating the computer operating system and more time working on production.**

Just like a bank's ATM kiosk machine, our touch-screens also operate as kiosks, and are designed to be **fast and simple to use**, with only the essential screens and buttons presented to the production operators.

Operators are guided through each transaction using clear and simple prompts, and in most cases it only requires one or two touches of the screen to complete the activity.

Management by Exception

The traditional method of managing production operations has always been to generate paper reports that show a summary of the current status, but there is often an overwhelming amount of data to process and filter, which results in a data overload, and any such reports are quickly outdated.

By practicing 'Management by Exception' and assuming that everything is OK unless you are otherwise alerted, you can **reduce or eliminate information overload** and the amount of printed reports required.

Alerts can be created to monitor many events and can trigger email or pop-up messages.

Daily Production Meetings

Daily production meetings typically involve Planners, Supervisors and Managers viewing printed paper reports, or a planning whiteboard.

Instead of using printed paper reports which are often inaccurate only minutes after printing, the meeting members can **view the shop-floor plan and production status in real-time using graphical screens.**

They can collectively view the loading queue for each machine or operator, see the status of each order, and even dynamically change the priorities and loading plan. Any changes will be effected immediately, without any attendees needing to leave the meeting.
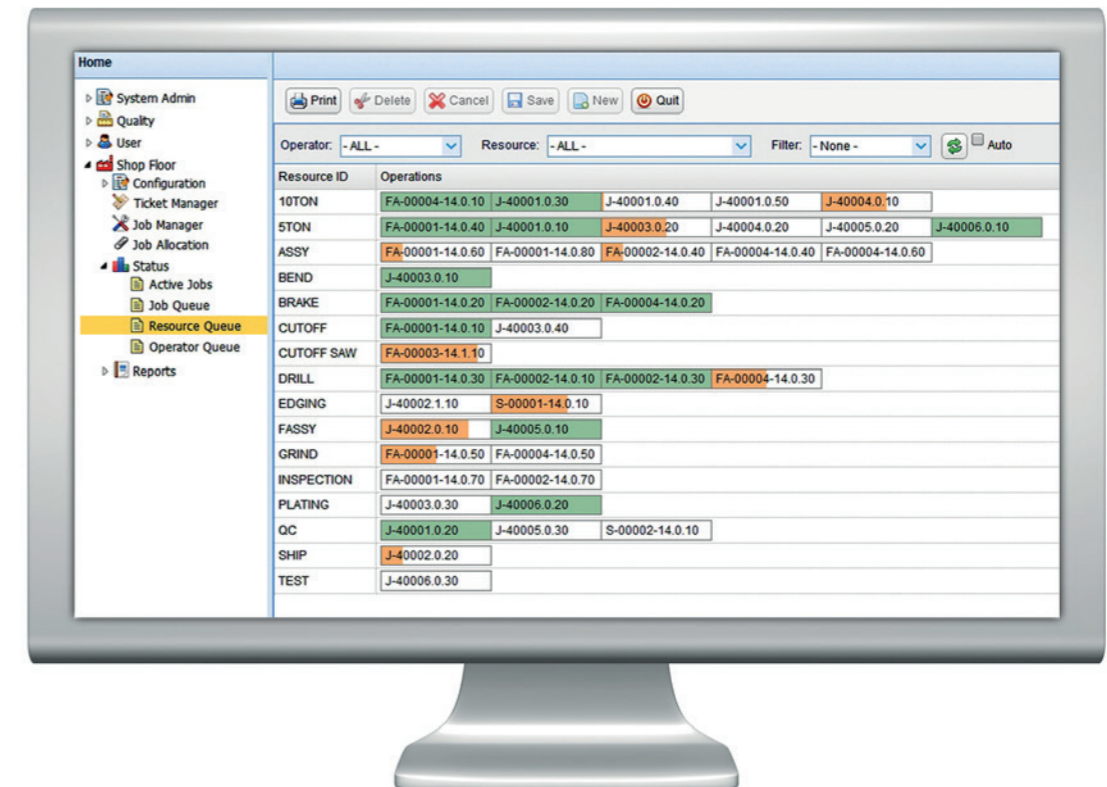
Paper-Less or Paper-Based

Pure Manufacturing can be deployed as either paper-less, paper-based or a combination of both.

In a paper-less environment, there are no printed job cards (Travellers), instead operators select the desired process from a filtered list presented to them on the shop-floor touch-screen.

In a paper-based environment, operators use the paper job card to identify the job and actual process they are working on by scanning the unique barcode printed against each process.

Production Operators are uniquely identified with an employee badge which can be encoded with either a barcode or RFID tag.

Typical Daily Transactions

Assign Operators to Operations · Machine Run · Lunch Break · Meeting · Reporting · Machine Setup · Stop Job · Report · Print Job Sheet · Clock In · Clock Out · Release New Job · SHOP-FLOOR · BACK-OFFICE

But we already have an ERP System

Many businesses today use some form of ERP or accounting software to manage their business data, but, many of these still have most of the software's features and functions focussed around the accounting and administrative functionality.

In many such systems, once a job is released into production, it disappears into a 'Black Hole' and nothing is known about its progress, status or costs, until the job is fully completed and shipped to the customer.

Because of this lack of functionality, the engineering and production departments often revert to using paper spreadsheets and other manual systems that are disconnected from the accounting software.

Often the only way to know the status of a job when a customer calls, would be to walk down onto the shop-floor and try to locate the job and determine its current status.

Pure Manufacturing can be run either as a stand-alone system where job orders are created using the back-office applications, or alternatively can be integrated with other ERP and accounting applications allowing the import of job orders and the export of shop-floor data for further processing and analysis.

MATERIAL PLANNING • PURCHASING • INVENTORY • ACCOUNTING • QUOTATIONS • SALES • ENGINEERING • SCHEDULING

SHOP-FLOOR BLACKHOLE

Who are we

Established in Singapore in 1995 by a Mechanical Engineer with fifteen years of manufacturing experience, DiGiTaL Information Systems provide software, hardware, consultancy, training and support services to Small and Medium Enterprises in the region, enabling them to embrace technology to improve productivity across their entire business operations.

What we do

Purely Manufacturing – **we specialise in the development, deployment and on-going support of enhanced productivity solutions for discrete manufacturers**, especially those who are capacity-constrained, have a low-volume, high-mix product balance, and whose nature of business is typically order-driven, for example make to order, engineer to order or repair to order.

Industry Focus

The difference between just 'software' and a 'software solution' is the skill and experience of the provider. Their experience and ability to fully understand your needs is the key to success, and will ensure that you derive the maximum benefit from the software features and functionality.

Rather than providing solutions to retail, trading, distribution, healthcare and banking, we have our sights firmly focussed on the manufacturing and engineering sectors. In fact, one hundred percent of our customer base are in manufacturing.

This focus ensures that we speak the same language as our customers, providing more attention to detail, a vast domain knowledge and allows us to better attend to our customers' needs.

With a successful track record spanning 20 years, you can be assured that we understand the manufacturing industry, and that we know what it's like to have 'swarf in the soles of our shoes'.

Other Products from DiS

Pure Cyclecount

A fully automated real-time machine data collection solution that collects machine cycles in a repetitive environment.

Pure Quality

A suite of quality management modules providing Quality Plans, Non-Conformance and Corrective Actions.

IndySoft Calibration

An industry-leading solution for the calibration and management of gauges and equipment.

Infor ERP Visual

A manufacturing-centric ERP/MES solution with fully integrated APS and multi currency accounting.

Infor Visual JobShop

An out-of-the-box 'manufacturing only' solution which integrates with popular accounting packages.