

## Features

Fully Integrated with Infor VISUAL Enterprise® Supports from 1 to 40 Machines

**Provides Real Time Information** 

Work Order Queuing

Work Order Auto-Loading

Close on Quantity Complete

Resume on Machine Activity

Time or Quantity Labour Tickets

**Un-Assigned Quantities** 

**Down Time Management** 

Machine Names & Zones

**Tooling Management** 

Two External Relay Ports

Quick-Shift Change

## Benefits

Eliminates Manual / Barcode Labour Tickets

**Eliminates Human Count Errors** 

Improves Operator Efficiency

Improves Machine Throughput through reduced Job Queues

Improves Job Visibility with Real-Time Data

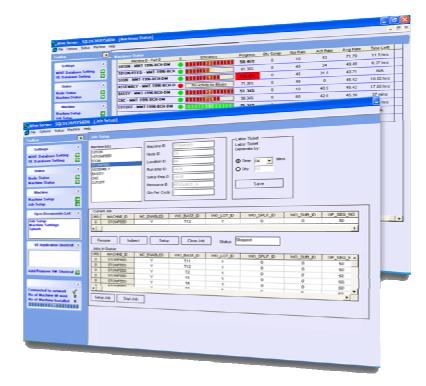
Improves Quality by Dynamically Monitoring Cycle Rates

Reduces Shop Floor Paperwork

Reduces or Eliminates Quantity
Over-Runs

**Enables Proactive Management** 





# **Real-Time Data Collection for ERP**

#### **Functional Overview**

 $\mathsf{ERPDC}^{\circledast}$  is a real-time hardware and software shop floor data collection solution designed to automatically generate setup, run labour tickets and provide real-time status for machines and equipment on the production shop floor.

It is fully integrated with the related modules in VISUAL Enterprise® including Shop Resource Maintenance, Employee Maintenance, Labour Ticket Entry, the Manufacturing Window and the Concurrent Scheduler.

It eliminates the need for manual labour tickets and provides a graphical view of machine and work order status which is updated in real time.

## How Does it Work?

It employs solid state proximity sensors or mechanical relays which are positioned on the machine or equipment to either sense the movement of the machine 'stroke' or is activated by the machine's internal controller or PLC.

Using solid state proximity sensors, machine cycle rates as fast as 10 cycles per second are possible.  $\,$ 

#### **Typical Applications**

Typical applications are metal and rubber stamping, injection and blow molding.

However any manufacturing process which produces in distinct cycles would be suitable including CNC machine tools, conveyor or hopper-based systems.

ERPDC is a cost effective solution. It is simple to install, easy to use and can be retro-fitted to most manual or automated machine which produces in cycles.

#### Real-Time Status

The Machine Status window is the heart of the system.

It provides a graphical view of every machine and every job running on the shop floor, and in real time. The machines are listed as rows, and the real time status of the work orders running on each machine is displayed in columns.

The user can decide which columns they wish to show or hide. The information which is available includes; % Completion, remaining Run Time, Dynamic Efficiency, Scrap Quantity, Standard Run Time, Actual Run Time and much more.

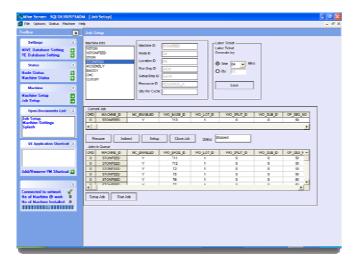
The Machine Status Window can also be viewed in full screen mode or by using an internet web browser with the possibility of allowing your customers to view their job status from anywhere in the world!

## Un-assigned Quantities

You are able to easily manage quantities produced which are not directly included into the work order's quantity complete. These include scrap, test run and over-run quantities

#### Resume on Activity

ERPDC will wait until it detects machine activity and will take different actions based on the current status. For example, if the machine is currently in setup mode and detects machine activity, it will close the setup labour ticket and open a run labour ticket, and periodically update the quantities complete. When ERPDC detects inactivity, it will generate an inactive labour ticket so that all of the machine's time can be accounted for.

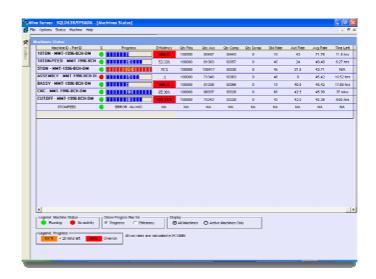


#### Quick Shift Change

You can quickly and easily change a shift with a few mouse clicks, automatically closing the labour tickets for the operators from the old shift, and creating new labour tickets for the operators resuming on the new shift.

## Machine Zones

In addition to the existing Shop Resource ID in VISUAL Enterprise®, ERPDC provides features to allow you to be able to map your production shop floor using names and zones to better visualize your shop.



#### Work Order Queuing & Auto-Loading

ERPDC will determine the jobs to be loaded onto each machine based on Visual's finite scheduler and will queue them allowing a one-click loading of the job onto the machine. If there are multiple jobs for the same part (i.e. the Engineering Master is identical) then ERPDC can be configured to automatically load the next identical work order once the quantity for the existing work order has been completed.

### Close on Quantity Complete

ERPDC will close the work order operation either when it detects that the exact quantity has been completed, or optionally, when a percentage over the required quantity is complete. It will automatically create a labour ticket for any overrun quantities.

#### Time or Quantity Based Tickets

Labour tickets are automatically generated based on run time, i.e. every minute, hour, 8 hours, or on quantity complete. If set to quantity complete then a new labour ticket will be created upon completion of a user-defined quantity, i.e every 100, 1000 etc.

#### Down-Time Management

Down Time Codes allow the tracking of indirect machine time, for activities such as Maintenance, Cleaning etc.

#### Tool Management

ERPDC allows you to effectively manage your production tooling by allowing you to record the service history, the number of cavities and by automatically recording the number of shots that each tool has been through. This allows you to determine when a tool is scheduled for redressing and allows you to keep a complete history of the tools. User Defined fields are also provided to allow the recording of additional information such as the shot weight, the percentage of crushed materials etc.

## Relay Ports

Two relay ports are provided which allow you to connect an external Siren or Light Beacon which can be configured to alert the users to certain critical events.

For example it can be configured to alert the user when a machine is idle for too long or when a machine is soon to complete the current job.