

FINALIST
EUROPEAN ELECTRONICS
INDUSTRY AWARDS
AND ELECTRONICS INDUSTRY
DESIGN AWARDS



a world

SMART



GROUP

Project

PPM-Monitoring...

**Benchmarking
your assembly process**

“Compare your  with ”



ppm-monitoring.com





There are no easy methods for companies to compare their manufacturing yields with other similar businesses. This basic procedure is a necessity to understand your own World Class Manufacturing status, Six Sigma manufacturing improvements, capital investment benefit or success of New Product Introduction (NPI). It can also be a very useful benchmark when selecting a contract manufacturer and assessing the performance of its production process.

A common question asked by many companies is “how does my process compare with other companies in terms of yield?” The information does not exist or is not easily available to small and medium volume companies due to the expense of obtaining the data.

The most common method of illustrating process yield is Parts Per Million (PPM) or Defects Per Million Opportunities (DPMO) Defective. This provides a measure of the defect level against a process stage or a specific product compared against a known number of opportunities for defects to occur. The measure of PPM defect levels in printed board assembly is one of the most common and meaningful process indicators and has been successfully used for many years in the Far East and Europe.

The SMART Group PPM Monitoring project supported by the Department of Trade & Industry (DTI) provides this information through its website www.ppm-monitoring.com. The data includes average yields for screen printing, component placement, reflow and wave soldering with reference to different PCB complexities like Fine Pitch, Ball Grid Array (BGA), Chip Scale Package (CSP) and Lead-Free Soldering with a breakdown of the process used during assembly in the participating companies.



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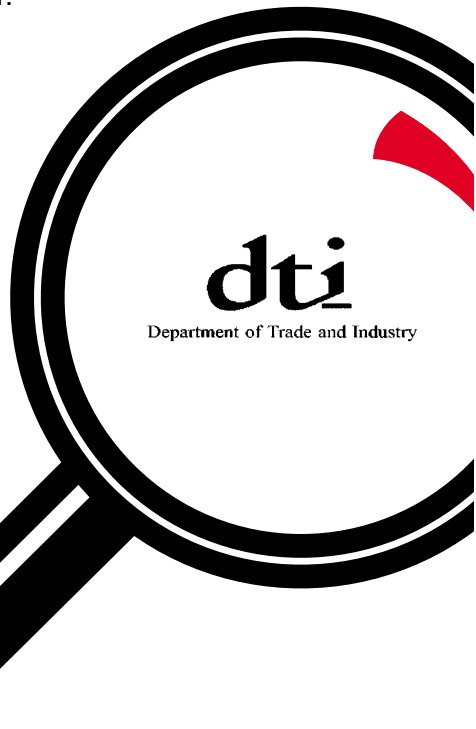


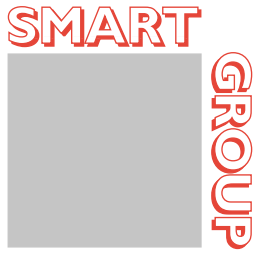
The basic monthly yield information is available **FREE**, but to benefit from a greater wealth of data, all that is required is a little time to contribute to the project. To find out more on the benefits of the project, how you can participate or obtain support from the SMART Group, visit the website or email us on info@ppm-monitoring.com

Future steps in the SMART Group PPM Monitoring project will focus on the incidence of specific defect types, components most affected and lead-free. This will allow design engineers to predict manufacturing yields based on component selection and ultimately manufacturing cost.

What else does www.ppm-monitoring.com offer engineers?

- Interactive Process Defect Guides for:-
 - Screen Printing
 - Component Placement
 - Reflow and Wave Soldering
- Free download of all PPM Monitoring documentation and standards
- Archive of Monthly Defect Levels
- Training videos on how to monitor your process
- Engineers comments on the benefits of PPM Monitoring





A world 1st SMART Group project

dti

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