

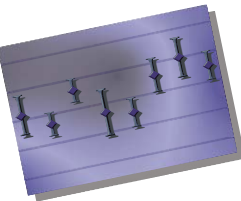
# SAMPLES

Samples are selected for low standard deviation and are fully randomised. Unless otherwise specified, the samples are MDF.

Thin samples have a thickness of less than 5mm.

Thick samples have a thickness of between 15 and 30mm.

Low formaldehyde emission samples will generally comply with European Class 1 and Class A.



## Testing Variability

There are three major components affecting the standard deviation calculated from a number of test results from a single production run:

1. the product
2. the methodology
3. the test equipment

One of the objectives for laboratories taking part in the LabCheck programme is to ensure that their method and machine components are minimised and similar to other well controlled laboratories.

Many product specifications specify a 95% pass rate. The following diagrams indicate the benefit of lower standard deviation in this circumstance.

Fig 1 Normal Distribution - lowering the SD and effect on pass rate - before factory alters the process.

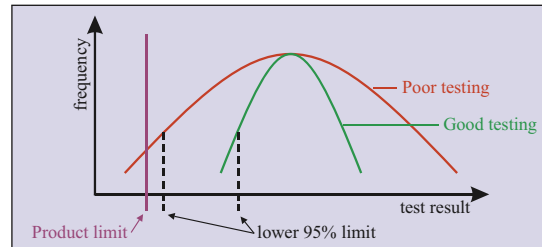
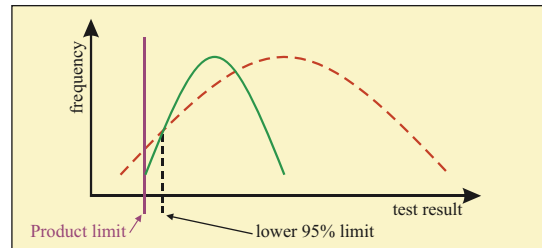


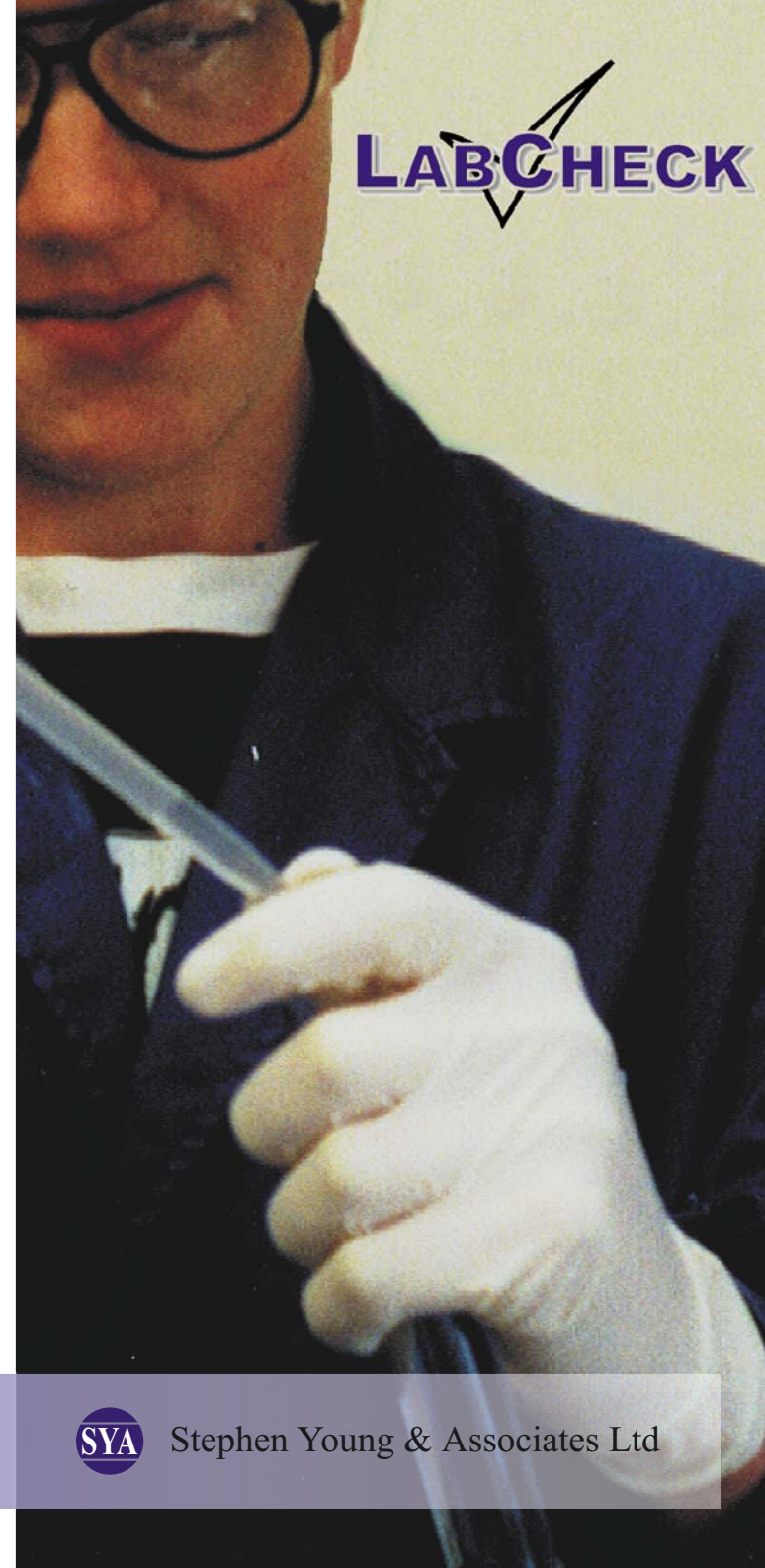
Fig 2 The process reset - the dotted line indicates the former distribution of results when the laboratory had a high SD. The solid line shows the factory has lowered the mean but still achieves a 95% pass rate due to the reduced SD.



### LabCheck

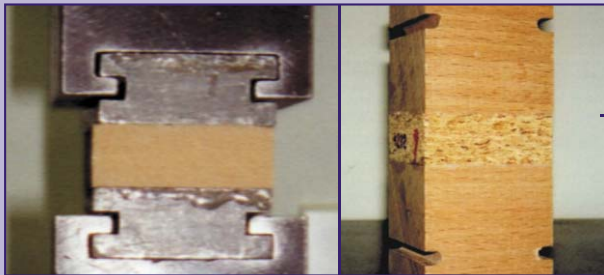
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The LabCheck inter-laboratory trial service is a laboratory proficiency testing programme for timber and bio-based products. LabCheck enables laboratories to benchmark their performance against other laboratories in similar industries.



## **WEBSITE**

[www.timbertest.com](http://www.timbertest.com)

The TimberTest website provides further industry information as well as more about the LabCheck testing service. Members of LabCheck can order testing services on-line.

## **BENEFITS**

In this competitive industry, LabCheck clients can compare their laboratory testing performance with other similar laboratories.

Laboratories giving incorrect means or high standard deviations will often result in higher production costs in the factory.

Used regularly, LabCheck can identify possible problems with testing procedures, enabling a reduction in standard deviations and correction of means.

## **PROCESS**

At regular intervals, randomised samples are sent to participating laboratories. The laboratories test the samples and return the results to LabCheck. Results are tabulated and plotted against other laboratories using the service. To ensure participants cannot be identified, each laboratory is assigned a confidential code number.

A full report is sent to all laboratories indicating how they compare with the others taking part in the trial.

### *The advantages of using*



- ◆ Independent and confidential
- ◆ Regular comparisons with other laboratories
- ◆ Helps ensure optimal quality and minimised production costs
- ◆ Wide range of tests and standards
- ◆ Valuable addition to quality management systems
- ◆ Use the TimberTest website to place orders



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