



# LEAN SIGMA MANUFACTURING GREEN BELT

## 14-Day Programme commences October 14th 2008 ~ Leamington Spa



INTRODUCTION
<p>This programme is designed to provide delegates with an integrated approach for improving the flow, capability and consistency of manufacturing processes, thereby reducing waste, increasing customer satisfaction and improving business performance. The robust 'DMAIC' approach provides a common structure for improvement, within which a wide range of techniques can be applied. Improvement projects undertaken by delegates are a key feature of this Green Belt programme, enabling them to 'learn by doing', and providing an immediate return for their companies.</p>
OBJECTIVES
<ul style="list-style-type: none"> <li>To develop a clear understanding of value, waste &amp; process variability</li> <li>To ensure that the essential foundations are in place for successful Lean Sigma deployment</li> <li>To provide a truly integrated, structured improvement methodology</li> <li>To introduce a range of techniques for improving process flow and efficiency, &amp; reducing variability within manufacturing processes</li> <li>To ensure the sustainability of process improvements</li> <li>To achieve significant improvements during the training programme</li> </ul>
ACCREDITATION PROCESS
<p>This programme includes an accreditation process that includes a project, multi-choice examination and project presentation.</p>
PROGRAMME FEES
<p>£3,600+VAT per delegate, includes:</p> <ul style="list-style-type: none"> <li>All materials</li> <li>Lunches and refreshments</li> <li>Accreditation</li> </ul>

PROGRAMME CONTENT			
Lean Sigma Essentials			
September 16	September 17	September 18	September 19
<p><b>Introduction to Lean Sigma</b></p> <ul style="list-style-type: none"> <li>Programme introduction</li> <li>Objectives &amp; origins of Lean Sigma</li> <li>The value of an integrated approach</li> <li>Understanding value, waste &amp; process variability</li> <li>Developing a Lean Sigma improvement strategy &amp; implementation plan</li> <li>Policy deployment &amp; performance measurement</li> </ul>	<p><b>Lean Sigma Foundations</b></p> <ul style="list-style-type: none"> <li>Building a sustainable CI improvement culture</li> <li>5S workplace organisation</li> <li>Creating a visual workplace</li> <li>Daily management</li> <li>Structured approaches to improvement</li> <li>Sources &amp; types of manufacturing Problems: flow &amp; consistency</li> <li>The DMAIC approach – a single structure</li> <li>Lean Sigma roadmap &amp; toolkit</li> </ul>	<p><b>DMAIC Structured Improvement Methodology</b></p> <ul style="list-style-type: none"> <li>DMAIC improvement exercise</li> <li>Defining &amp; scoping the problem</li> <li>Mapping, measuring &amp; assessing processes</li> <li>Analysing the facts &amp; finding the root causes</li> <li>Improving the process with creative solutions</li> <li>Implementing, sustaining &amp; replicating the gains</li> <li>Reviewing performance</li> </ul>	<p><b>Initiating Lean Sigma Projects</b></p> <ul style="list-style-type: none"> <li>Project identification, scoping &amp; selection</li> <li>Project planning &amp; getting started</li> <li>Project reviews &amp; support</li> <li>Measuring project success</li> <li>Action planning</li> <li>Block 1 assessment, summary &amp; review</li> </ul>
Focus On Consistency			
October 14	October 15	October 16	October 17
<p><b>Measuring Process Variability</b></p> <ul style="list-style-type: none"> <li>Using the DMAIC process to improve process variability</li> <li>Basic statistics</li> <li>Introduction to Minitab</li> <li>Measurement System Analysis (R&amp;R Studies)</li> <li>Graphical analysis</li> <li>Capability analysis</li> </ul>	<p><b>Analysing Process Variability</b></p> <ul style="list-style-type: none"> <li>Statistical analysis techniques</li> <li>Introduction to hypothesis testing</li> <li>Introduction to regression analysis</li> <li>Identifying key process input variables using Design of Experiments (DOE)</li> </ul>	<p><b>Improving &amp; Controlling Process Variability</b></p> <ul style="list-style-type: none"> <li>Improving process performance using DOE</li> <li>Introduction to screening techniques &amp; Taguchi experiments</li> <li>Controlling process variability using SPC control charts</li> </ul>	<p><b>Leadership &amp; Change Management</b></p> <ul style="list-style-type: none"> <li>Managing organisational change</li> <li>The dynamics &amp; process of change</li> <li>Building commitment to change</li> <li>Leading, building &amp; coaching effective improvement teams</li> <li>Action planning</li> <li>Block 2 assessment, summary &amp; review</li> </ul>
Focus on Flow			
November 18	November 19	November 20	November 21
<p><b>Value Stream Mapping &amp; Improving Process Flow</b></p> <ul style="list-style-type: none"> <li>Using the DMAIC process to improve process flow</li> <li>Introduction to Value Stream Mapping</li> <li>Drawing &amp; evaluating the current state map</li> <li>Lean techniques for improving process flow</li> <li>Creating the future state map</li> <li>Developing the improvement plan</li> </ul>	<p><b>Improving Overall Equipment Effectiveness</b></p> <ul style="list-style-type: none"> <li>Measuring &amp; improving Overall Equipment Effectiveness</li> <li>Total Productive Maintenance (TPM)</li> <li>Implementing autonomous maintenance</li> <li>Rapid Changeover Techniques (SMED)</li> <li>4-Step changeover reduction</li> <li>Changeover improvement activity</li> </ul>	<p><b>Mistake Proofing &amp; Cellular Manufacturing</b></p> <ul style="list-style-type: none"> <li>Achieving zero defects with Mistake Proofing (Poka Yoke)</li> <li>Mistake Proofing in manufacture, design &amp; the office</li> <li>Factory layout &amp; cellular manufacturing</li> <li>Introduction to lean supply chains</li> <li>Factory simulation &amp; improvement activity</li> </ul>	<p><b>Project Closure &amp; Sustainability</b></p> <ul style="list-style-type: none"> <li>Project closure &amp; sign-off</li> <li>Building sustainability (process audits, ongoing performance reviews etc)</li> <li>Green Belt certification requirements: final project reports &amp; presentations</li> <li>Action planning</li> <li>Block 3 assessment, summary &amp; review</li> </ul>
	January 8 '09	January 10 '09	
	<p><b>On-Site Project Review</b></p> <ul style="list-style-type: none"> <li>Project review at delegate's workplace</li> <li>Coaching &amp; support for final report &amp; presentation</li> </ul>	<p><b>Certification Event</b></p> <ul style="list-style-type: none"> <li>Final project presentations</li> <li>Programme summary &amp; review</li> <li>Award of certificates</li> </ul>	