



Black Belt Process Improvement

April, 1-2-3 2025: Six Sigma
May, 6-7-8 2025: Six Sigma
June, 3-4-5: Lean



Context

You wish to take things to the next level, after following a Green Belt Six Sigma or Process Improvement Methodologies training, and deepen your knowledge of applicable advanced statistical techniques? Don't miss the opportunity & sign up for our Black Belt Six Sigma training. The techniques mentioned below will allow you to zoom in on difficult process & quality problems.

What can you expect

We provide insight into the statistical tools that have proven to be of great help in solving everyday problems in an industrial environment:

- Decide whether the results of 2 or more groups (e.g. machines, suppliers, 2 control methods, ...) are different and / or better.
- Find important process variables that can influence the output and the quality of the product and even make predictions about the quality.
- Perform experiments: many people involved in process improvement regularly carry out tests. Over time, "smart" methods such as Design of Experiments have been developed to provide maximum insight into the influence of parameters and their possible interactions on the desired outputs with a limited number of tests. With the new, revolutionary "Definitive Screening Designs" you will really understand what it means to get a maximum of information with a minimum of tests.
- Apply the Lean toolbox in a structured and logical manner (avoiding cherry picking).

Target group

This program is focused on those people who have experience in projects and who are involved in the improvement of complex manufacturing or design processes.

Green Belt level is a prerequisite.

Our approach

- The Black Belt training program consists of 3 work sessions each of 3 consecutive days.
- Each session offers a mix of theoretical foundation and practical exercises.
- Each session offers the opportunity to exchange experiences with other participants.
- At the end of the training there will be an exam. After achieving a final score of 70% or more, the participant is awarded a 'Black Belt Training Certificate'.
- After the training programme, it is possible to make use of a project coaching approach, consisting of the following elements, upon agreement:
 - Intake interview to help select the right project, increasing the chances of success
 - 2 coaching sessions after each training session or ad hoc help with data analysis, DoE set-up, emerging issues, etc.
 - Preparation and evaluation of the project story board for certification.



Programme Six Sigma

- Recap of the basic statistics and extended with statistics used with discrete outputs (good-bad situations).
- The hypothesis tests, both for continuous and for discrete outputs, are practiced and complemented with the non-parametric tests, which are very useful alternatives for classical hypothesis testing (Wilcoxon, Mann-Whitney, Kruskal-Wallis).
- The applications for advanced regression analyses are explained. This includes the combination of discrete and continuous input variables, the non-linear regression and the logistic regression for use with discrete outputs (good-bad situations).
- The Principal Component Analysis is the trigger for Big Data analysis and is used in those many cases where ordinary regression is not allowed or even fails.
- Design of Experiments (DOE), Response Surface Methodology and the top of the bill: the new Definitive Screening Designs that form the bridge between the Screening designs and Optimisation designs. Split plot Designs are explained. These are used when there are so-called Hard-to-Change factors in the experiment.
- Gage R&r, a special DoE that is used to determine the suitability of a measuring system, is stripped of all its secrecy. The ANOVA type II method used here is also explained.
- The influence of autocorrelation on the calculated control limits is explained in the advanced Statistical Process Control module.

Programme Lean

We provide insight into more technical tools from the lean toolbox that have proven to be of great help in solving everyday problems in an industrial environment:

- Productivity improvements (>20%) in production environments:
 - By installing standard work
 - Through visualisation and load levelling
 - Through line balancing exercises
- Breakthrough improvements in quality systems through application of Poka Yoke (Zero defects)
- How SMED can substantially (>50%) improve rebuild time, but also how to optimise shutdown (preventive maintenance) using the same methodology.
- Improved supply chain performance (less stock and improved OTIF)
- How do we organise breakthrough improvement ourselves?
- How can we deal with complexity and variation in customer demand and gain a strategic advantage?

Black Belt Certification

Participants receive, after following the training and passing the exam, a Black Belt Training Certificate. If they want to receive a Black Belt Certificate, they need to successfully perform a process improvement project according to the DMAIC-roadmap. Stanwick can coach them during this project execution and after participating in the final presentation of the project hand them their Black Belt Certificate. Please do not hesitate to contact us if you want to receive more information on project certification.

Testimonials about the training

"If statistics were explained in the same practical way in our school study, more people would deal with data more professionally."

"A course that I hated at the university suddenly becomes a passion and my most important tool for process improvement."

"The importance of statistical process control is seriously underestimated and it is not understandable that it will no longer be applied."

"Unbelievable how ignorant and clumsy we dealt with data before this training."

"It is unbelievable how we can better understand and make our process easier to understand with a very limited number of tests (Design of Experiments)."

"The pallet of tools provided now allows us to find the causes and find solutions for practically all problems."

"The tools provided in the Green Belt are now also much clearer to us."



Trainers



Tim Beghin:

Senior management consultant, assists companies in improving manufacturing and non-manufacturing processes. He has hands-on experience in executing complex projects within a multi-cultural setting and applying Lean principles in different domains (pharmaceutical, chemical, food, metal). He is also skilled in coaching design thinking and innovation workshops and organising events. He graduated in Bioengineering in Cell and Gene Technology at the VUB and Master in Business Economics from the University of Ghent. He is a Lean and Six Sigma Black Belt and a certified Design Thinking workshop facilitator.



Tom Van der Straeten:

Managing partner, senior management consultant, coaches companies and is a professional trainer in the field of Continuous Improvement (Black Belt Lean and Six Sigma), Total Productive Manufacturing and Lean Transformations in the End-to-End Supply Chain. He has experience in production, maintenance and supply chain management in the electrical pharmaceutical, automotive and lighting industries in an international environment as well as in services. He has a Master's Degree in Civil Engineering (Electro Technical Engineering) and has a post gradual degree in Business Administration at the KUL



Joachim Vermeeren:

Senior management consultant, coaches companies in the field of continuous improvement via Lean Manufacturing and Problem Solving. He has a wide background in the automotive industry with in depth knowledge of logistics processes. He is an experienced trainer of Lean Principles and Problems Solving and gathered his knowledge internationally.

Practical information

DATES

April, 1-2-3 2025: Six Sigma
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TIMING

08h30 till 17h00

LOCATION

TBD

PRICE (excl VAT)

Six Sigma (6 days): € 4.000
 Lean (3 days): €2.000
 All-in (9 days): €5.500
 (Discount of 35 %, starting from second participant of same company). Stanwick is recognised for payment through the KMO-portefeuille.

PRICE INCLUDES

Price includes course material and lunch.
 Overnight stays are not included.

LANGUAGE

The course language is Dutch.

I WANT TO REGISTER MYSELF

Mail to lieve.grymonprez@stanwick.be

I will pay the registration fee, indicating Black Belt Process Improvement 2025.

On the account number
 BE91 2850 2218 8676
 BIC GEBABEBB

Your registration will be considered final up on acceptance of the registration amount. In case of cancellation, communicated is only allowed by email or by letter and is only possible up to 8 days before the training. If not, the registration money is not rechargeable. You can - however - be replaced by a colleague, on condition the required information reaches us in time.