



2-day LEAN

Col EXPERIENCE

1-day INDUSTRY 4.0 **EXPERIENCE**

IMPROVE
PRODUCTIVITY,
INCREASE QUALITY,
BUILD MOMENTUM,
GROW YOUR TEAM



TARGET GROUP

The workshops are designed for managers & executives interested in operations improvement.

In need to train a large number of Supervisors & Foremen? All workshops can be customized to fit this target group as well. Just inform us in advance and we can set up a date to suit your schedule. ON MOBILE: PRESS & HOLD



ROI EXPERIENCE

FROM THE ALL-IMPORTANT
PROCESS DESIGN...

→ GOAL

Learn how to implement Lean to improve productivity, increase quality, build momentum, and grow your team

→ TOPICS

Experience the benefits of Lean in 4 immersive rounds of real production from push to pull How to improve any work system: Task breakdown, waste identification, build-in-quality, line balancing & re-layout, connection of upstream processes
When to do what: Implementation sequence & big picture

2 day, 5600RMB

ROI EXPERIENCE

... TO HOW TO MAKE SENSE OF INDUSTRY 4.0

→ GOAL

Learn how to implement Industry 4.0 to add new capabilities to your factory & increase overall performance

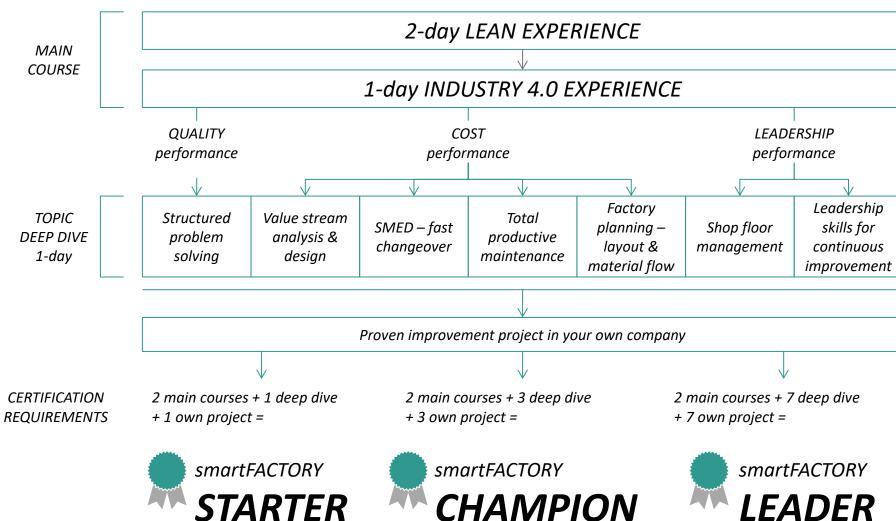
→ TOPICS

Opportunity map: Find out how to increase performance by adding Industry 4.0 skills to your factory. Get to know who is ahead: Examples of real-life smart factories. Hear about the technology drivers behind. AND MOST IMPORTANT: Learn about an implementation sequence which works for you. Bonus experience sensor application & connectivity

1 day, 3800RMB



ROI CERTIFICATION PROGRAM



MAIN COURSES	COL	IRSE LAN	GUAGE >	<i>SEPT</i> English	<i>OCT</i> Chinese	<i>NOV</i> English	<i>DEC</i> Chinese	<i>JAN</i> English	<i>FEB</i> Chinese
ROI LEAN EXPERIENCE	REGISTER ON MOBILE: PRESS & HOLD	2 day	5600 ¥	26 27.9.	15 16.10.	12 13.11.	10 11.12.	7 8.1.	18 19.2.
ROI INDUSTRY 4.0 EXPERIEN	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	28.9.	17.10.	14.11.	12.12.	9.1.	20.2.
TOPIC DEEP DIVE	Register 6 we	eks in advar	nce: 10% discou	ınt. 4 week	s in advand	ce: 5% disc	count.		
Structured problem solving	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	/	18.10	/	/	/	21.2
Value stream analysis & design	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	/	19.10	/	/	/	22.2
SMED – fast changeover	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	/	/	15.11	/	/	/
Total productive maintenance	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	/	/	16.11	/	/	/
Factory planning – layout & material flow	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	/	/	/	13.12	/	/
Shop floor management	REGISTER ON MOBILE: PRESS & HOLD	1 day	3800 ¥	/	/	/	14.12	10.1.	/
Leadership skills for continuous improvement REGIS ON MOBILE: PRESS 8		1 day	3800 ¥	/	/	/	/	11.1.	/

DURATION

FEE

DATES

TRAINING ROSTER

No suitable date? Workshops can be arranged upon request. Inquire here

2-day LEAN ROI EXPERIENCE

TIME	MIN	DAY 1	DAY 2
8:30	90	 Welcome, introduction, motivation Introduction of line, task practice First production round 	• Experience <i>TAKT</i> Exercise: Line balancing & re-layout
10:00	30	Break	Break
10:30	90	• Experience WASTE IDENTIFICATION Exercise: Task breakdown, VA/NVA, improvement	• - run & review -
12:00	60	Lunch	Lunch
13:00	90	• Experience <i>STABILITY</i> Exercise: Poka Yoke, build-in-quality, standardization	 Experience PULL Exercise: Kanban, Supermarket, Milkrun, connection of upstream process
14:30	30	Break	Break
15:00	90	• Experience FLOW Exercise: Batch size 3, batch size 1	 The 8 basic questions Big picture Summary
16:30	30	Wrap-up of the day	Go & see shop floor Kunshan
17:00	-	Finish	

1-day INDUSTRY 4.0 ROI EXPERIENCE

TIME	MIN	DAY 1
8:30	90	 Introduction: What makes a factory smart? Examples: 9 questions (and answers) to make your factory smarter Why now? Technology driver of Industry 4.0
10:00	30	Break
10:30	90	 Use-case experience sensor application & connectivity IT architecture for I4.0, horizontal & vertical integration
12:00	60	Lunch
13:00	90	 How to implement: Digitalization sequence Exercise with opportunity map
14:30	30	Break
15:00	90	Use-case experience <i>information</i> : Real-time production monitoring
16:30	30	Wrap-up of the day
17:00	-	Finish



SmartFACTORY ≪ ROI STRUCTURED PROBLEM SOLVING

GOALS

To understand how to solve quality problems so they never occur again

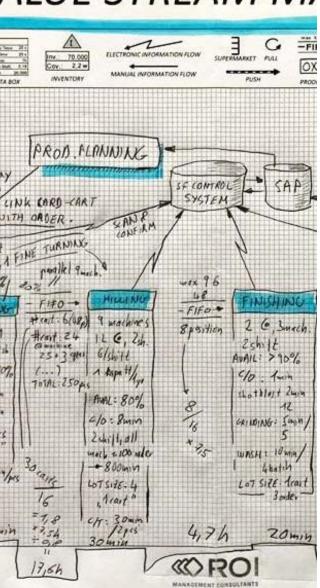
TARGET GROUP

Quality Managers, General/Plant Managers, Engineering Managers

CONTENT

- Typical problems with problem solving, the importance of the closed loop
- Exercise Challenger launch: Find the broken loop
- Importance of framing
- Exercise mixed up parts: Framing problems right
- Orientation about methods and tools for closed-loop problem solving
- How to make an accurate problem statement
- Exercise broken weld: Point of cause, direct cause, root cause
- Exercise bearing hole: Cause & effect, single-factor experiments,

ALUE STREAM MA



smartFACTORY

ROI VALUE STREAM MAPPING

GOALS

To understand how to use value stream mapping to achieve end-to-end improvements

TARGET GROUP

General/Plant Managers, Production Managers, Logistic Managers

CONTENT

- Value stream mapping benefits & scope
- How to identify the value stream to tackle first
- Principles for creating a value stream map, standard symbols
- Exercise: How to do a current state value stream map
- Understanding takt time and how to calculate it
- Understanding the principles of pull systems
- Exercise: How to design a future state value stream
- Improvement approach: How to get from current state to future state



ROI SMED – FAST CHANGEOVER

GOALS

To understand how to reduce changeover times of equipment to *be able to reduce batch* sizes

TARGET GROUP

Engineering Managers, General/Plant Managers, Production Managers

CONTENT

- Motivation behind the ability for quick changeover
- Fast changeover terms: SMED, ZERO, OTED
- How to do an accurate set-up time analysis
- How to identify internal and external tasks
- Step by step to a fast changeover: ECRS
- Exercise: Fast changeover



*** ROI TOTAL PRODUCTIVE MAINTENANCE

GOALS

To understand how to implement a holistic maintenance system to *improve uptime of equipment*

TARGET GROUP

Maintenance Managers, General/Plant Managers, Production/Engineering Managers

CONTENT

- Motivation: Why total productive maintenance (TPM)
- Understanding the 8 pillars of TPM
- Pitfalls during implementation, and how to avoid
- Where to start: Machine classification
- Introduction to Overall Equipment Effectiveness (OEE)
- Exercise OEE Waterfall: How to accurately calculate OEE
- Comparison of roll-out strategies



ROI LAYOUT & MATERIAL FLOW PLANNING

GOALS

To understand how to design a factory layout with *optimized space usage and minimal material flow distance*

TARGET GROUP

General/Plant Managers, Production/Engineering Managers, Logistic Managers

CONTENT

- Requirements capture: Current situation & development opportunities
- Concept design: From big picture to detail, from inside to outside, first ideal, then real
- Types of layout: Functional, islands, box, flow, flow & in sequence
- Layout planning considerations: Line design, Warehouse location, Dock, Admin, levels of automation
- How to do: Production map, product-process matrix, space usage, transport matrix
- 8 steps to develop the best-fit layout



smartFACTORY Control Control

GOALS

To understand how to run shop floor management routines to increase overall performance

TARGET GROUP

General/Plant Managers, Production/Engineering/Quality/Logistic Managers

CONTENT

- Elements of a shop floor management system
- Importance of shop floor management routines for continuous improvement
- Tools for on-site management, communication & organization, visualization & transparency, standardization & process capability, problem solving & continuous improvement
- Leadership roles in shop floor management: Go & see, No jumping past subordinates



ROI LEADERSHIP SKILLS FOR CONTINUOUS IMPROVEMENT

GOALS

To understand the leadership skills required to strengthen *subordinates in continuous improvement*

TARGET GROUP

General/Plant Managers, Production/Engineering/Quality/Logistic Managers

CONTENT

- Why only few companies become real masters of continuous improvement
- Overview: Leadership skills for continuous improvement
- Exercise: Leadership styles & impact
- Gold standard: What makes a good interaction & asking questions right
- What to work with: Leadership tools. What to do: Leadership tasks. How to interact:
 Leadership behavior for continuous improvement
- The 3Rs: Real place, real thing, real facts

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1-day INDUSTRY 4.0

EXPERIENCE



3D PRINTING INDOOR MAPPING

