

GOOD  
PRAC  
TICES

EFQM  
Leading Excellence

# Passion 4 Excellence

*Be part of the network*

EFQM EXCELLENCE  
AWARD 2017  
AWARD WINNER

 **BOSCH**

# System CIP with IPN

## WHY: Strategy@BhP

<p><b>ZU KU NFT</b></p> <p><small>WIR IM BHP EXZELLEZ INNOVATION ZUKUNFT</small></p>	<p><b>Menschen</b></p>	<p><b>Führung</b></p>	<p><b>Organisation</b></p>
<p><b>INN OVA TION</b></p> <p><small>WIR IM BHP EXZELLEZ INNOVATION ZUKUNFT</small></p>	<p><b>Digitale Fabrik</b></p>	<p><b>Technologie- portfolio</b></p>	<p><b>Ideenschmiede</b></p>
<p><b>EXZ ELL ENZ</b></p> <p><small>WIR IM BHP EXZELLEZ INNOVATION ZUKUNFT</small></p>	<p><b>ISEC</b></p>	<p><b>Leitwerk</b></p>	<p><b>Fertigungswerk</b></p>

**Leadplant responsibility to achieve EXCELLENCE in processes and costs**

# System CIP with IPN

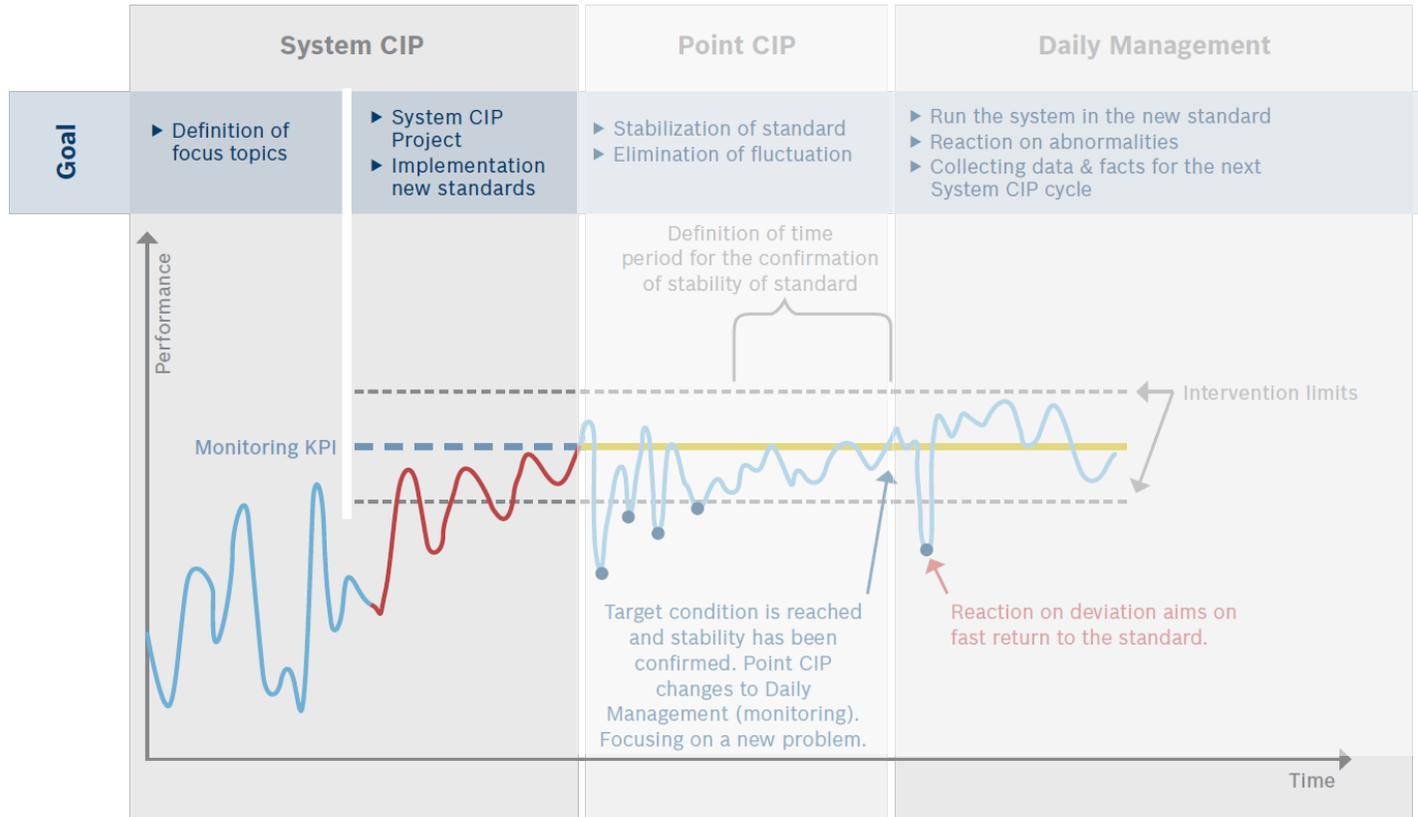
## WHY: Strategy@BhP

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**Leadplant responsibility to achieve EXCELLENCE in processes and costs**

# System CIP with IPN

## WHAT: Continuous Improvement System



Standardized, interlocked and worldwide continuous improvement according Bosch Production System

# System CIP with IPN

## WHAT: System CIP IPN in a Nutshell

**2002** First IPC meeting

**90** Participants

**Trust**

Leadplant survey in 2017  
Feedback round each meeting

**3** Days Workshop in different plants:

Information  
Discussion  
Decisions

**11** Plants

**Standardized**

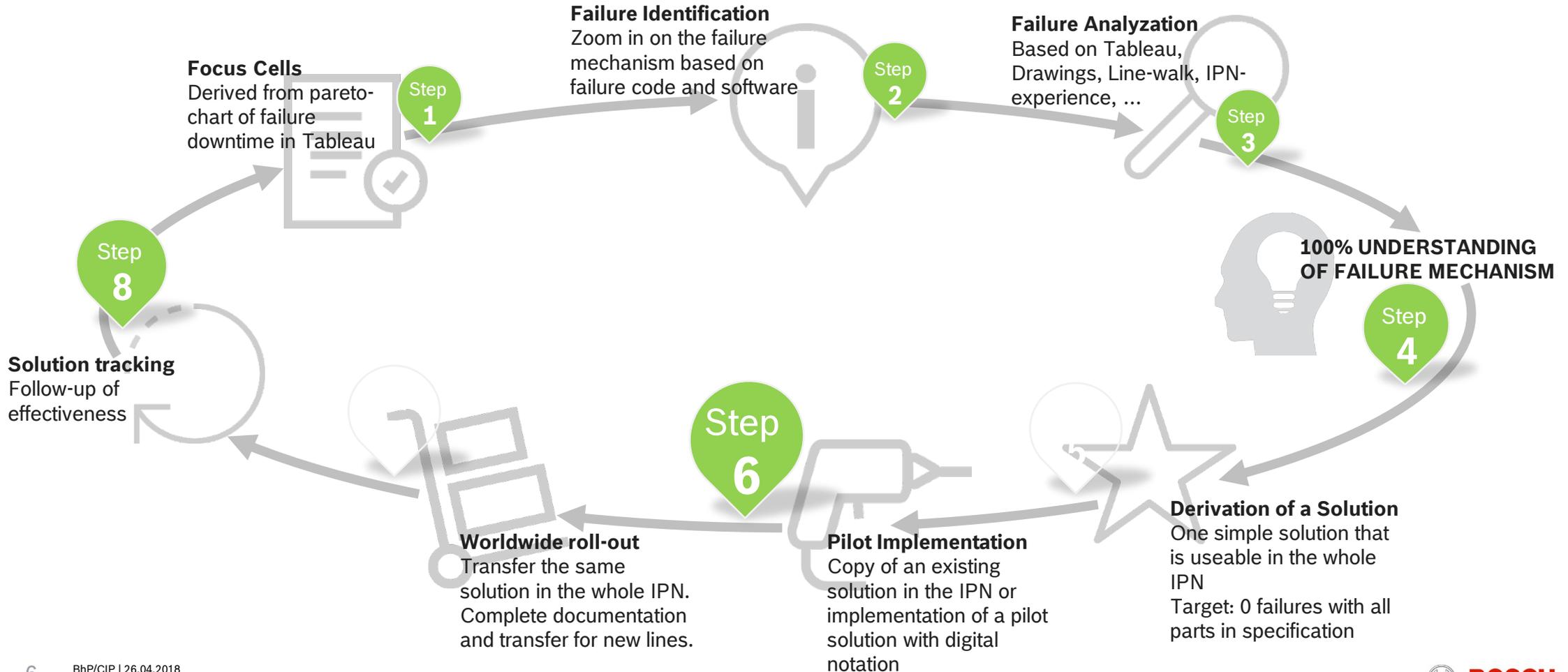
Equipment  
Processes  
Common Targets

**2** Meetings per year



# System CIP with IPN

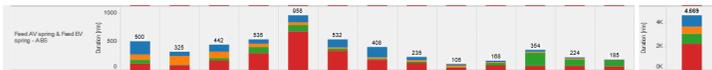
## RESULT: Value Add



# System CIP with IPN

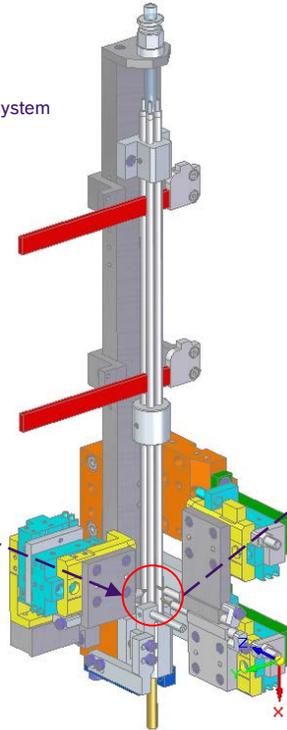
## RESULT: Value Add

BhP-TEF 4-column-system

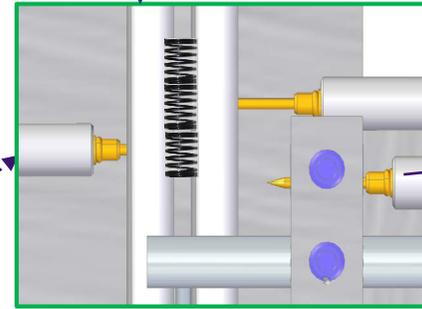


Error Type	Failure count [num]
Feed AV spring   part not in separator	432,2
Feed EV spring - ABS   part not in separator	440
Feed EV spring - ABS   process sequence not fini..	819
Feed AV spring   consecutive error	738
Feed AV spring   limit counter	464
Feed AV spring   process sequence not ready	157,0
Feed EV spring - ABS   consecutive error	85
Feed EV spring - ABS   locking cover open	74,0
Feed EV spring - ABS   Zufuehrung Feder Verein..	55,0
Feed AV spring   locking cover open	57,0
Feed EV spring - ABS   Zufuehrung Feder Verein..	24,3,0
Feed AV spring   separator - D005 K193: dejamin..	19,16,0

Downtime based on tableau



Short- and long-term video analysis  
By using GoPros / Smart Cams



Analysis of separation process



Wear on separation-needle



**Failure identification** through tableau and pareto



**Failure analysis** of feeding and separation process



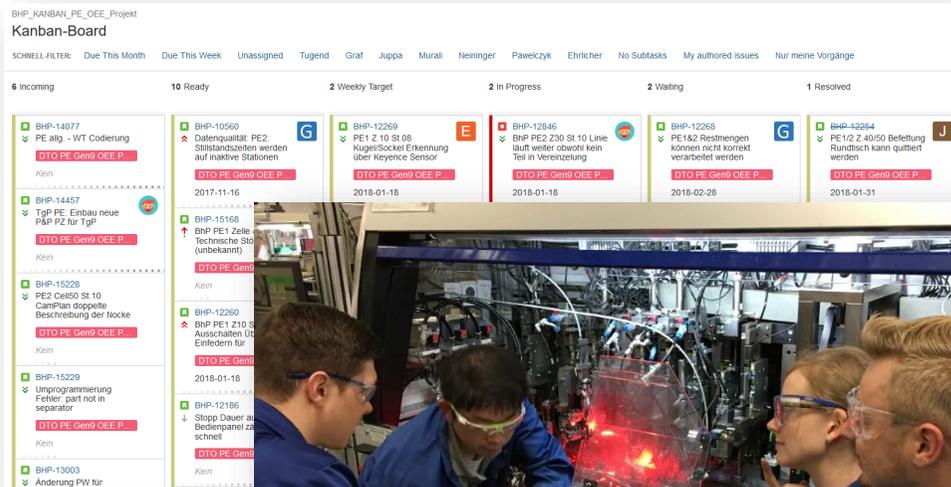
**Detailed analysis** of hardware, software as well as process parameters



**Target= 100% failure understanding** and decuction of activities

# System CIP with IPN

## Following Steps: Continuous to work as **ONE TEAM** ww!



- ▶ Using different **tools** according needs of **team** like sharepoint, OneNote, JIRA..
- ▶ Reduce **IPC frequency** in our value stream from 6 to **3 months (!)**
- ▶ Meet on-site in each plant to ensure “go to gemba”

Increase efficiency in problem-solving by using ww know-how and competencies for PE9

THANK YOU