

# EXCELLENCE IN MECHANICAL DESIGN

BY

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CEO VALCON DESIGN

Valcon

○ HALIFAX

○ OSLO  
○ STOCKHOLM  
○ ODENSE  
○ COPENHAGEN  
○ LONDON  
○ PRAGUE

Established in 2000

VALCON = VALUE CONSULTING

○ SHANGHAI

○ DELHI  
○ PUNE  
○ BANGALORE  
○ CHENNAI



# ROBUST DESIGN - THE VALUE IS CLEAR

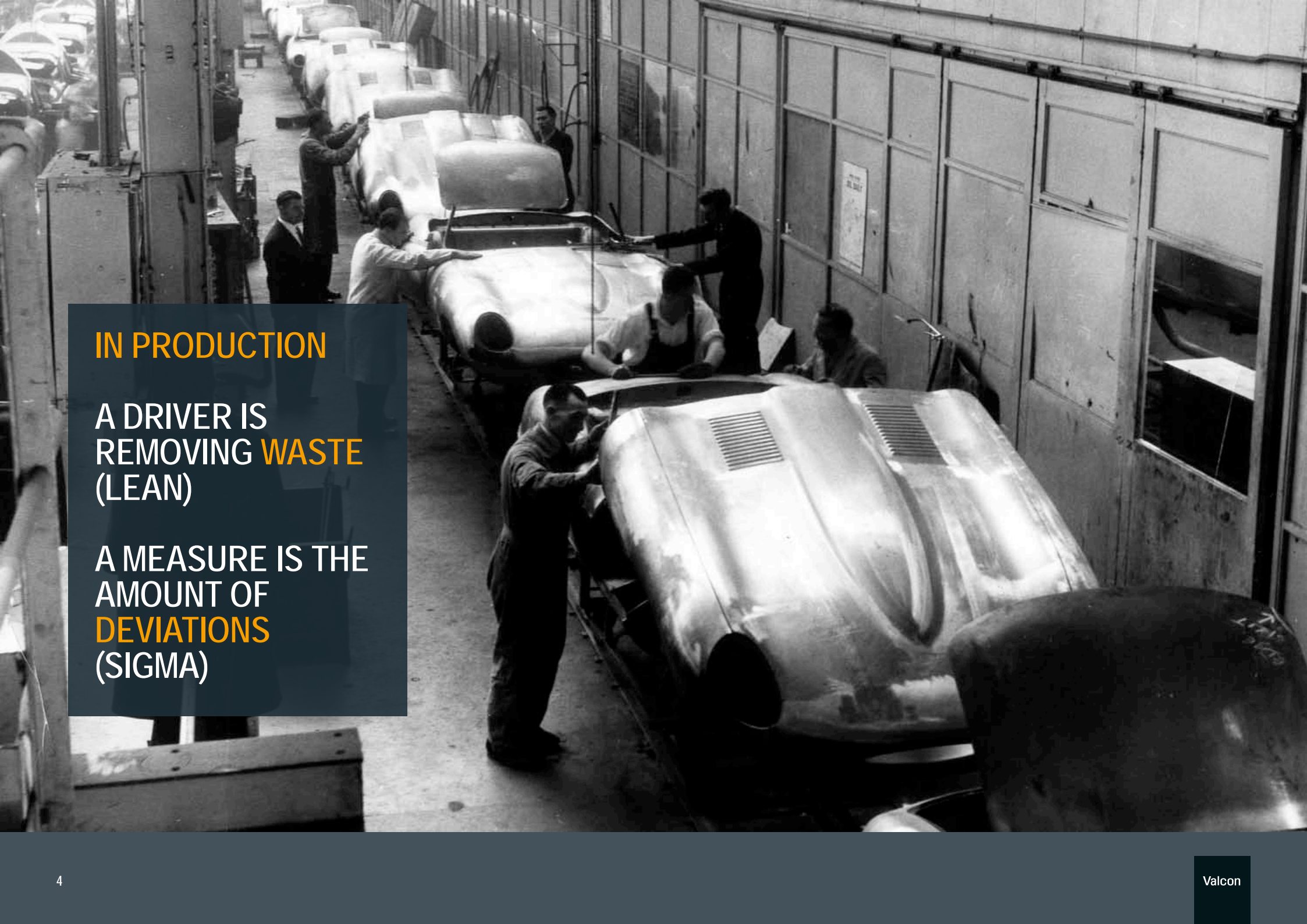
BUT WHAT ARE THE DESIGN DRIVERS TO ACHIEVE IT?  
AND HOW DO WE MEASURE IT IN THE DESIGN DETAIL?

INCREASED **PREDICTABILITY**  
IN PRODUCT PERFORMANCE

HIGHER **FIRST PASS YIELD**  
AND REDUCED  
COMPONENT COSTS

IMPROVED **WORK FLOW** IN  
R&D AND PRODUCT  
DEVELOPMENT PROCESSES

IMPROVED **INSENSITIVITY** TO  
PRODUCTION TOLERANCES  
AND AMBIENT CONDITIONS



## IN PRODUCTION

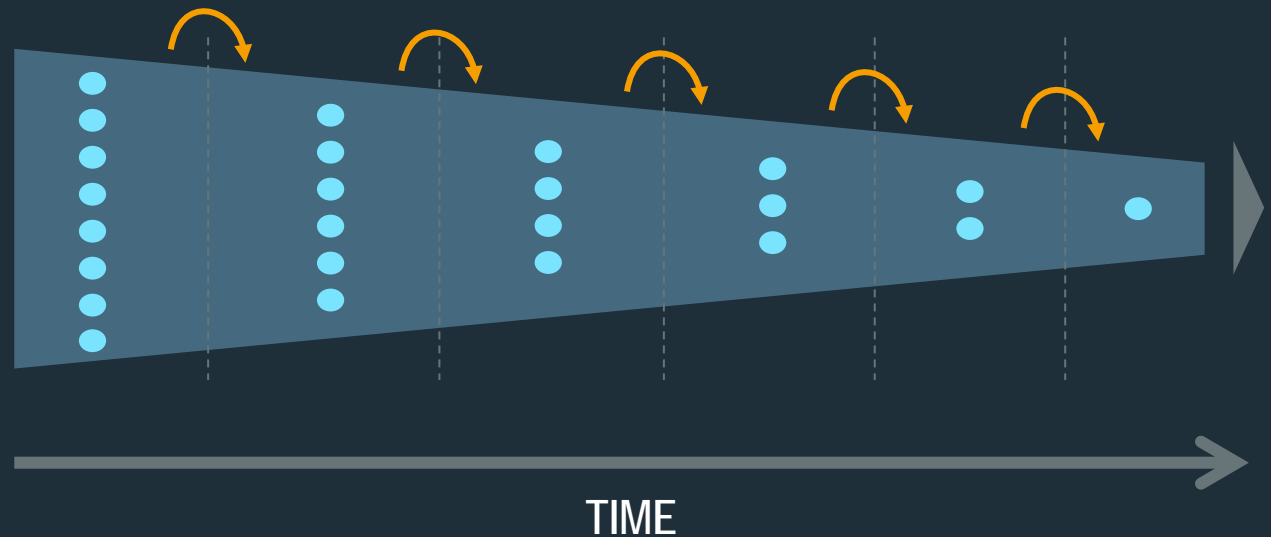
A DRIVER IS  
REMOVING **WASTE**  
(LEAN)

A MEASURE IS THE  
AMOUNT OF  
**DEVIATIONS**  
(SIGMA)

## IN MECHANICAL DESIGN

A DRIVER IS DESIGNING  
VARIANTS AND  
SELECTING BY  
**EXPERIENCE**

A MEASURE IS  
SIMULATE, BUILD AND  
TEST THE  
**PERFORMANCE**

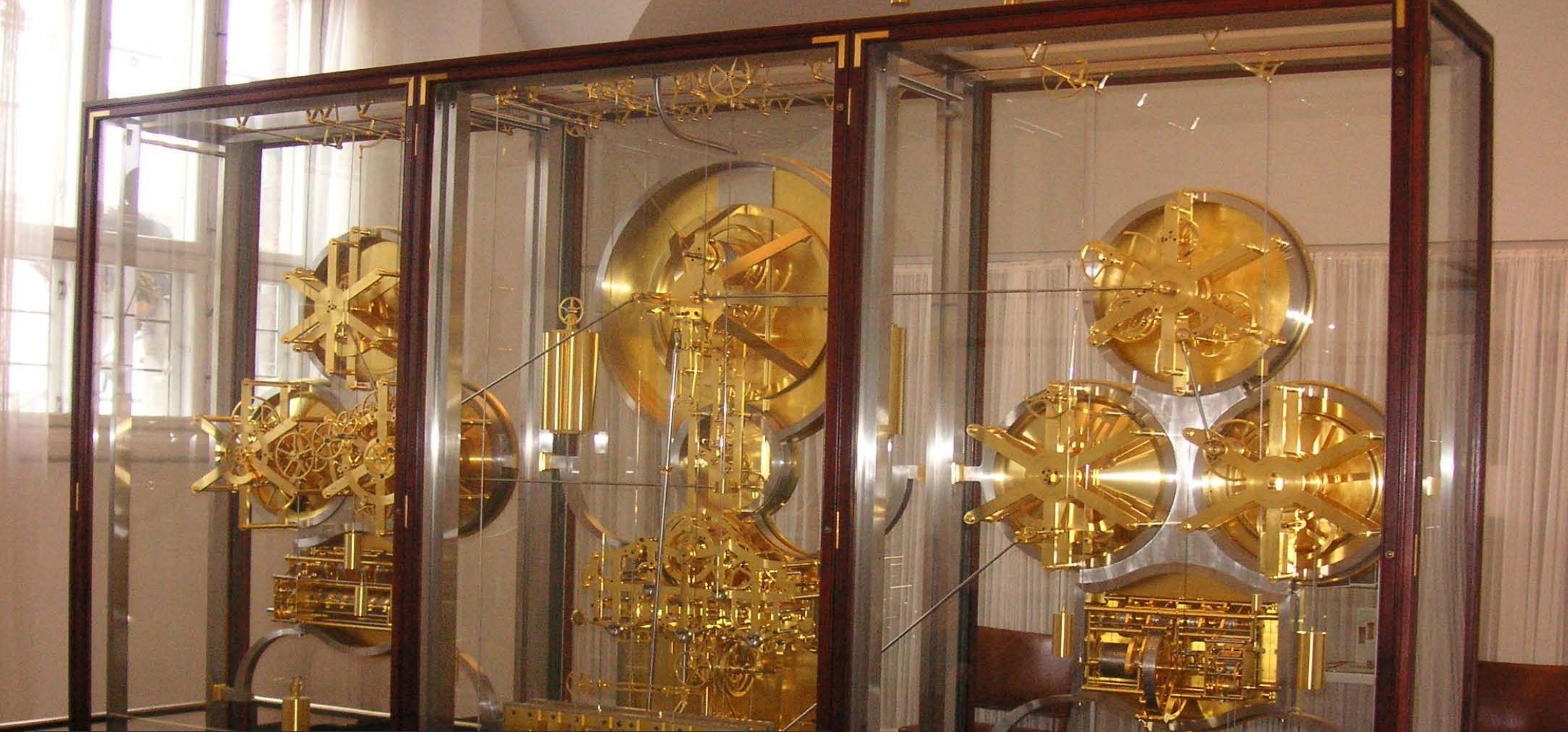


# ROBUST DESIGN

DRIVEN BY GEOMETRY KINEMATIC INSIGHT  
MEASURED BY DESIGN PREDICTABILITY INDEX<sup>®</sup>  
IS A WAY TO IMPROVE THE WAY WE WORK



**IN DENMARK WE HAVE A STRONG  
TRADITION FOR GEOMETRY  
EXCELLENCE**



**JENS OLSENS  
WORLD CLOCK**  
**ONE OF THE MOST ACURRATE  
MECHANICAL CLOCKS IN THE WORLD**





**HC ØRSTED SATELLITE**  
BY FAR THE WORLD'S MOST  
ACCURATE SATELLITE FOR  
MEASURING MAGNETIC FIELDS



**INSULIN DEVICES, WIND TURBINES, PUMPS, HEARING AIDS, THERMOSTATS, CAR STEREO, LEGO AND MANY MORE PRODUCTS**

**ALL RECOGNISED AS BEST OF THERE KINDS**

# BASED ON

A STRONG DANISH TRADITION FOR DESIGN

-  
GEOMETRY KINEMATIC INSIGHT

-  
OUR VISION TO IMPROVE DESIGNS IN THE MARKET BY MAKING THE  
ROBUST DESIGN PROCESS LESS ITERATIVE AND LESS EXPERIENCED  
BASED

-  
AND A STRONG BELIEF THAT THE TIME HAS COME TO CHANGE THE  
WAY WE WORK IN DEVELOPMENT

**VALCON DESIGN IS EXCITED TO PARTICIPATE  
AND CONTRIBUTE TO ISoRD 2014**