



Kim Villefrance

Key Competences and Tools

| | | | | | | | | | |
|------------------------|---|---|---|---|---|---|---|---|---|
| Project Management | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Mechanical Engineering | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Lean innovation | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Quality Management | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

Name Kim Villefrance
Location Aarhus

Work Experience

Year 2015 -
Company MEFU
Title Mechanical Engineer, Consultant

Year 2012 - 2015
Company SGM A/S
Title Mechanical Engineer

Year 2009 – 2011
Company Classic Rebuild
Title Owner

Cases

Task
Lead designer and construction of the world's first IP65 rated moving head LED spotlight at SGM.

Process

Starting with a blank sheet of paper, everything had to be developed from scratch. Test rigs were made to validate Ingress Protection at the start of the project. As the products had to be used on cruise ships, protection against corrosion was a big issue. It meant that choice of material and surface protection had to be tested in salt chambers.

During the project, sourcing of suppliers and parts were also my task, which meant a lot of contact to Chinese suppliers.

Results

Product was launched less than a year after start-up of development. During development, more features was requested, which was implemented successfully.

The product received great reviews from the industry, and is sold worldwide, as the only one available for outdoor use as well as mounted in fountains/theme parks.

Task

Design/construction of a 160T hydraulic press, for steel wheel manufacturing for Starco Europe.

Process

Making larger and larger wheels required a new horizontal hydraulic press, for flaring edges of steel bands. Research showed that it would be more economical to develop a press in-house, instead of buying one.

FEM analysis was used throughout the project, to validate strength, bending and optimization of weight.

The deadline on the project was very tight, as it would be needed in production within one year.

Results

Development and production was completed within time, and all functions were satisfactory. It was later converted to a 200T press, merely by adjustments made in the pump construction.

Task

Design and construction of fixtures and robotic equipment for decoration machines for LEGO System.

Process

As new products were developed, product specific decoration fixtures must also be made. In close collaboration with decoration technicians, the fixtures are designed with high production output in mind.

FOR MORE INFORMATION
PLEASE CONTACT:

Mads Stisen
Mads@mefu.dk
(+45) 61 33 31 52

KONSULENTHUSET
MEFU

3D parts of the products are used to design fixtures, which are later CAM machined, using a sub supplier.

Results

All projects was delivered in time, and was functioning correctly approved by Site Acceptance Tests.

Education

| | |
|--------------------------------|--------------------------------------|
| Year | 2007 |
| Field of study | AP Graduate in Production Technology |
| Educational institution | VIA University College, Horsens |

FOR MORE INFORMATION
PLEASE CONTACT:

Mads Stisen
Mads@mefu.dk
(+45) 61 33 31 52

KONSULENTHUSET
MEFU