

# INVESTING IN INDUSTRY 4.0 KURUDA ENGINEERING SDN BHD

## Kuruda Engineering opted for higher business efficiencies



Since its incorporation in 1966, Kuruda Engineering specialises in producing customised design for automation, customised heater fabrication, thermocouples and resistance temperature detectors (RTD)'s sensors. More than just designing, Kuruda Engineering extended their services from designing to manufacturing on broad product lines ranging from temperature sensor to industrial heater. With commitment in delivering best customers' satisfaction and product quality, Kuruda Engineering aims to be a pioneer in the industry and to develop more sophisticated equipment in this field.



## CHANGES IN SCALABILITY

In effort of bringing the company closer to its goal, Mr. Michael has something on his mind that is to adopt automation into his manufacturing process. The idea is so much in parallel with the concept of industry 4.0. It was no surprise that Mr. Michael showed tremendous support towards industry 4.0 and his anticipation for the transformation is genuine.

"We shouldn't be afraid of investing in the implementation of Industry 4.0 as the long-term benefits it could bring are far beyond the resources that have to be tendered. When automation comes in, it massively enhances productivity and cost-saving by relying less on manpower which in turn brings promising ROI."

*Michael Yong,  
Managing Director of Kuruda Engineering*

## ERRORS WITH LETHAL CONSEQUENCES

One of the most interesting projects Kuruda Engineering did was implementing camera detection system in BP Oil Refineries. The oil and gas industry require state of art technology to avoid costly and dangerous emission or oil spills. The camera detection system helps to pinpoint oil leaks before mishap happens and service is affected. Before implementing the advanced system, they are depending on men's naked eyes in identifying defects hence resulting in high chance of quality rejection.

## ADOPTING NEW TECHNOLOGY

Kuruda Engineering adopted SOLIDWORKS 3D CAD to design the camera detection system including building frames, camera systems, setting up control panel, positioning and installation. SOLIDWORKS allowed the engineers to see the actual design and details of the machine assembly intuitively. This immediately reduced design error and prompted more accurate designs which lead to substantial time and cost-savings. Transferring 3D models to 2D drawings was also a simple process, allowing designers to come out with assembly or part drawings easily for fabrication.

## BETTER COST EFFICIENCY AND CUSTOMER EXPERIENCE

Kuruda Engineering experienced a reduction of approximately 50% in cost spent in designing. The visualisation functionality which prompted Kuruda Engineering's upgrade to the latest version of SOLIDWORKS also allowed them to visualise and validate the designs, ensuring highest quality of product. Photorealistic rendering capabilities in SOLIDWORKS for 3D parts and assemblies also built a professional and lasting impression to their customers as compared to 2D drawings.

## PARTNERING WITH IME

"IME has been there helping out the industry for a few decades by providing us with the proper engineering software and complete total solution platform that we needed to come out with the best design. We have known IME since we started doing 3D design and continuous partnership with IME will heighten the success in our research and design."

*Michael Yong,  
Managing Director of  
Kuruda Engineering*