## **NDEX5**

## Industrial Equipment Design Suite

Sustainability by design



### Industrial Equipment Design Suite

#### DESCRIPTION

Simplify and streamline your design process, ensuring that even if you are facing a skills gap or resource shortage, you can still produce reliable, customer-tailored solutions with ease.

Transform the way you design industrial equipment with cutting-edge, AI-powered tools and generate innovative, cost-effective and resilient product designs.

This AI-powered suite enables your business to effortlessly make simulations easy through the use API and UI and gather data from those simulations. leverage it for optimisation in mechanisms and dynamic machines.

This suite enables you to overcome the challenges of manual design methods, set a new standard in machine construction and align your products with market demands.



#### MAIN BENEFITS

- Optimises the product design considering wear evolution
- Shortens the design development time
- Analyses product behavior in early-stage designs
- Increases machine operation accuracy and efficiency
- Reduces product time-to-market



The AIDEAS project has received funding from the European Union's Horizon Europe programme under grant agreement No 101057294.

**AIDEAS Machine Design Optimiser (AIMDO):** Define the key design parameters in multi-physical systems, enhancing machine performance as required for each scenario, through AI.

**AIDEAS Machine Synthetic Data Generator (AIMDG):** Synthesize large datasets through simulations for the analysis of the machine design.

**AIDEAS CAx Addon (AICAx):** Take of advantage of a set of APIs and UIs supporting the integration of AI-assisted optimisation modules into CAx systems.

#### **USE CASE**

Meet BBM, an extrusion blow moulding (EBM) machine manufacturer that is paying more and more attention to ecological and sustainable aspects. Using the **AIDEAS Industrial Equipment Design Suite**, BBM will be able to **reduce machine end-of-life costs by 15%** and **shorten the design cycle times by 20%.** 



Moreover, this suite will enable them to also **reduce machine downtime**, **energy consumption** and **extend the machine's lifecycle**. This will grant the company the opportunity to enhance the agility, sustainability and resilience of EBMs through their entire life cycle.



**LEADING DEVELOPERS** 





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# Simplify your design process

