



for immediate release

ABB Leverages ESTECO Technology to Handle the Complexity of Mechatronic System Design

A white paper illustrates how multidisciplinary optimization helps resolve major challenges in the automation industry

Trieste (Italy), 12th March 2015 – **ABB Group**, a global leader in power and automation technologies, makes the most of optimization technology to **design better and more efficient** products and systems. The company chose **modeFRONTIER**, the multidisciplinary optimization platform developed by ESTECO, to **handle the complexity** that automation and control systems entail in a variety of applications, as a [recently published white paper](#) illustrates.

“The ability to **manage mechatronics** is becoming increasingly important – says Daniel Wappling, Global R&D Manager at ABB – as simulation encompasses **more and more systems** and not just components: the impact of the **mechanics, electronics and software** all need to be accounted for.”

Ranging from robot design to hardware-in-the-loop optimization and collecting **two optimization projects** performed by **ABB researchers**, the white paper provides an overview on how optimization technology helped **maximize mechatronic product performance**, meet **reliability** demands and ease overall **environmental impact**.

ABB Group covers almost every segment of the power generation and industrial process control market with its products and systems. Everyday, the 8,500 engineers and scientists at ABB Research & Development are committed to meeting the automation industry’s ever-increasing demand for **reducing energy consumption** and **improving reliability and performance**. Looking at **system interdependencies** from the earliest concept phase is crucial for an **effective strategy** that aims at

maximizing product performance, meeting reliability demands and easing the environmental impact of their products.

“In the case of the **Twin Robot Xbar Press Tending Robot System** – says Daniel Wappling, Global R&D Manager at ABB – with modeFRONTIER we obtained a **12% energy saving**, without compromising performance. Obviously, this is something that **can’ t be done by hand**, you need an optimization software to do it.”

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About ESTECO SpA

ESTECO is a pioneer in numerical optimization solutions, specialized in the research and development of engineering software for all stages of the simulation-driven design process. Perfecting engineering and reducing complexity in the design process is our vision. Founded in 1999, the company is headquartered in Area Science Park in Trieste (Italy) and currently serves more than 250 international clients including BMW, Daimler, Ferrari, FIAT, Ford Motor Company, Honda, Mazda, Toyota. modeFRONTIER, the company’ s key product, is a multidisciplinary and multiobjective optimization platform capable of streamlining the engineering process through innovative algorithms and integration with leading simulation software. In numerous industries, ESTECO technology has become essential to increasing the understanding of cost/performance factors and reducing product development time. www.esteco.com