



03

—
01 Multibody simulation is invaluable for fast and reliable design of products with complex mechanics, such as this pantograph.

—
02 Parametric analysis of a mechanical system.

—
03 Multibody models of different topologies of a medium-voltage circuit breaker.

smart and fast option: Simulate the mechanism in a multibody tool and simulate only the critical part in the FEM tool, with input from the multibody simulation.

Circuit-breaker design is one area where ABB puts multibody simulation to good use. Circuit breakers are very complex mechanical systems that can be described by analytic formulas only in a limited way. A multibody tool is a must if the dynamics of such a complex system need to be analyzed →03. Using a multibody tool, it was possible to compare three circuit-breaker topologies within two months. Without the tool, three demonstrators would have had to be built – a costly and lengthy process.

Multibody simulation tools provide valuable support during the development of complicated mechanical systems. The tools accelerate the development process significantly and help avoid any unpleasant surprises during production by characterizing the influence of production tolerances. •

SUBSCRIBE

How to subscribe

For a subscription, please contact your nearest ABB representative or subscribe online at www.abb.com/abbrevreview

ABB Review is published four times a year in English, French, German, Spanish, and Chinese. ABB Review is free of charge to those with an interest in ABB's technology and objectives.

Stay informed...

Have you ever missed a copy of ABB Review? Sign up for the e-mail alert at abb.com/abbrevreview and never miss another edition.



Please note that when you register for this alert, you will receive an e-mail with a confirmation link. Please ensure that you have confirmed your registration.

IMPRINT

Editorial Board

Theodor Swedjemark
Head of Corporate Communications

Adrienne Williams
Senior Sustainability Advisor

Reiner Schoenrock
Technology and Innovation

Bernhard Eschermann
Chief Technology Officer, ABB Process Automation

Amina Hamidi
Chief Technology Officer, ABB Electrification

Andreas Moglestue
Chief Editor, ABB Review
andreas.moglestue@ch.abb.com

Publisher

ABB Review is published by the ABB Group.

ABB Ltd.
ABB Review
Affolternstrasse 44
CH-8050 Zürich
Switzerland
abb.review@ch.abb.com

Partial reprints or reproductions are permitted subject to full acknowledgement. Complete reprints require the publisher's written consent.

Publisher and copyright ©2021
ABB Ltd.
Zürich/Switzerland

Printer

Vorarlberger
Verlagsanstalt GmbH
6850 Dornbirn/Austria

Layout

Publik. Agentur für
Kommunikation GmbH
Ludwigshafen/Germany

Artwork

Indicia Worldwide
London,
United Kingdom

Disclaimer

The information contained herein reflects the views of the authors and is for informational purposes only. Readers should not act upon the information contained herein without seeking professional advice. We make publications available with the understanding that the authors are not rendering technical or other professional advice or opinions on specific facts or matters and assume no liability whatsoever in connection with their use.

The companies of the ABB Group do not make any warranty or guarantee, or promise, expressed or implied, concerning the content or accuracy of the views expressed herein.

ISSN: 1013-3119

abb.com/abbrevreview

