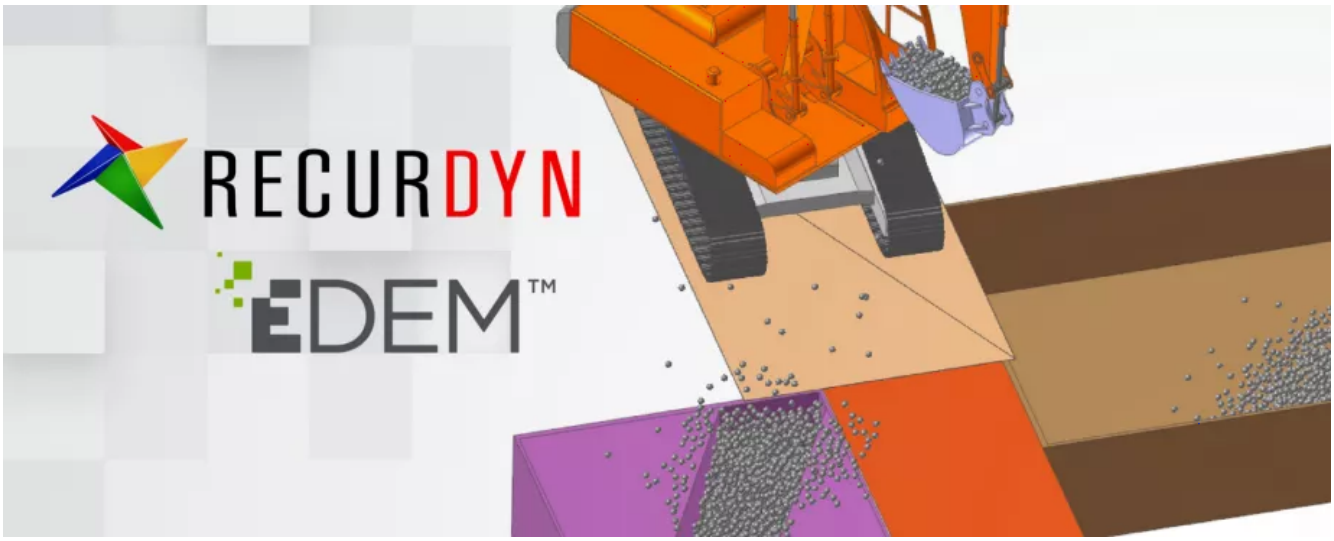

Produktneuheiten

EDEM announces new co-simulation solution with multi-body dynamics package RecurDyn

Bearbeitet von am 31. Okt. 2017
Edinburgh, Vereinigtes Königreich –

EDEM, the bulk material simulation specialist, today announced the availability of a co-simulation solution between EDEM software and RecurDyn, a multi-body dynamics package from FunctionBay. This solution enables engineers designing heavy equipment such as excavators, ploughs and off-road vehicles to introduce realistic bulk material behaviors to their multi-body dynamics simulations - offering unrivalled insight into how material loads are transferred throughout a mechanical system and providing key insights into equipment-material interactions.

EDEM is capable of recreating the behavior of a wide range of real-world bulk materials from gravel, sand and rocks; to compressible soils, clays, and highly cohesive ores as well as powders. Users can select materials from a library of over 40,000 ready-to-use materials models or create customized ones to suit specific applications needs. With an easy-to-use interface, highly-optimized CPU & GPU solvers and powerful analysis tools, **EDEM** delivers realistic predictions of material loads and forces acting on equipment parts during operation. During simulation, the coupling transfers the realistic material loads from **EDEM** directly into ***RecurDyn*** where they are used to calculate the effect on equipment dynamics. The updated dynamics are then passed back to **EDEM** to provide realistic force-feedback throughout a simulation.By including high-fidelity loads in

their ***RecurDyn*** multi-body dynamics simulations engineers do not need to rely on hand calculations or assumptions to represent equipment loads and they get greater confidence in their designs. This also means that extensive what-if analysis can be performed without the need to build expensive prototypes. Engineers can explore different scenarios and easily compare designs for a range of different materials and different maneuvers early in the design cycle. This provides greater insight into equipment performance and enables more design optimization improvements to be made. It also gives confidence that equipment will perform as expected in specific conditions.***Richard LaRoche***, Chief Executive Office of **EDEM** commented:*"When designing heavy equipment, being able to accurately predict the loads and forces acting on equipment is key to optimizing equipment performance and durability. By coupling EDEM with RecurDyn engineers no longer have to rely on "rules of thumb" and assumptions to get realistic material loads in their multi-body dynamic simulations".****Michael Jang***, Chief Executive Office of **FunctionBay** added:*"Our partnership with **EDEM** means our **RecurDyn** users can get access to an accurate representation of the loads and forces acting on equipment. This capability brings greater insight into equipment performance and results in increased design accuracy and reduced prototyping costs."*The ***EDEM-RecurDyn*** coupling is available as part of EDEM 2018 and RecurDyn V9R1 which have recently been released.***About EDEM******EDEM*** *is the market-leading Discrete Element Method (DEM) software for bulk material simulation.* ***EDEM*** *simulation technology is used for 'virtual testing' of equipment that handles or processes bulk materials in the mining, equipment manufacturing and process industries. Companies worldwide use* ***EDEM*** *to optimize equipment design, increase productivity, reduce costs of operations, shorten product development cycles and drive product innovation.* ***EDEM*** *is a global company established in 2003 as* ***DEM Solutions Ltd.*** *and headquartered in Edinburgh, UK with offices in USA and Japan and supported by a network of channel partners in South America, South Africa and Asia-Pacific.*