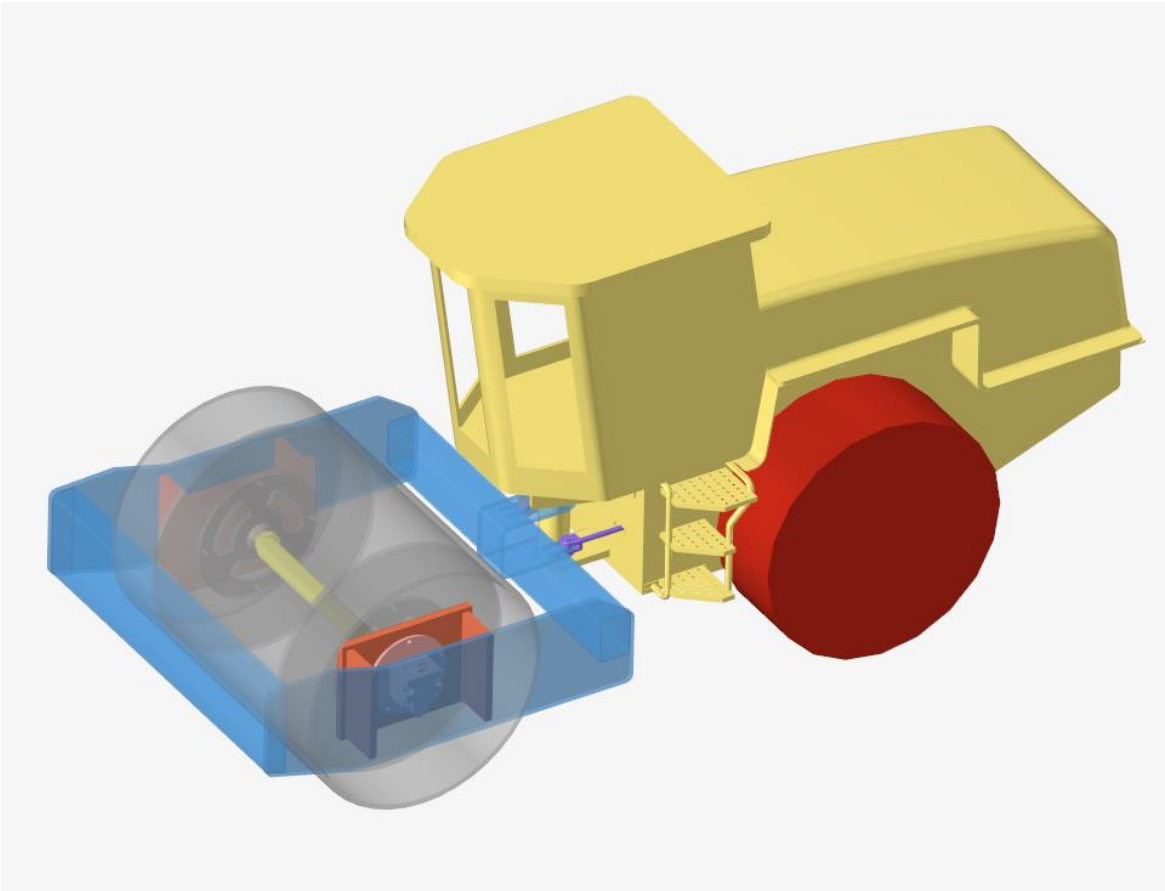

Vibrating Roller Compactor Performance Using MotionSolve and EDEM Co-simulation

Challenge

Assessing Vibrating Roller Compactor components and their performance within a co-simulation framework.

Solution

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- Generate a vibrating roller compactor model.
- Design compactor to run over material in three phases.
- Design eccentric shaft to create inbalance in front drum.

Altair EDEM

- Simulate particle interaction to validate compression of material bed.

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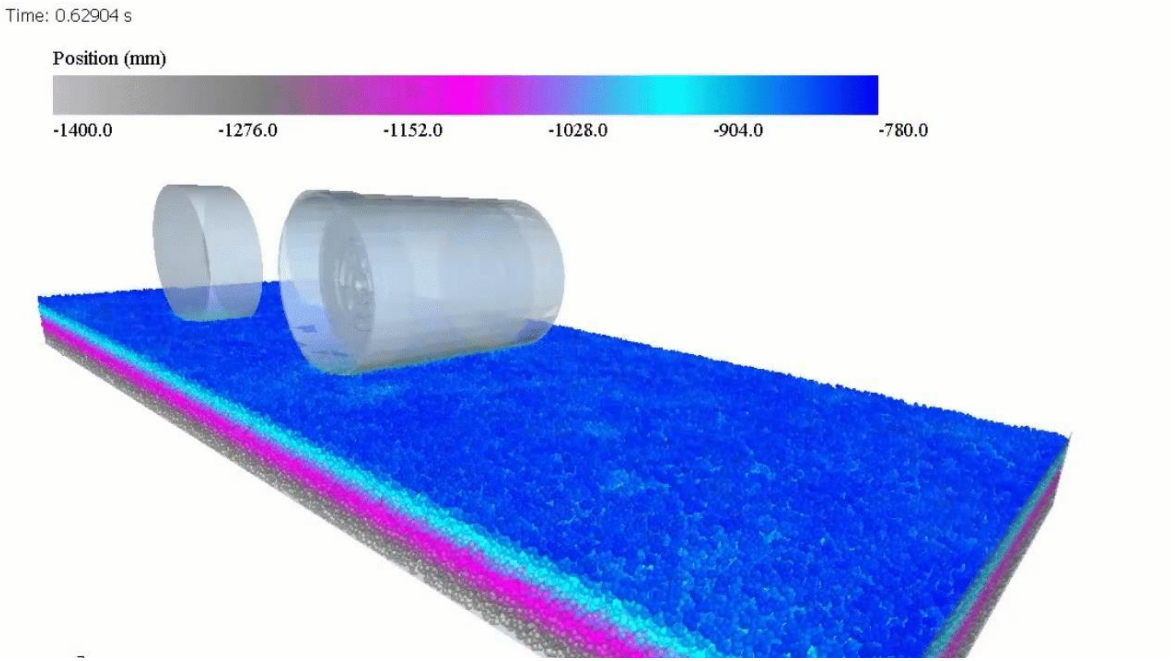
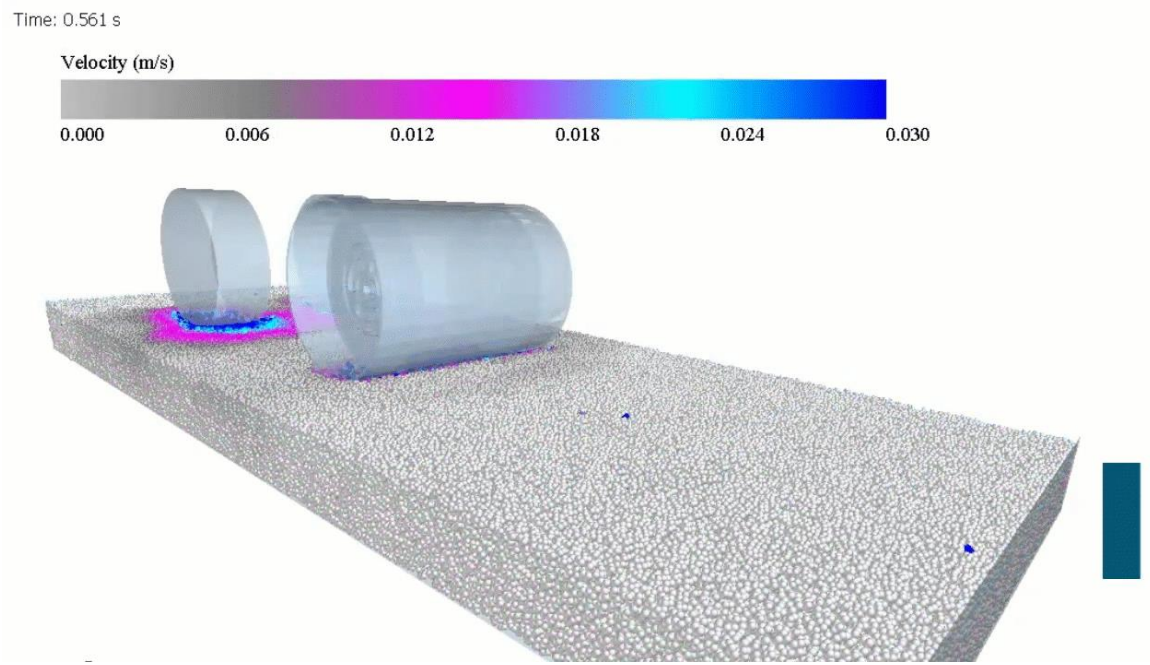
EDEM Results: Particle Height and Velocity





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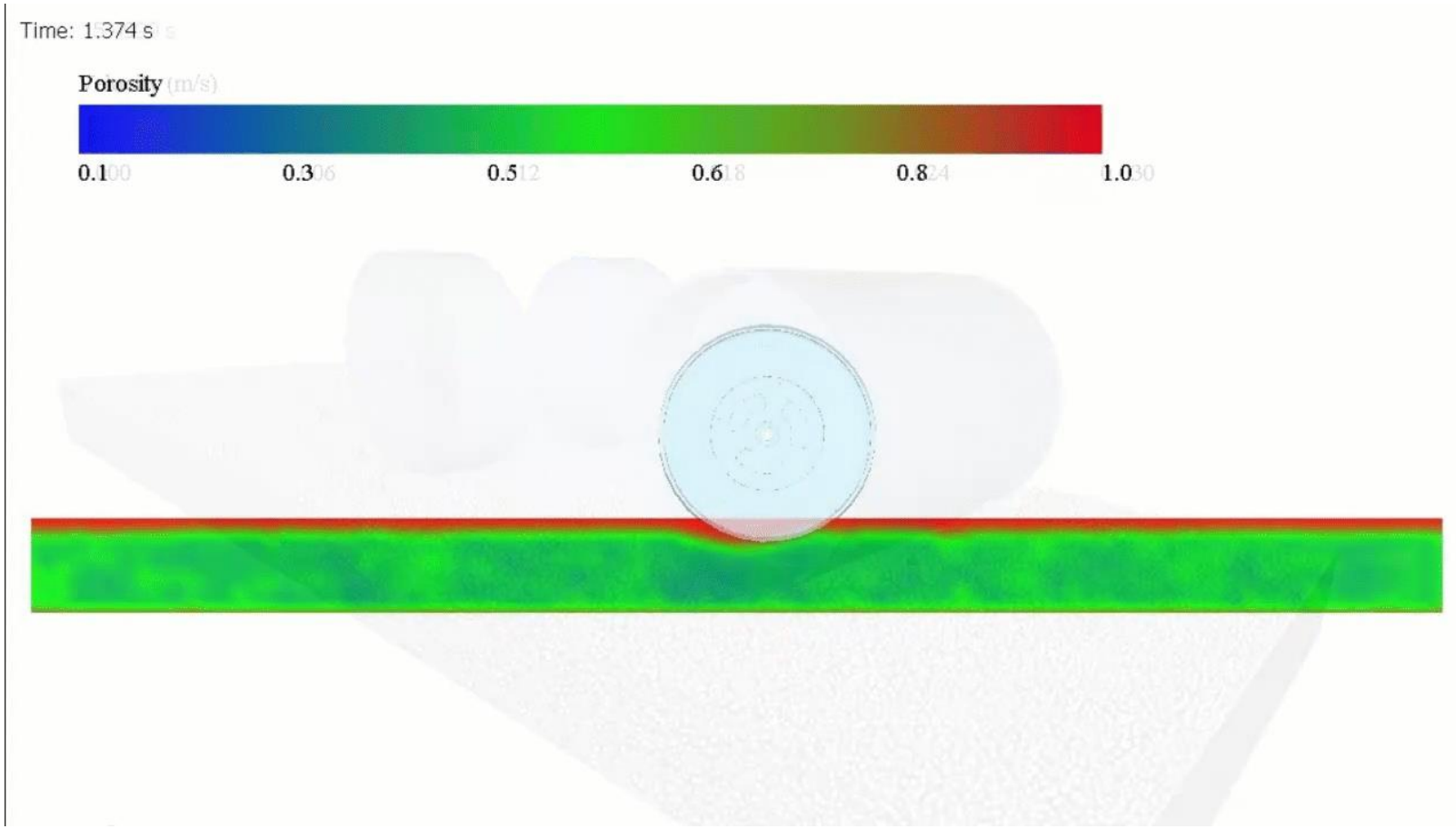
EDEM Results: Particle Porosity



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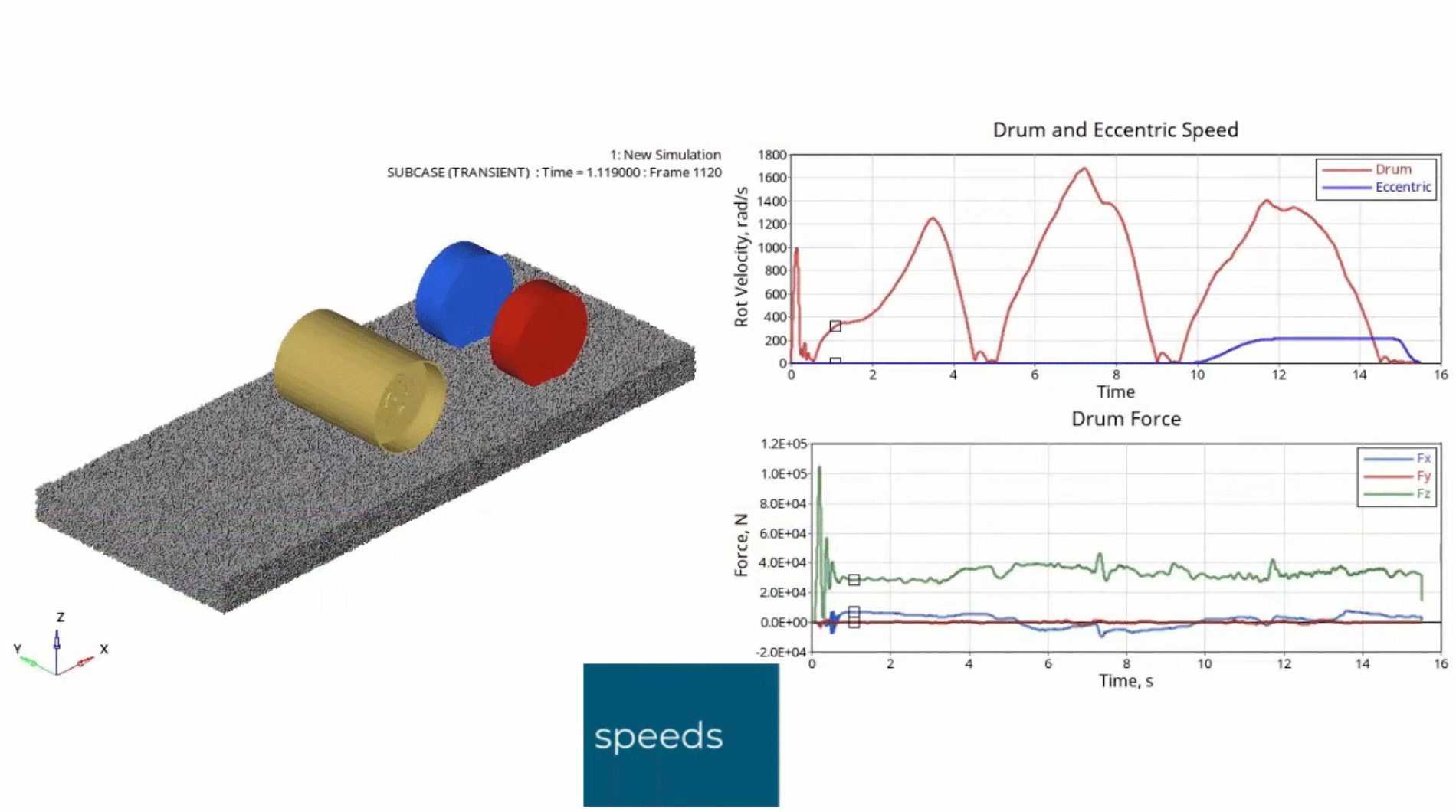
MotionSolve Results: Drum Forces and Speeds



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