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multi-physics CFD simulation
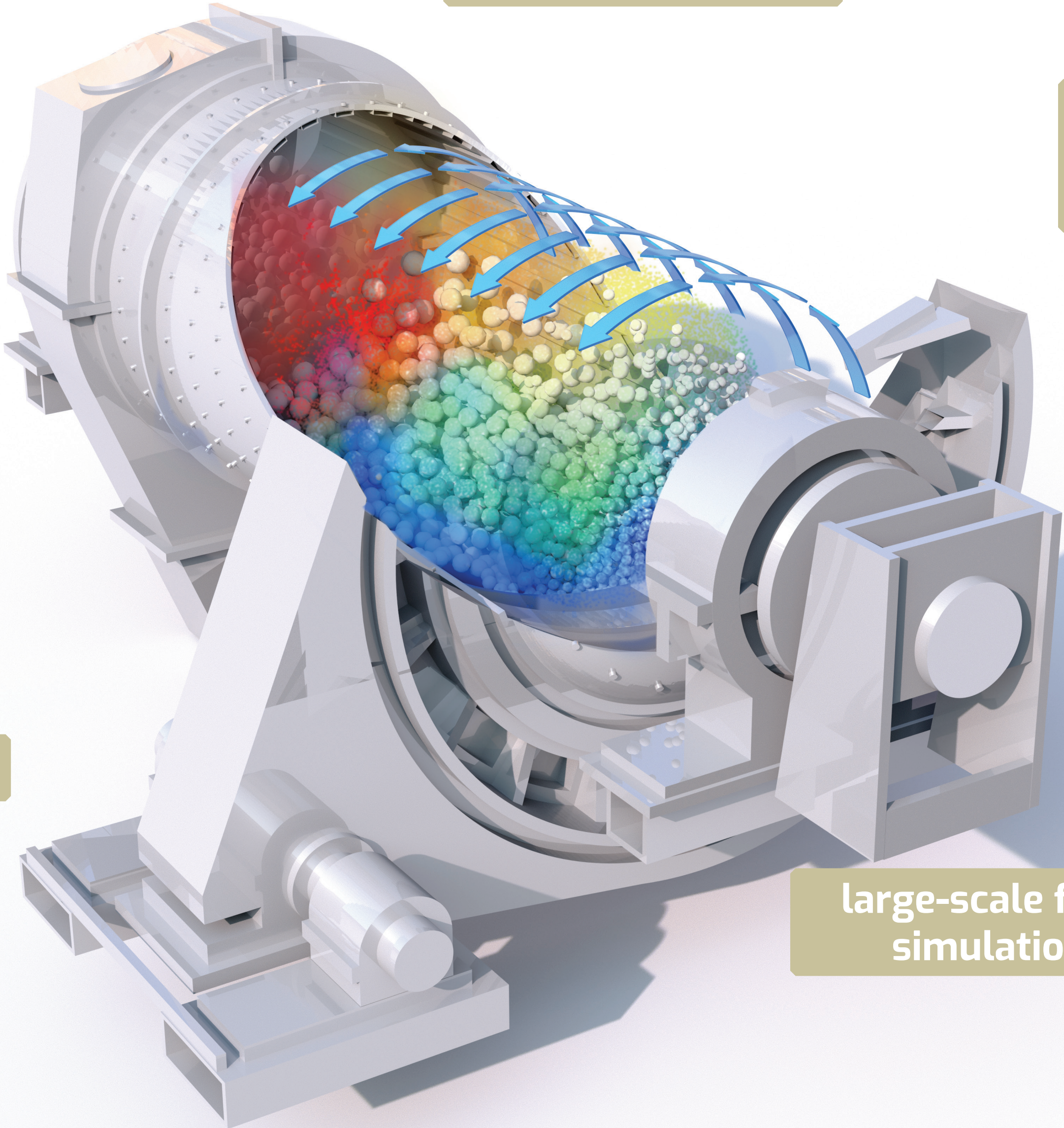
complex fluid flows

multi-disperse granular materials flows
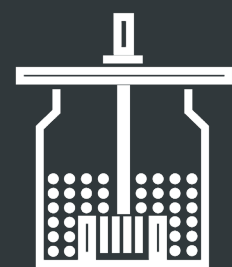
slurry flows

large-scale fluid simulation

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- Mineral Processing Applications use both particle-based (SPH, DEM) and mesh-based (LBM, BEM, FDM) methods to solve highly complex multiphysics problems

- GPU-based computation reduces run-time by factor 20

- Even most complex problems - dry multi-disperse granular material flows, free surface- & non-newtonian fluid flows, agglomeration, coagulation, flotation, bubbly & slurry flows, crack & crush in milling - can be modelled with highest accuracy

- Facility and equipment efficiency can be optimized already in the design phase. Thus saving capital costs, energy and precious materials in tailings
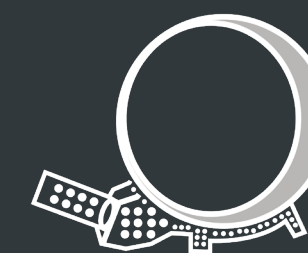
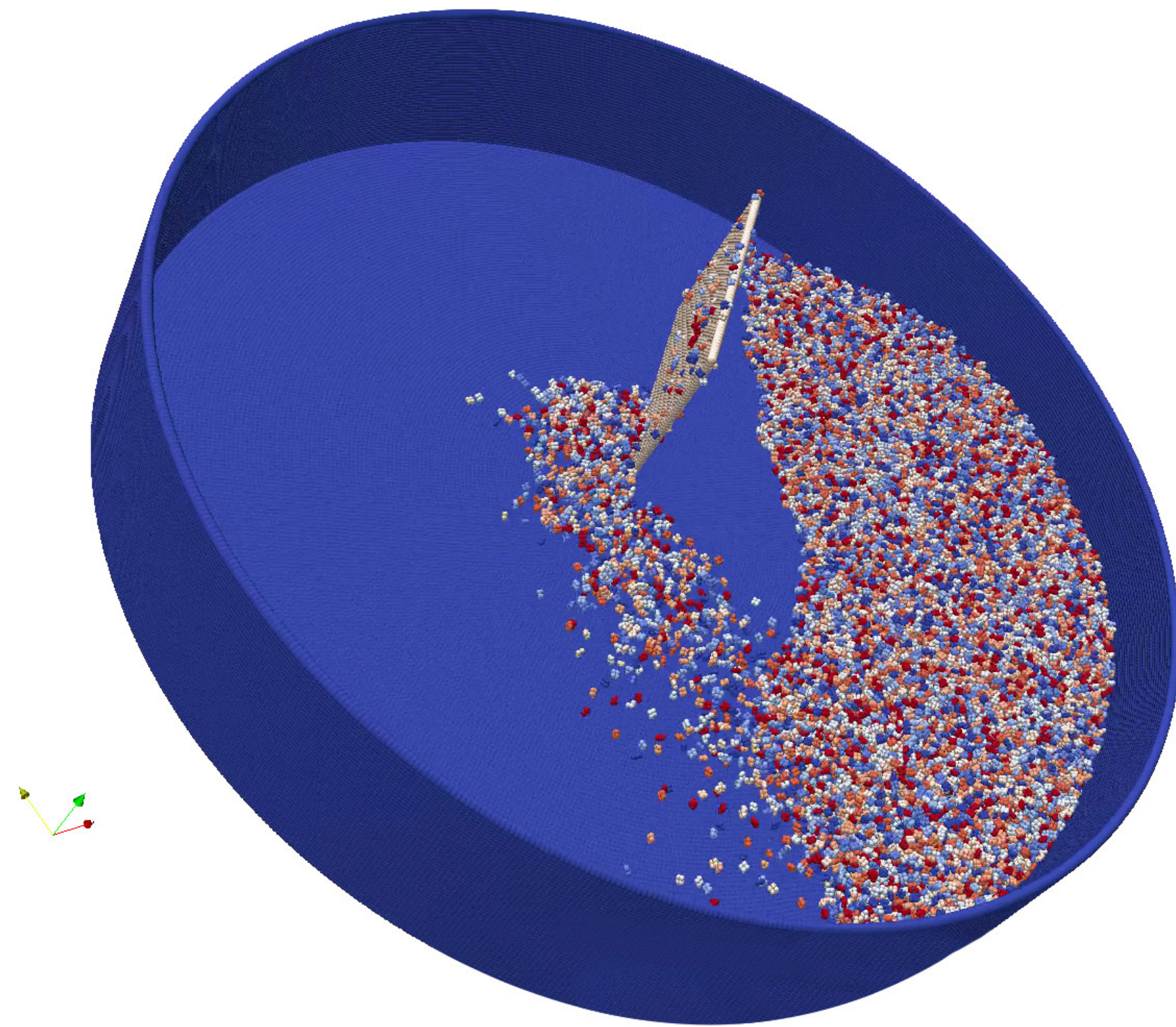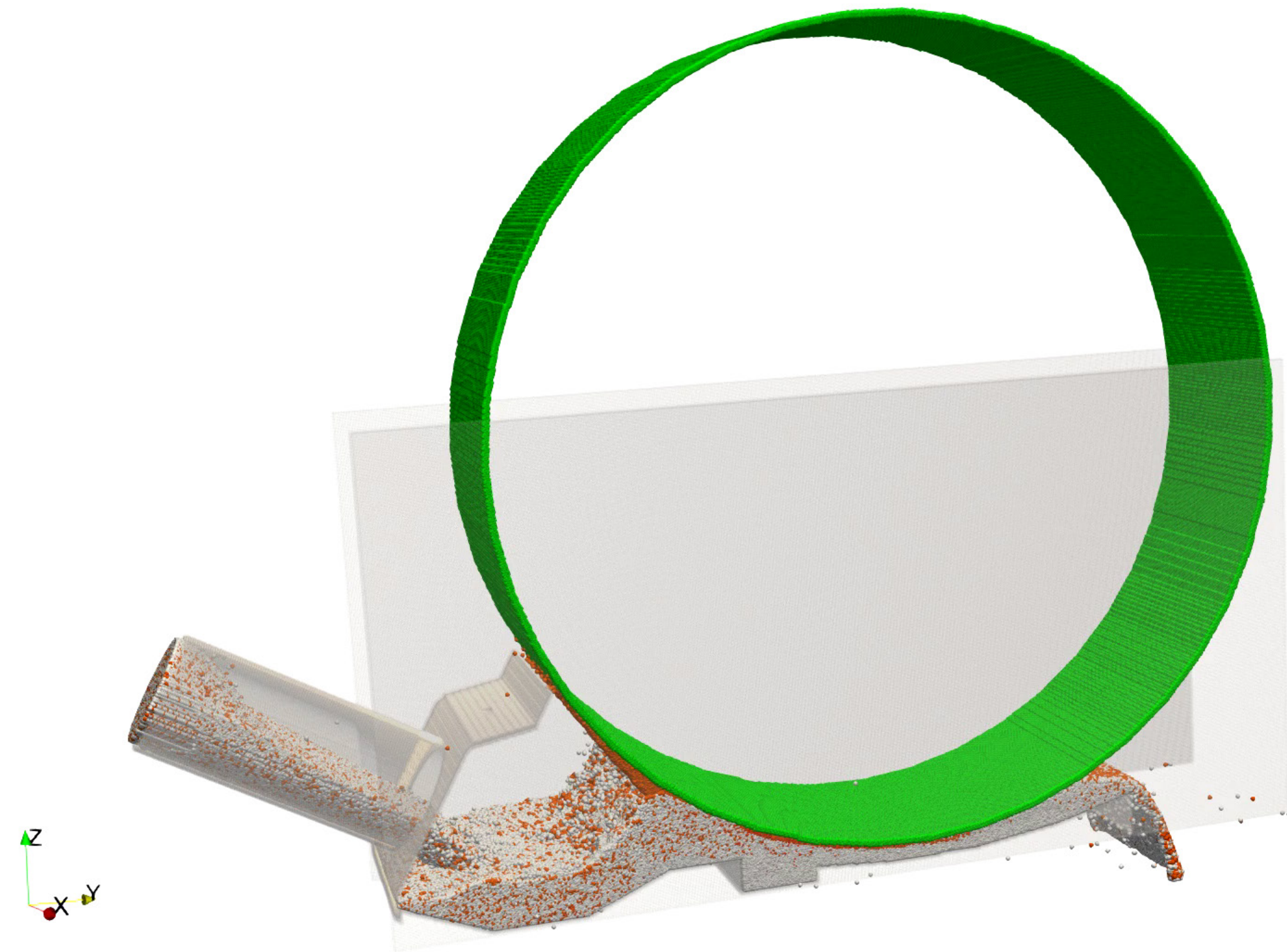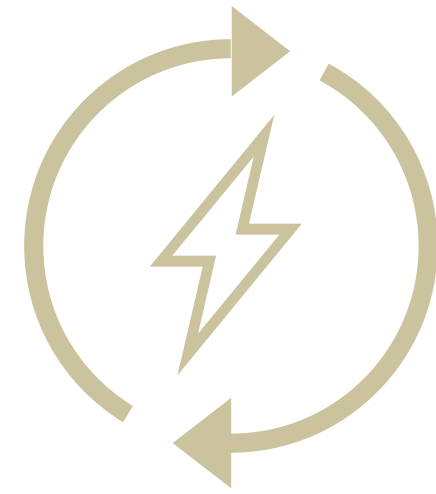Floatation Tank Cell

Pelletizers

Thickeners

Ball mills

Magnetic Drum Separator

Hydrocyclone

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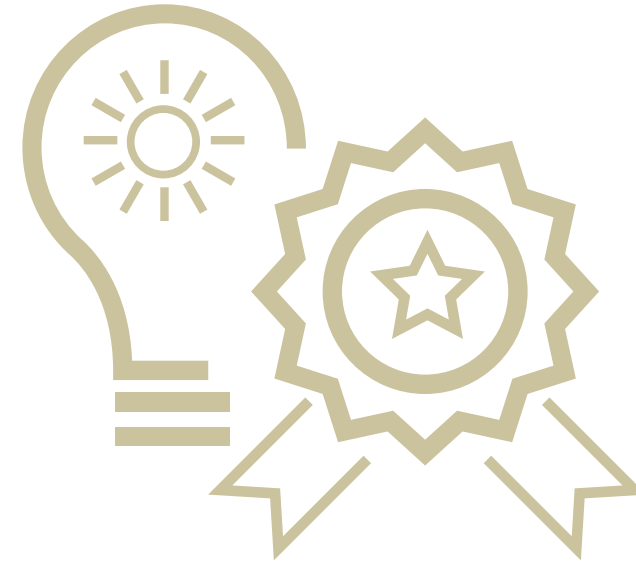Processing

Pelletizer Simulaton

Magnetic Separator Simulation

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OPTIMIZE

- Optimize tailings to maximize yields

- Enhance existing equipment and optimize their performance

- Validate the design of new equipments and facilities

MINIMIZE

- Reduce maintenance and avoid production stops

- Save energy, water, material & manpower

- Alleviate losses incurred due to long production cycles

INCREASE

- Increase efficiency

- Improve the yield obtained in your existing facilities

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