

PAUL WURTH SERVICING**SIMULATION OF BULK MATERIALS****ANALYSE YOUR RAW MATERIALS**

Material flow behaviour, falling curves, optimisation of material flow without interrupting the operation of your plant – Paul Wurth can provide you this information.

We have a consistent method to simulate bulk material behaviour in an assembly of plant components and provide accurate material flow results.

A strong expertise gained over the past years has made **Paul Wurth** a frontrunner in discrete element modelling in the ironmaking domain. We propose to share this know-how by offering tailor-made services to our clients: Paul Wurth supports blast furnace operators using the Discrete Element Method (DEM) and provides solutions to improve their processes.

Your benefits

Amongst others DEM Simulation provides you:

- Better understanding of the material handling process.
- Optimisation of wear intensive spots.
- Optimisation of flow bottle necks in equipment.
- Improvement of flow rates.
- Accurate determination of material falling trajectories.
- Material cost savings

Choosing Paul Wurth as your bulk material simulation provider, because...

As one of the world leaders in the design and supply of technological solutions for the iron & steel industry Paul Wurth has extended its modelling capabilities in the granular flow behaviour.

A large amount of studies have been carried out so far, in particular for the blast furnace Bell Less Top® charging system. Ironmaking raw materials calibration parameters in the simulation software have been verified on full scale test rigs and by on-site measurements.





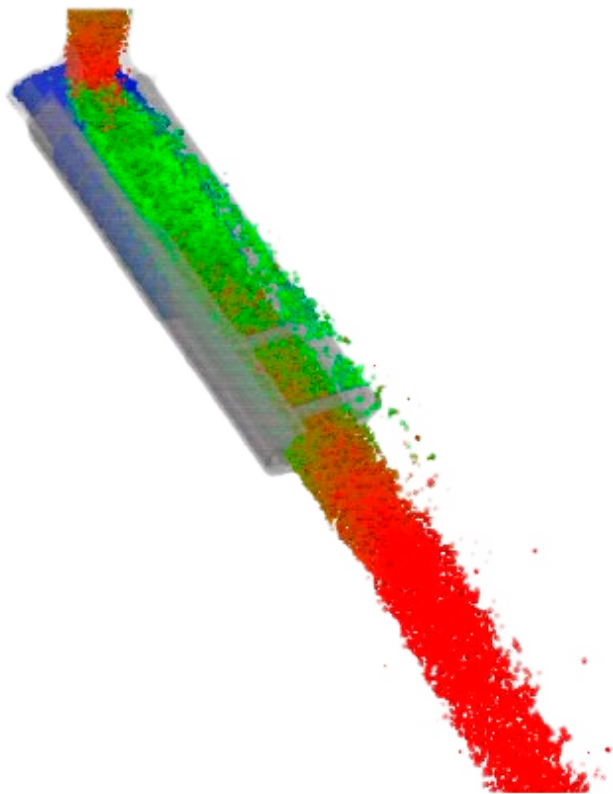
SIMULATION OF BULK MATERIALS

Our expertise

As a constructor of complete blast furnace plants, Paul Wurth has an overall understanding of process and operation of the plant, and thus of the plant components.

We can offer the following expertise in granular flow consultancy:

- Flow behaviour of granular media such as coke, pellets and sinter considering the actual grain size distribution.
- Filling and discharge of hoppers.
- Filling and discharge of skips.
- Material transport off or on a conveyor.
- Flow behaviour in the conveyor head and impact on deflector plates.
- Determination of material flow rates and trajectories.
- Material flow behaviour on rotating distribution chutes and tilting rockers.



Customised services

Paul Wurth offers you feasibility and concept studies including:

- Creation of 3D CAD models.
- Simulation of material flow behaviour.
- Analysis of simulation results.
- Engineering of tailor-made solutions in close cooperation with the customer.

