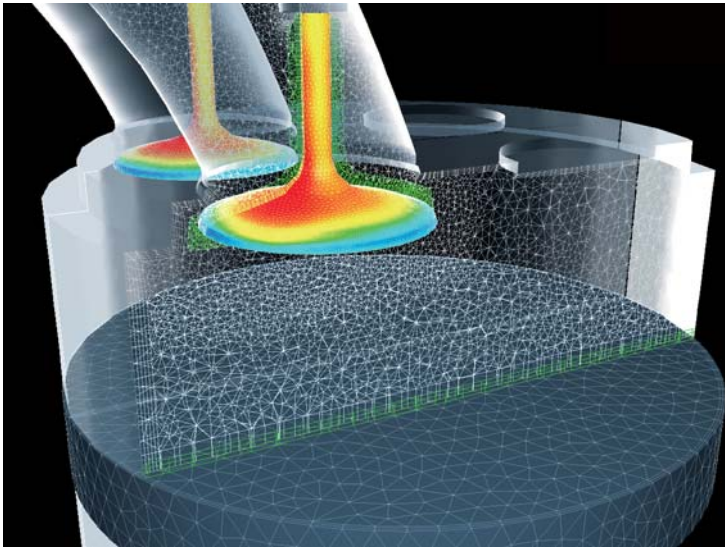


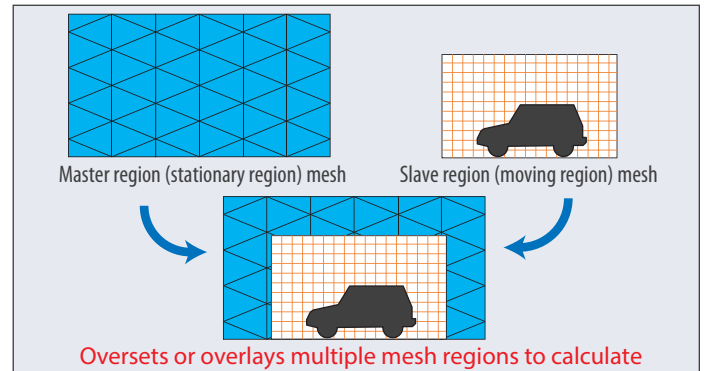
Overset Mesh - Overset Method

Enables simulation of moving objects with complex movements and/or rigid-body collision with walls - by overlapping multiple mesh regions

What is Overset Mesh?

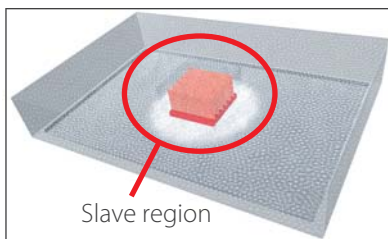


Simulates one analysis space by oversetting multiple computational grid (mesh) regions. Requires users to create a domain and mesh that surrounds a moving object separately from the other domain. A moving condition can be applied to each moving region.

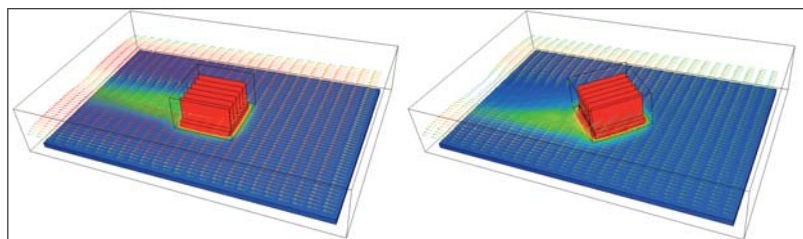


Application 1: Slave Region Can be Replaced Arbitrarily to Compare Multiple Cases

• Heat sink



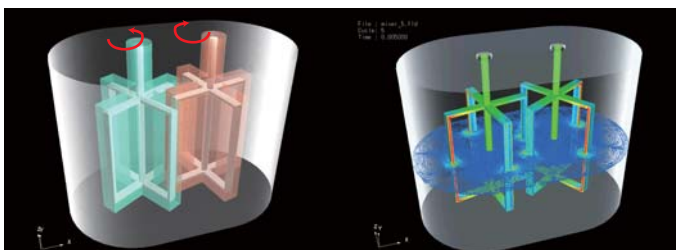
Mesh created per part



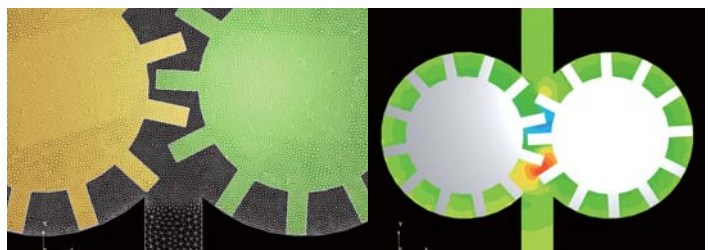
➡ Analysis model can be modified just by moving a part or by replacing it and merging it back to the master region

Application 2: Multiple Rotating Regions Overlapping One Another

• Mixer

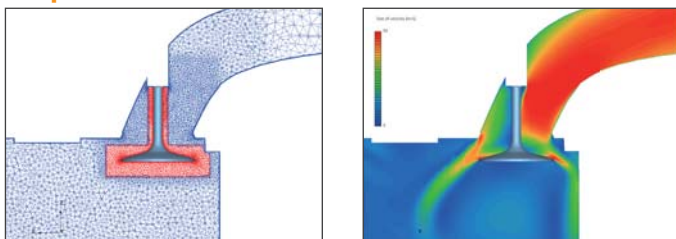


• Gears



Application 3: Moving Object with Contact

• Open-close Valve



The overset method helps execute the analysis that requires a complex movement or contact of objects, which cannot be simulated with a single mesh.

Other Applications

- Ball valve
- Rotation of scroll pump
- Piston movement
- Open/close motion of flaps, etc.