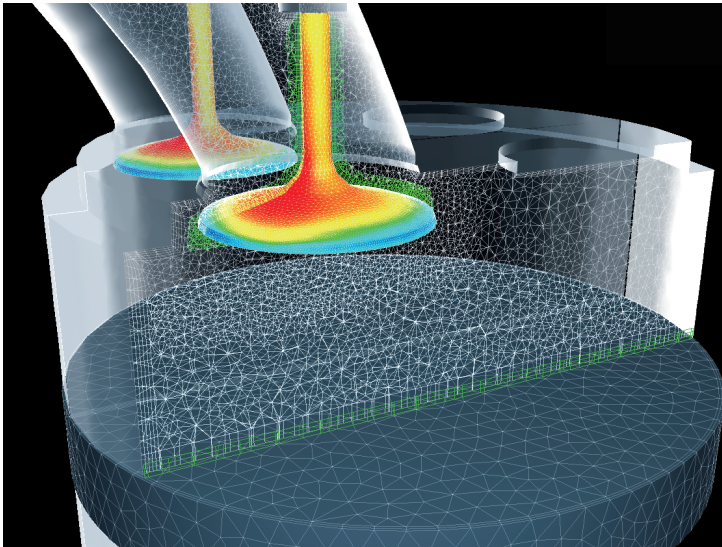


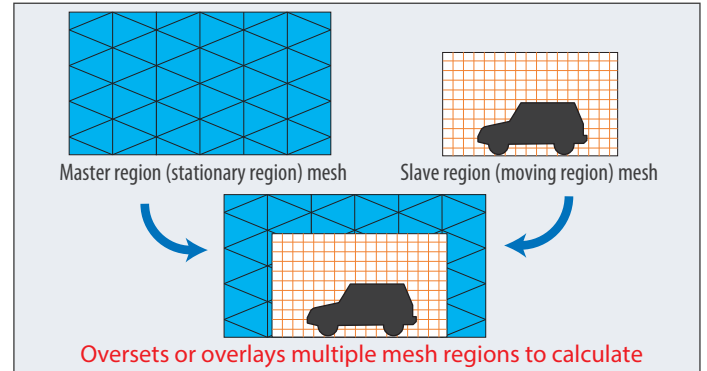
# Overset Mesh - Overset Method

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

## What is Overset Mesh?

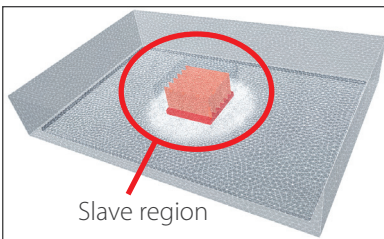


Simulates one analysis space by oversetting multiple computational grid (mesh) regions. Requires users to create a domain and mesh that surrounds a moving object separately from the other domain. A moving condition can be applied to each moving region.

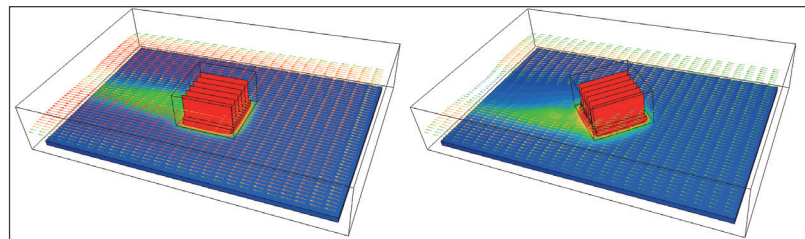


## Application 1: Slave Region Can be Replaced Arbitrarily to Compare Multiple Cases

### • Heat sink



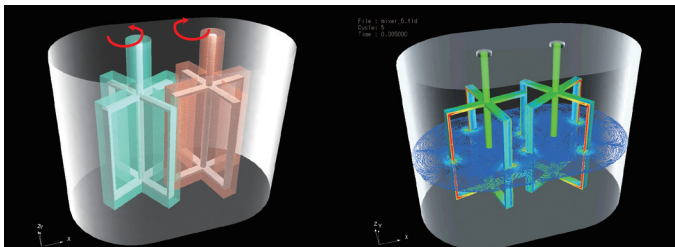
Mesh created per part



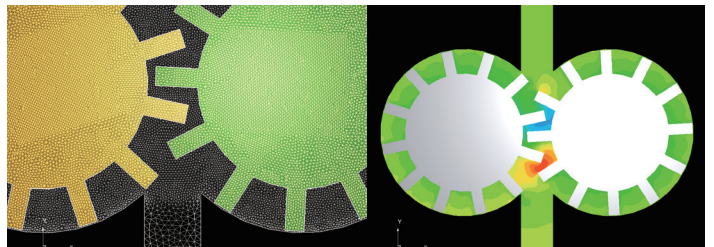
➔ Analysis model can be modified just by moving a part or by replacing it and merging it back to the master region

## Application 2: Multiple Rotating Regions Overlapping One Another

### • Mixer

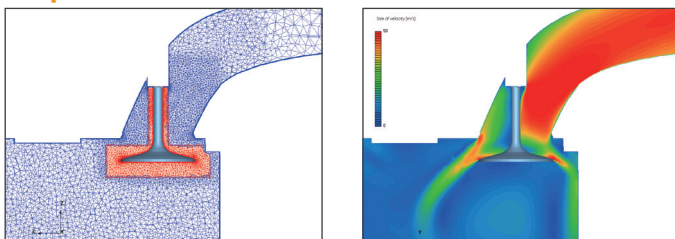


### • Gears



## 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.