Knockdown factors for defective lattice materials

Supervisors:

S. Beretta

S. Foletti

M. Gavazzoni

Static strength of lattice materials (increasingly adopted for their lightweight) are deeply affected by geometric errors/vacancies

- FE models with homogeneized cells + submodels;
- dependence of static strength on number of vacancies investigated by FE simulations of static strength (based on Gurson's model) for ideal and real geometry;
- definition of prospective dependence of yield strength;
- definition of knockdown factors for static resistance.



VVF 0.15