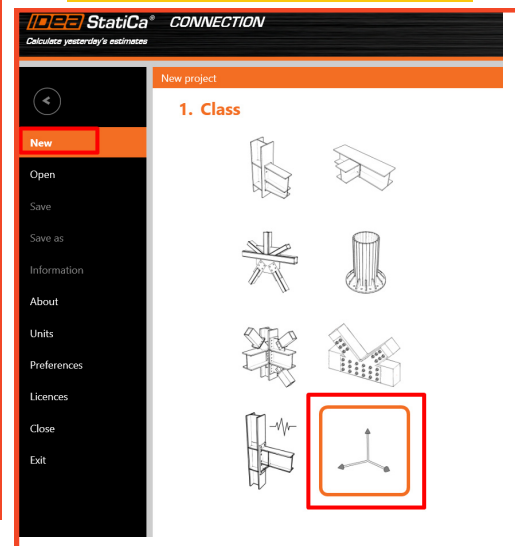


Evaluation of corner connection with wide flange brace in Ordinary Concentrically Braced Frame (OCBF) - CBFEM

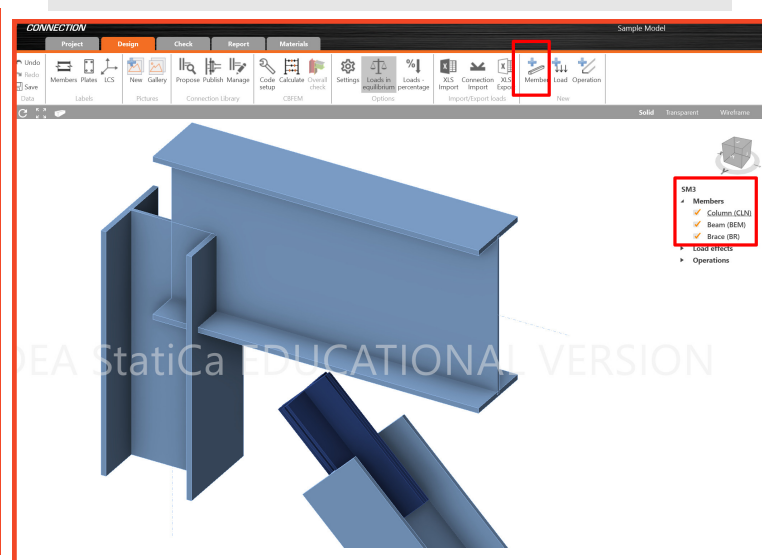
1. Open **IDEA StatiCa Connection**



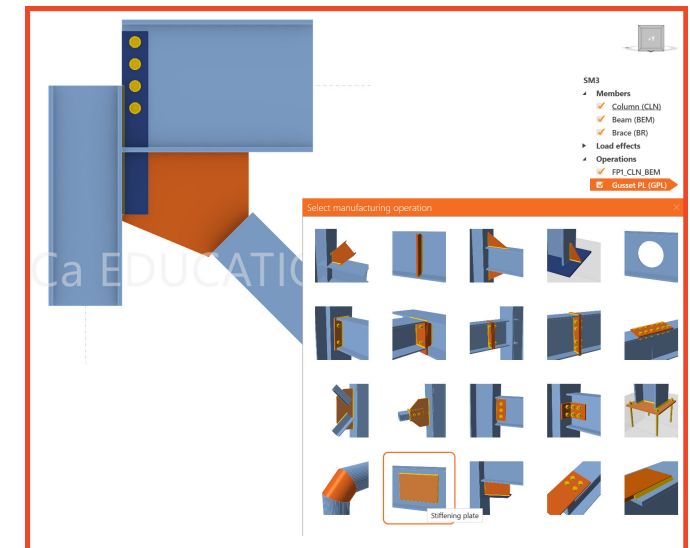
2. Select **AISC 360-16 (LRFD)** as design code in parameters. **Create New Model**



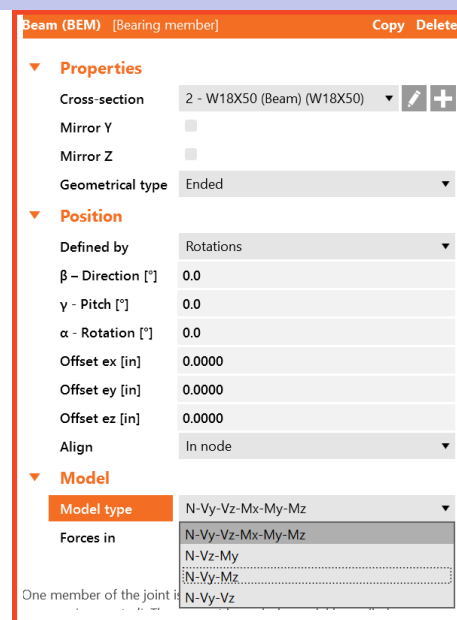
3. **Define Members** - Beam, Column, Brace, Double Angles (as stiffening members, in operations) for the given size and material properties as per design



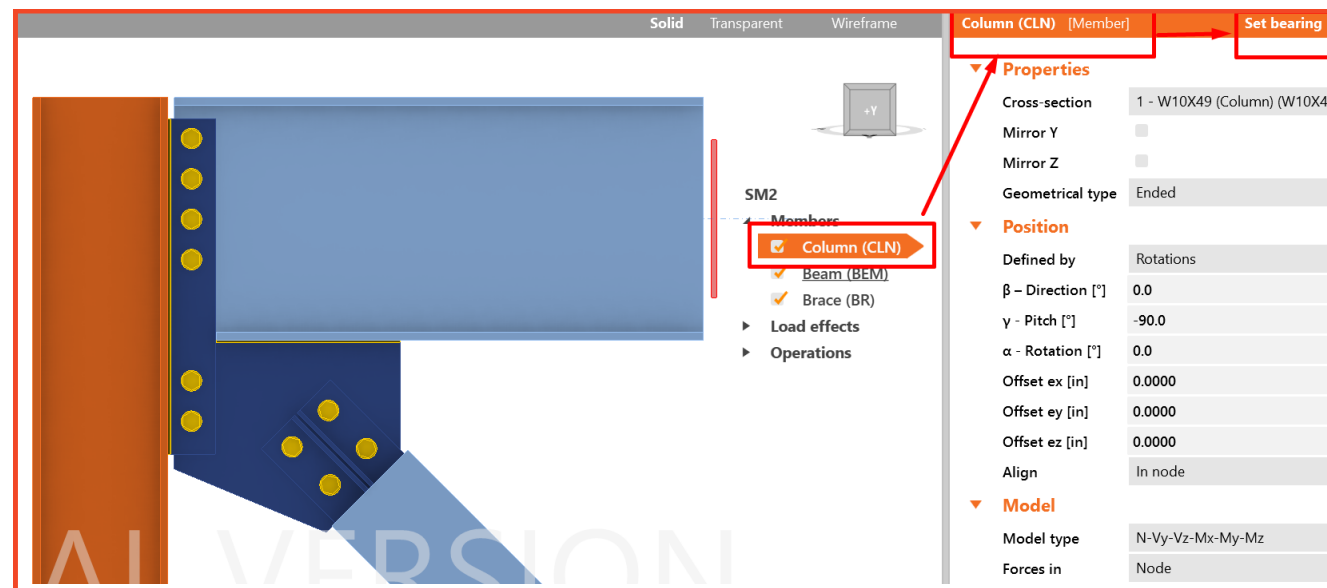
4. **Define Plates** - Fin Plate and Gusset Plate for given / trial thickness and material properties



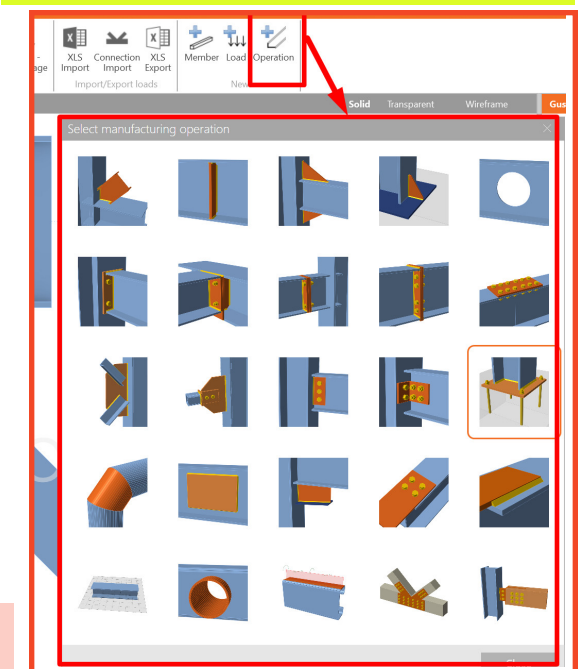
7. Assign **appropriate model types** to beam and brace members, such that forces are in node [N-Vy-Vz-Mx-My-Mz to beam] [N-Vy-Vz to brace]



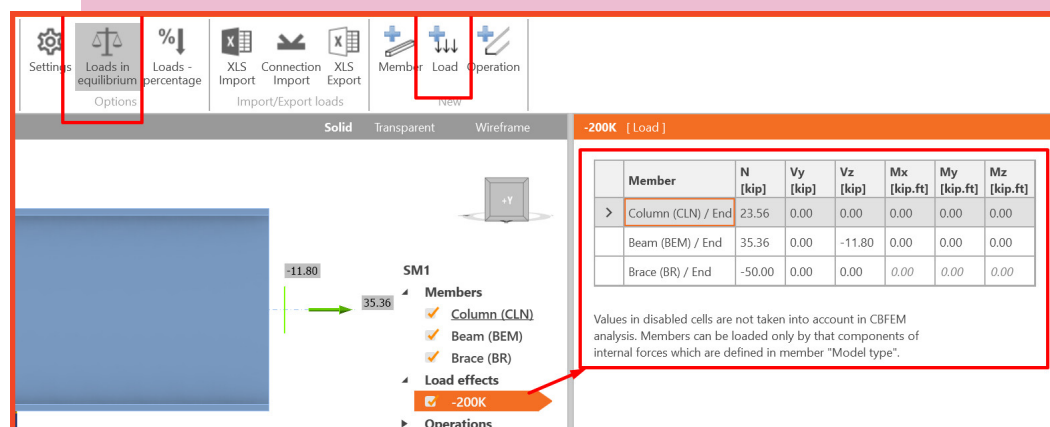
6. Assign the column as **Bearing Member**



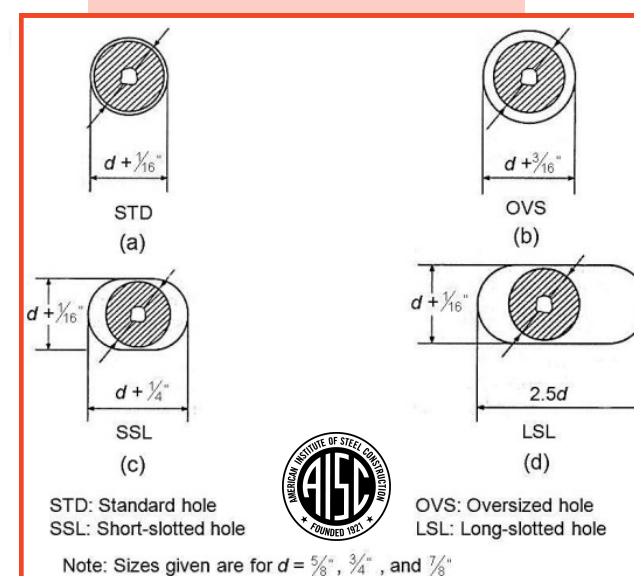
5. **Connect the members and plates** using suitable operations in CBFEM for connection - Bolts and Welds



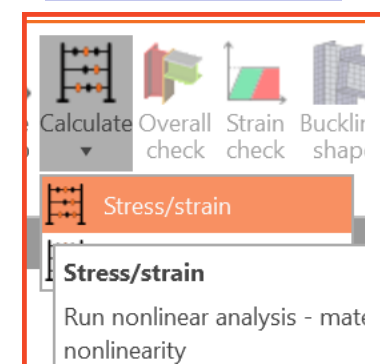
8. Assign the **design loads** to the members and balance the forces such that " **loads in equilibrium** " is followed in CBFEM Use **stress-strain method** in CBFEM for OCBF



9. Change the **resistance factor (LRFD)** or **safety factor (ASD)** (if required) in code setup, based on the type of bolt hole, as given in **Section J3.8 of AISC 360-16**



10. **Run Analysis** of connection in IDEA StatiCa



Note -The required strengths of beam and their connections are to use the **overstrength seismic loads** as given in **AISC Seismic Provision Section F1.5c**

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