

16 Hours **ADVANCED** Training on

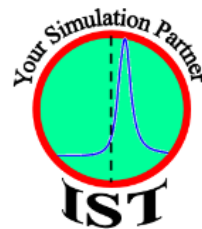
Hydraulic & Fuel System Simulation in GT-SUITE

Case Study



Practice

Access to Live Videos



IST Pvt Ltd

EV, HEV & Engine Development
Staff Augmentation
Corporate Training

Training Fees

Category	Training Fees per participant (Rs.)
Company Sponsored	15,000.00
Individual Sponsored	13,00.00

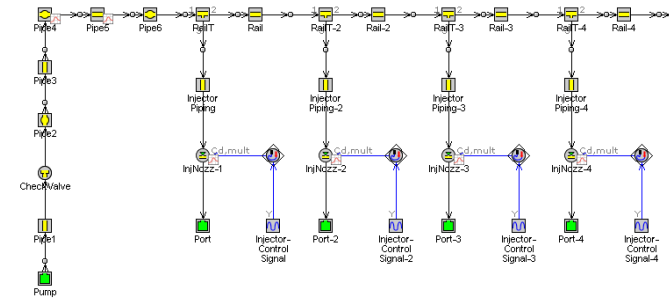
For registration, please contact us:

- E-Mail ID: subir.mandal@integratedsimtech.com
- Contact No.: +91-9763909935

This comprehensive advanced module deals with various aspects of hydraulics and fuel injection system modeling and simulation using 1D simulation GT-SUITE & GEM-3D software. Detailed training agenda is mentioned below.

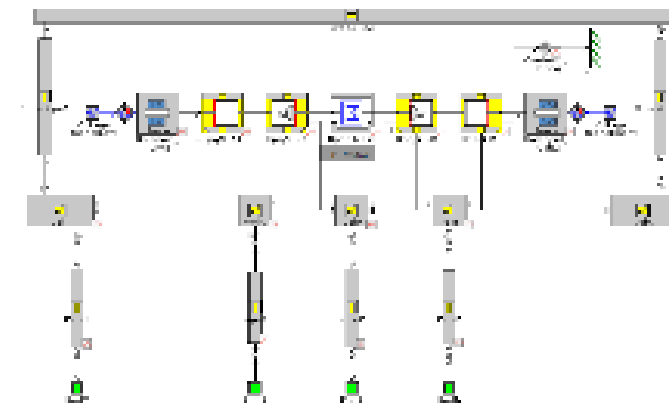
Modeling flow piping

- Conversion of 3D CAD into 1D flow components.
- Discretization



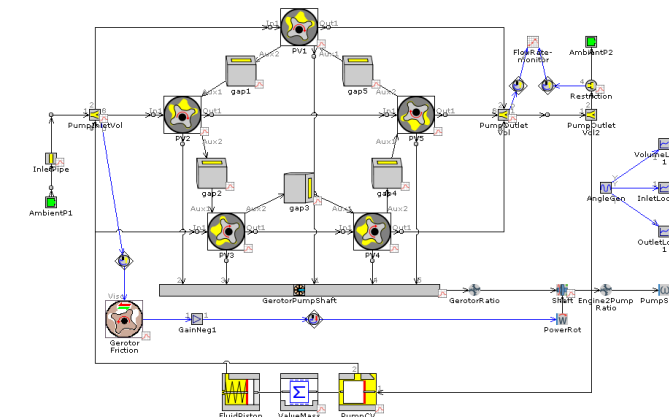
Modeling hydraulic & fuel system components

- Modeling hydraulic circuit and injection system components - control valves (e.g., check valve, DCV), regulating valves (e.g., pressure control, flow control), pumps, injector, etc



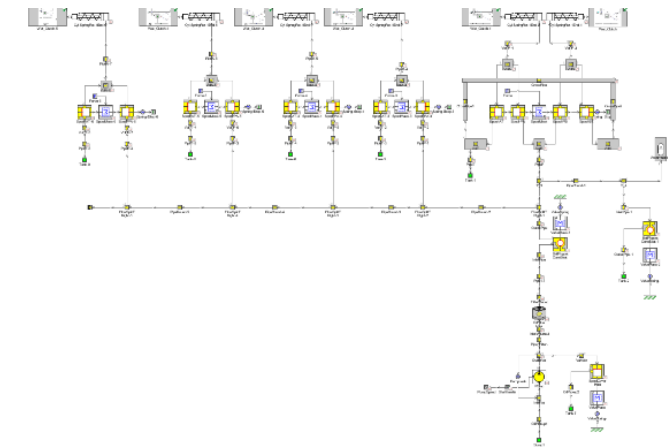
Modeling pumps

- Various options to model different types of pump
- Detailed modeling & simulation of pumps
- Pressure pulsation and flow ripple predictions



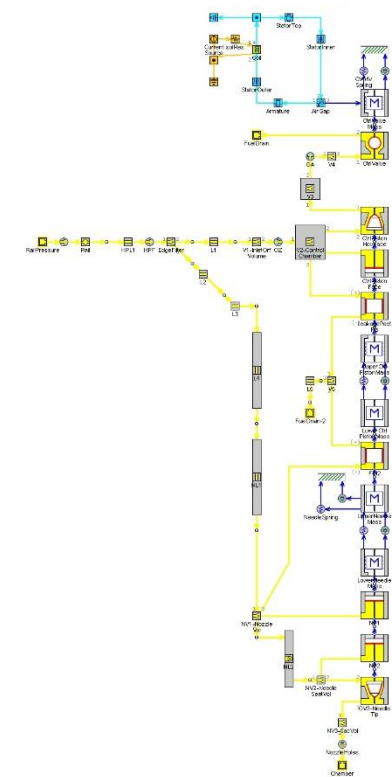
Modeling complete hydraulic system

- Integration of hydraulic system components, simulation and post processing of results
- Solver basic of fluid flow, explicit, implicit, fluid properties, cavitation
- Subassemblies - Internal, external, and encryption
- Model setup - Initialization, parameter sweeps, convergence, run setup, case setup
- Impact of various operating and design variables on hydraulic system performance



Injection system modeling

- Modeling of a complete fuel injector and associated components & circuits
- Predict injection rate shape matrix required for predictive combustion model in engine performance



Trainer

- Over 19 years of industrial experience in diesel, gasoline, gas engines; HEV & EV; and aircraft engines
- 1D simulation domain – engine performance, cooling, HVAC, HEV & EV drivetrain, battery, lubrication, acoustics, hydraulics, cranktrain, and valvetrain
- Worked with GE, Cummins, ESI, MTU (Rolls-Royce), IST
- Conducting training for 10 years
- GT-SUITE user for 14 years
- M.Tech. from IIT Kharagpur



Who Should Attend?

- Working professionals/ planning to work in hydraulics and fuel injection system domains using 1D simulation software
- OEMs/ Consulting Companies/ Start-ups
- Engineering Students/ Professors/ Scholars