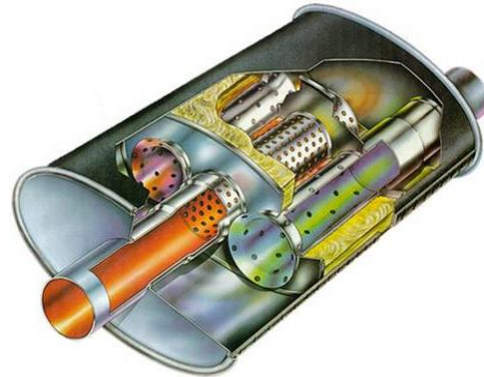


16 Hours **ADVANCED** Training on

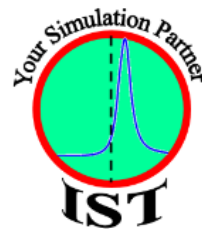
Intake & Exhaust Acoustics Simulation in GT-POWER

Case Study



Practice

Access to Live Videos

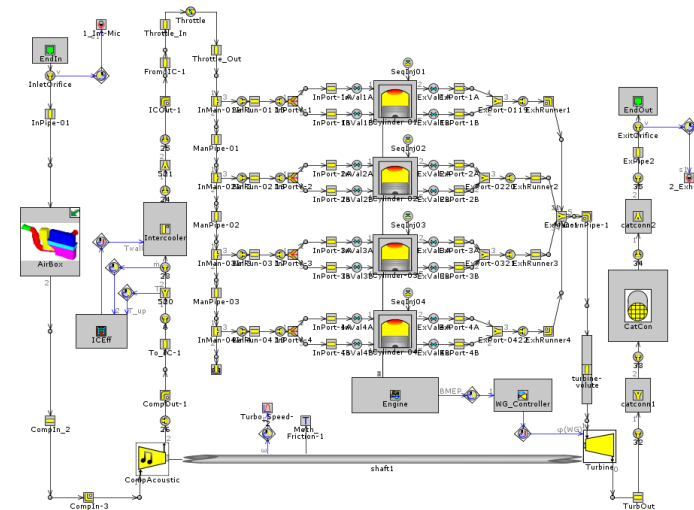


IST Pvt Ltd

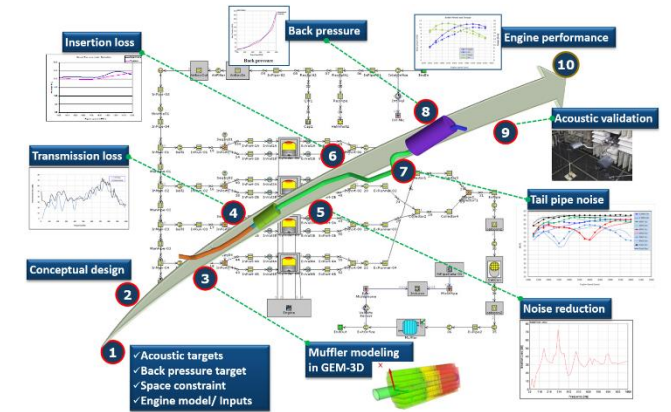
EV, HEV & Engine Development
Staff Augmentation
Corporate Training

This is an advanced level training module for those who are interested in acoustics analysis of resonator, airfilter, and muffler using GEM-3D, GT-POWER. Muffler design, back pressure prediction, and different aspects of acoustic analysis are included. The module includes theory, construction & calibration of acoustics model. Participants will get good amount of time for practice of software. It will cover the following topics:

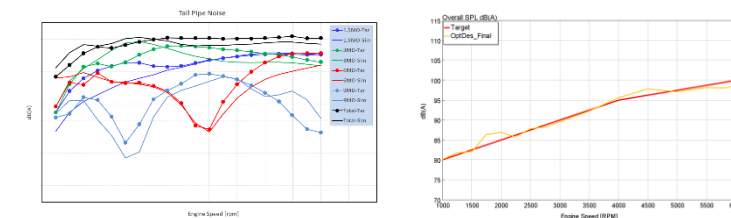
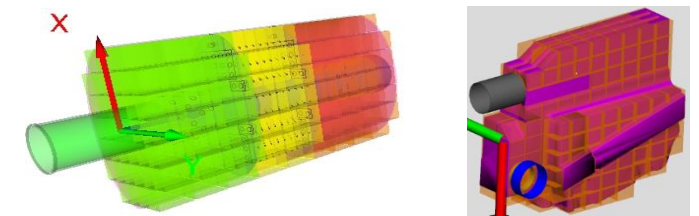
- **Engine and acoustics component modeling**
 - ✓ Engine modeling specific to acoustic analysis
 - ✓ Approach to engine modeling when sufficient data is not available
 - ✓ Detailed modeling of muffler, resonator, and airbox in GEM-3D
 - ✓ Solver basics of flow and heat transfer model
 - ✓ Subassemblies - Internal, external, and encryption
 - ✓ Data required for acoustics analysis
 - ✓ Model setup - Initialization, parameter sweeps, convergence, etc
 - ✓ Post processing using GT-POWER



- **Specific areas of acoustics analysis**
 - ✓ Pressure losses in an intake/ exhaust systems
 - ✓ Insertion loss, transmission loss, and noise reduction
 - ✓ Radiative free field noise (SPL) at an external microphone
 - ✓ Sound files from simulation (WAV format)
 - ✓ Pass-by noise and transient noise; Campbell diagram
 - ✓ Multiple noise sources



- **Case Study and practice**
 - ✓ Design & optimization of air intake system with airfilter box and resonator
 - ✓ Design & optimization of exhaust system with muffler



Training Fees

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

For registration, please contact us:

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

Who Should Attend?

- Working professionals/ individuals who want to develop advanced level of competency and skill in acoustic analysis of muffler, airfilter box, resonator using 1D GT-POWER software
- Professionals from OEMs/ Consulting Companies/ Start-ups
- Engineering Students/ Professors/ Scholars

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

