

Simulation Case Study

Simulation
Services

Analysis &
Optimization

Component
Testing

Hardware
Development

Task

- ➔ Dynamic simulation of a passenger vehicle power steering

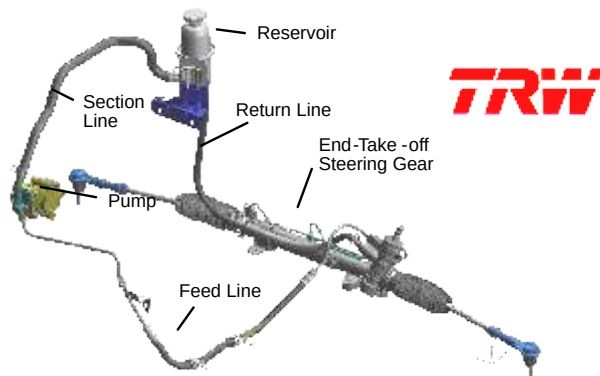
Explanation

- ➔ A power steering system uses hydraulic pressure to increase the drivers turning effort. As the driver turns the steering wheel, steering effort is reduced. The pressure is used in a hydraulic cylinder attached to the steering linkage

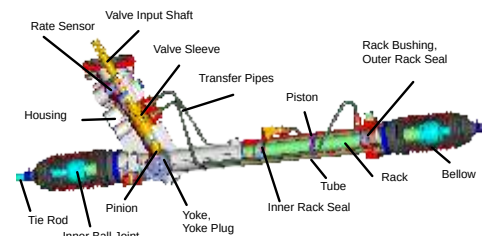
Realization

- ➔ Analysis of the power steering system
- ➔ Determination of essential components and effects
- ➔ Set-up of DSHplus power steering components
- ➔ Dynamic simulation of the power steering

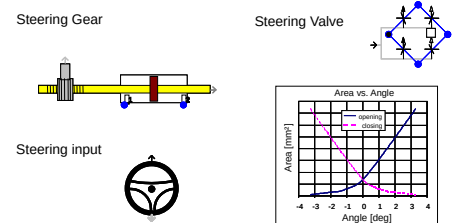
Conventional Rack & Pinion Power Steering System



Setup of Rack & Pinion Power Steering Gear



Components required for dynamic steering system modeling



Simplified simulation model of the power steering system

