

Agenda

Hydraulic Components Simulation Seminar

June 26, 2018

08:30 AM Welcome and coffee

09:00 AM Fundamentals of fluid systems

09:45 AM Scalability approach: from a detailed

geometrical view to a functional physical

representation

10:30 AM Component design

Hydrostatic pumps:

Technologies: piston, vane and gear pumps

Technical highlights: stability of the

displacement control device, flow oscillations, effects of aeration and cavitation on pump

dynamics, etc.

Hydraulic valves:

Technologies: directional control valves,

pressure- and flow-control valves

Technical highlights: flow-pressure

characteristics, flow and pressure gains, valve

stability, etc.

12:30 AM Lunch



Agenda

Hydraulic Components Simulation Seminar

June 26, 2018

13:30 PM System design – subsystems integration

Off-highway, heavy-machinery and automotive applications

Technologies: hydrostatic transmissions, load sensing principles, regenerative systems, etc.

Technical highlights:

Improvement of hydraulic systems' performances

Energy consumption of the hydraulic systems when interacting with the environment

Integration of control logics from the early

beginning of the design cycle

Optimization of NVH characteristics by the coupling between fluids and mechanics, etc.

16:30 PM Conclusions and seminar wrap-up