

# Numerical Simulation of the Fluid Control Systems by AMESim

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**Abstract:** Many different modeling and simulation software packages were created to perform studies in the fields of automobile, aerospace, robotics, offshore and general hydraulics engineering but none offered the full range of capabilities needed. There were deficiencies in the numerical capabilities, in the graphical interface and in the general modeling concept. The AMESim package was developed to overcome these limitations. This paper gives a description of the technical features, which were central objectives in the design of the software, and some examples of typical applications. A large amount of experience has been accumulated through more than 400 consultancy projects between the IMAGINE company, which created the software, and strong industrial companies.

**Keywords:** Modelling and Simulation Software, Fluid Control Systems, Electro Hydraulic Servo Systems