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Computer Applications in Mining Engineering

Lecture (3)

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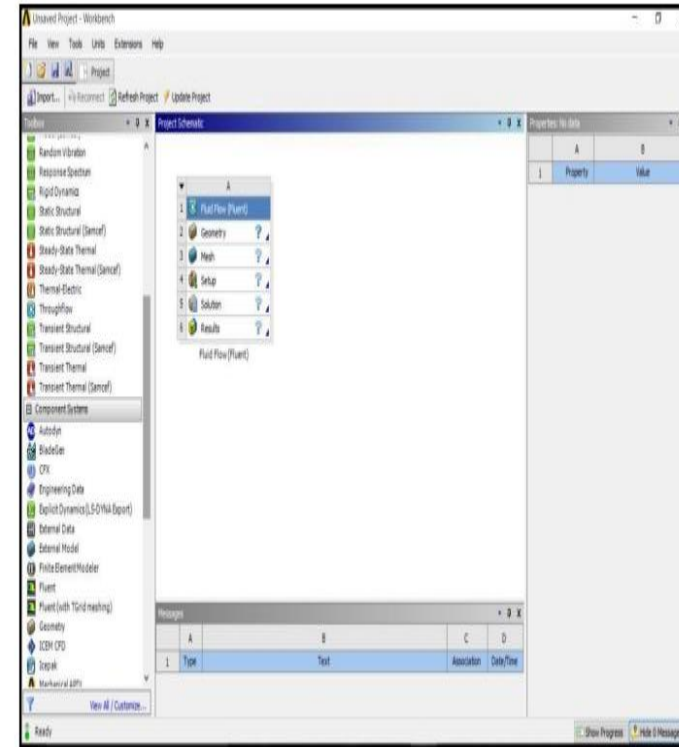


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1- Define of ANSYS Workbench: It is a project-management tool. It can be considered as the top-level interface linking all our software tools. Workbench handles the passing of data between ANSYS Geometry / Mesh / Solver / Postprocessing tools. This greatly helps project management.





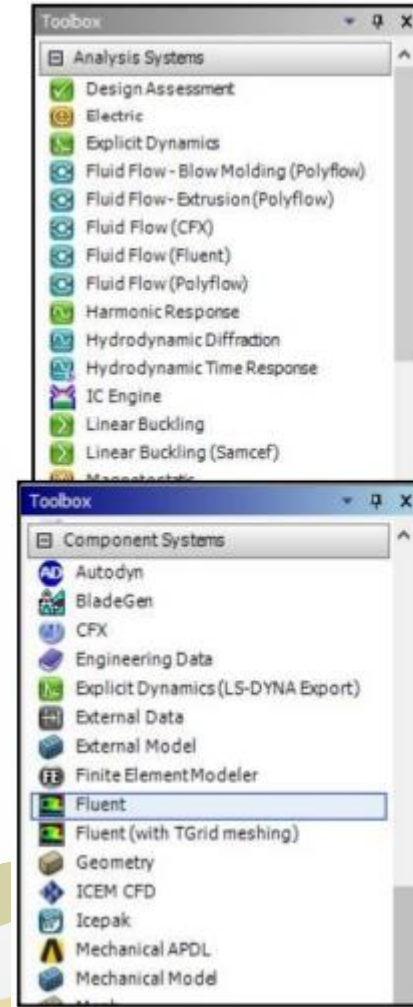
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2- Toolbox

2-1 Analysis Systems are ready made stencils that include all the individual systems (applications) needed for common analyses (for example Geometry + Mesh + Solver+ Post-Processor). 2-2 Component Systems are the individual building blocks for each stage of the analysis.



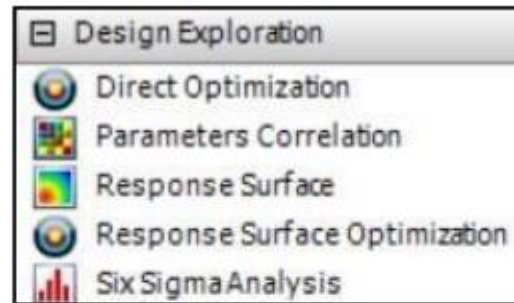


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2-3 Design Exploration It is Provides tools for optimizing designs and understanding the parametric response.



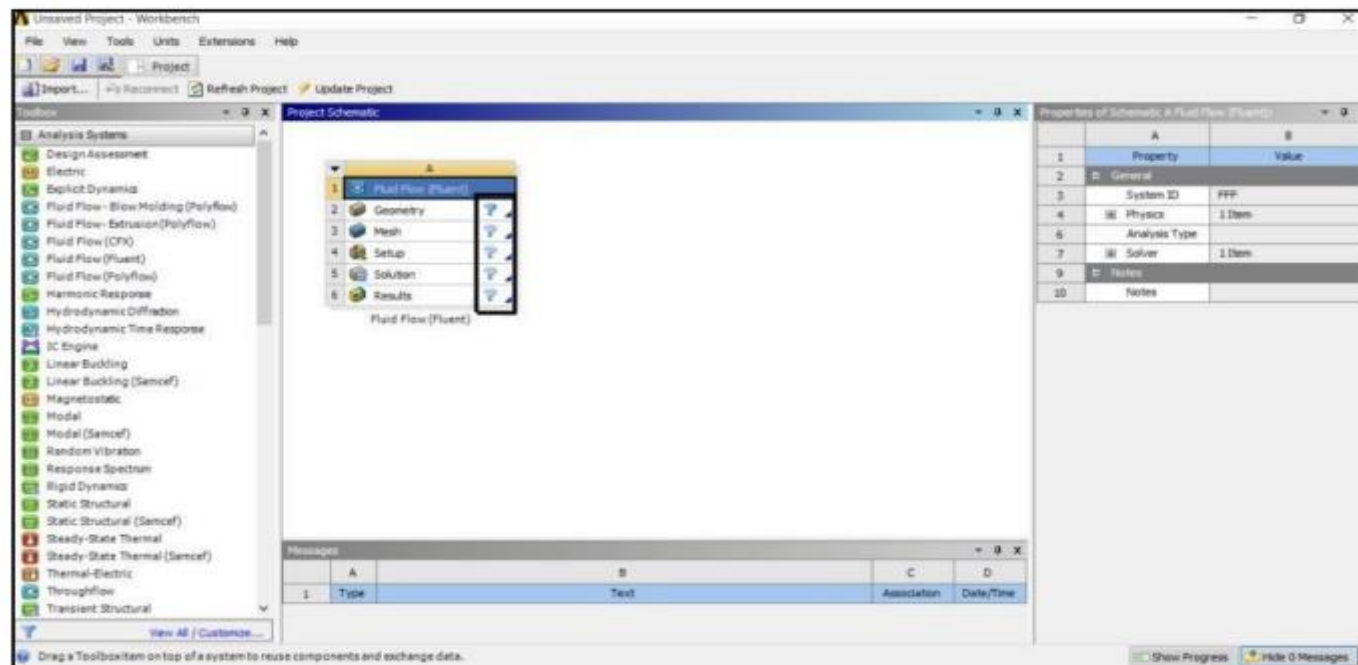
3- Dragging an Analysis System

On to the Project Schematic lays out a workflow, comprising all the steps needed for a typical analysis. Workflow is from top to bottom. As each stage is complete, the icon at the right-hand side changes.



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However, an analysis could equally well be prepared by selecting the individual Component Systems that are needed for this analysis, and then linking them together with connectors.

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TIP: There are two ways to create the connectors between the systems:

- 1) Use the mouse to draw a line (e.g. A2 to B2, B3 to C2 etc).
- 2) Or, simply drop the new system on the cell of the upstream one and the link will be generated automatically.

