

ANSYS Flow over an Ahmed Body - Results

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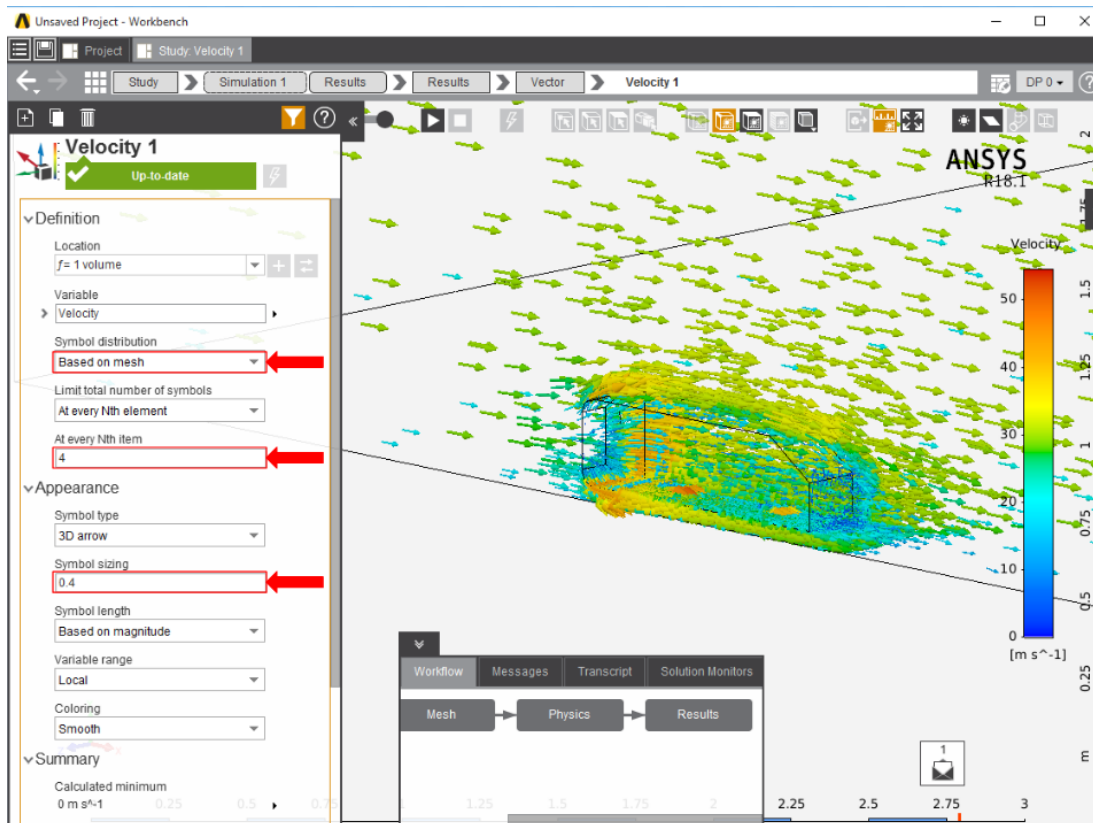
Problem Specification

1. Start-Up
2. Geometry
3. Mesh
4. Physics Setup
5. Results
6. Verification & Validation

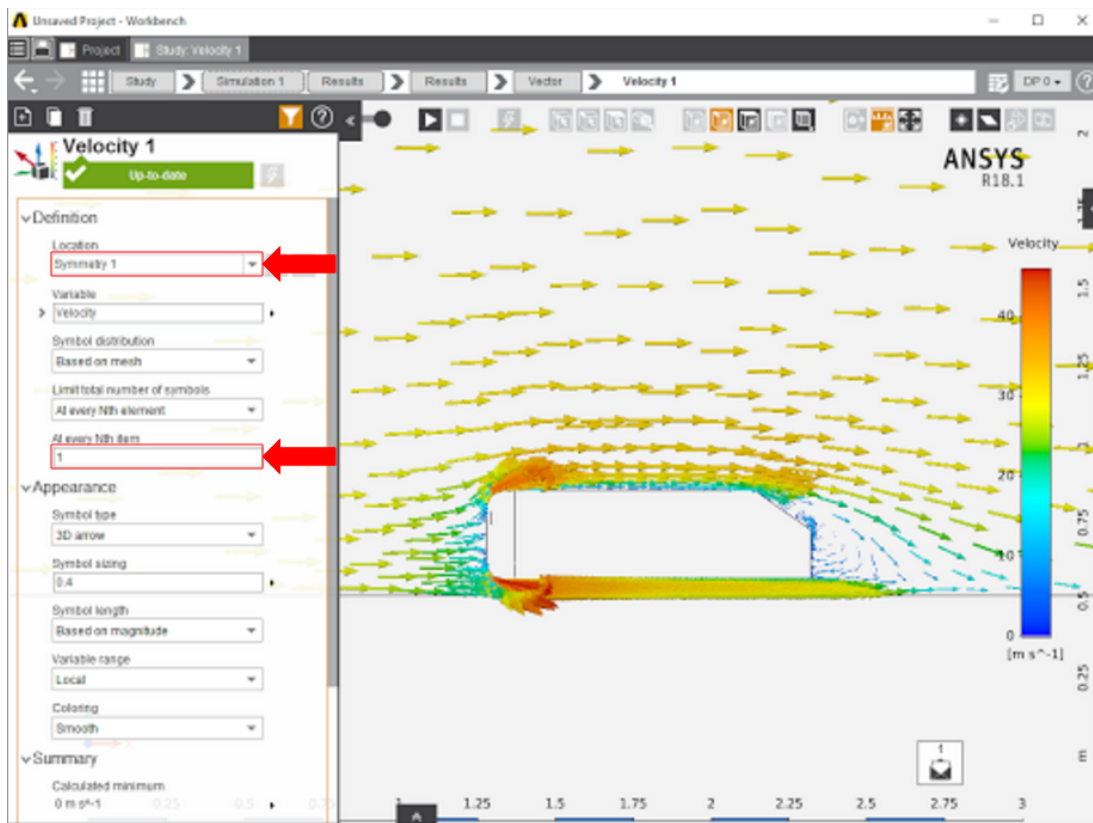
Solution/Results

Press the **Results** button in the **Workflow** to extract information from the simulation. In order to find information that can be readily used, first **press Evaluate Results**. Once the evaluation is complete, AIM will automatically output a Velocity Vector in the Results section under Objects.

Select the **Velocity Vector** to edit the settings with which the vectors are defined. Change **Symbol distribution** to **Based on mesh** and change **At every Nth item** to **4**. If desired, change the **Symbol sizing** in the **Appearance** section to alter how big the arrows are. Press the **Play** button in the model window to see how these velocity vectors develop over time.

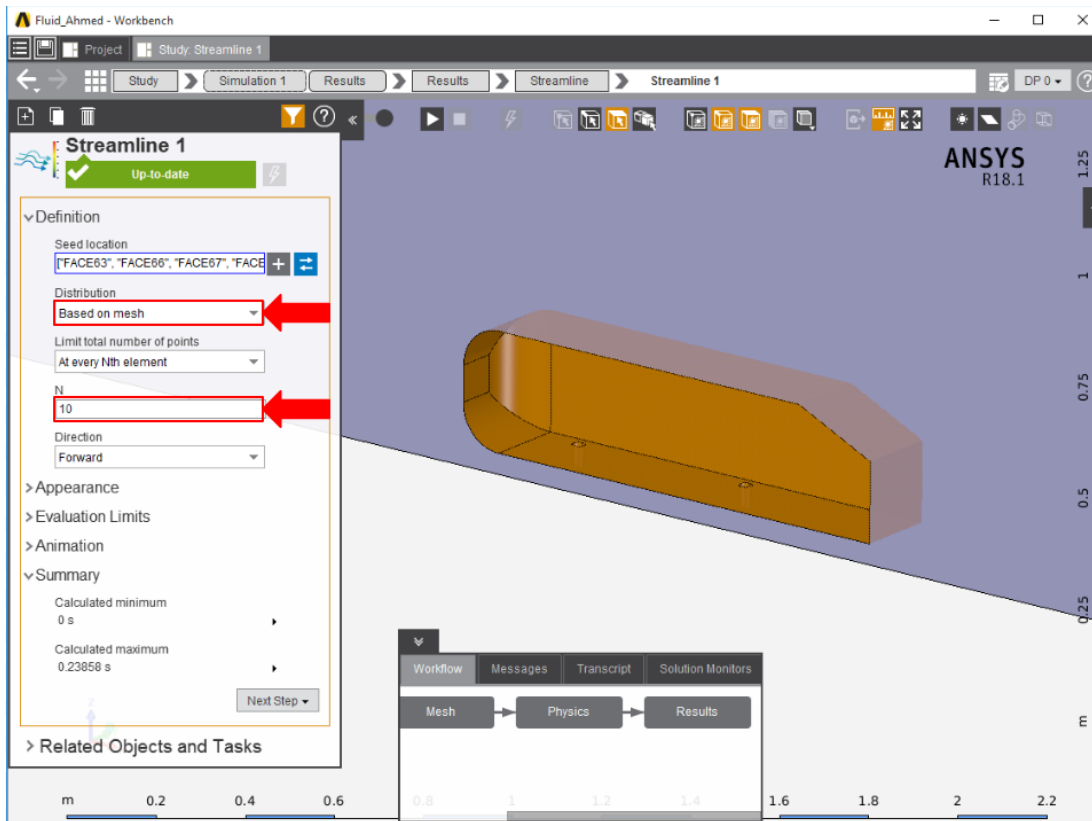


Flow along the midplane can be visualized by displaying the velocity vectors on the symmetry plane. Change the **Location** to **Symmetry 1**, change **At every Nth item** to **1**, and **press Evaluate**. Press the **Play** button in the model window to see how these velocity vectors develop over time.



Pressure on the Ahmed body can be plotted by adding a **Contour** in the **Add** drop down menu of the **Results** panel. Use **Total Pressure** as the **Variable** and then select the faces of the flow volume touching the faces of the Ahmed body.

Streamlines can also be computed, by picking the **Streamline** option in the **Add** drop down menu near the **Results** category. Select the faces of the Ahmed body as the **Seed location**. Then, change **Distribution** to **Based on mesh** and **At every Nth item** to 10.



Press Evaluate. If desired, change the Wire thickness in the Appearance section to alter how big the streamlines are. Press the Play button in the model window to see how these streamlines develop over time.

[Go to Step 6: Verification & Validation](#)

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