

Setup Multiphase PIV 24 cm

Camera Type : ImageProX 4

Lens: 60 mm

Aperture: f/16

Record Rate: 5 Hz

Number of Acquisition Loops: 10

Number of Double Frames per Loop: 75

Delay Δt : 1500 μ s

Image Width : 2048 px

Image Height : 2048 px

Calibration Factor: 13.71 px/mm

Calibration Relative Standard Deviation: 0.39 %

Active Area Width (real): 74 mm

Active Area Height (real): 74 mm

Laser Type: Litron LPU 550

Light Sheet Thickness: 3 mm before, 6 mm after the model

PIV SettingsCross-Correlation: Multi-pass (decreasing Size)

First Pass: Interrogation Area: 96 x 96 px², Overlap: 50 %, Passes: 1

Second Pass: Interrogation Area: 64 x 64 px², Overlap: 50 %, Passes: 1

Vector Postprocessing:

Hard Limits: V_x [-0.2, 0.2] m/s , V_z [0.0 1.0] m/s

Standard Deviation Filter: Remove if diff > 1.5*std.