

Materials List for:

Visualization of Flow Field Around a Vibrating Pipeline Within an Equilibrium Scour Hole

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Materials

Name	Company	Catalog Number	Comments
Camera control software	Vision Research	Phantom PCC 2.6	Camera control, image data acquisition and processing
Camera lens	Nikon Chiyoda		Nikor 60mm, f=2.8 prime lens
Continuous wave laser	Beijing Laserwave optoelectronics technology co. ltd.		PIV Laser source; Nd:YAG laser, 532 nm; air-cooling
High-speed camera	Vision Research	Phantom Miro 120	Image data recording
Laser sheet forming optics	Thorlabs Inc		Transform the point laser to a thin laser sheet
Pipeline model	ZONCEPZ SOLUTIONS		Acrylic cylinder with a diameter of 35 mm
Pipeline vibration system	ZONCEPZ SOLUTIONS		Consists of a sever motor, two connecting springs and pipeline supporting frames.
PIV calcaution software	AXESEA Engineering Technology Limited Co.	PISIOU	Image data processing for obtaining flow fields and pipeline displacements
PIV seeding materials	Shimakyu		Aluminum powder with a diameter of 10um
Recirculating flume	SZU ENGINEERING PTE LTD		Glass-sided, 11 m long, 0.6 m wide, and 0.6 m deep
Tri-pod	MANFROTTO	SKU MT190GOC4US 410	Camara supporting