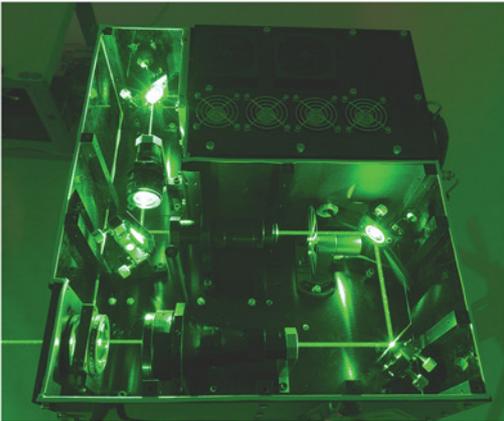
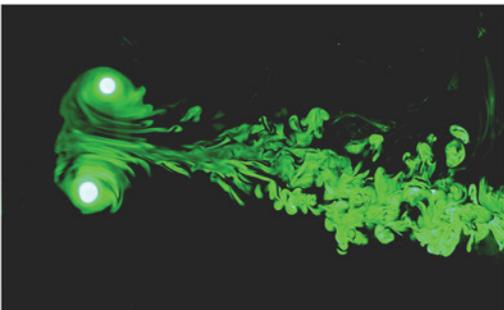


SPECIFICATION

- Nd:YAG laser, max. power output 3 W, wave-length 532 nm, continuous power output adjustment
- beam divergence less than 1.0 mrad, stability of light power output less than ± 1 % peak to peak
- light sheet geometry:
 - continuous adjustment of sheet width from 1 to 40 mm
 - light sheet area can be adjusted in several discrete steps
- frequency controlled beam modulation
 - with external TTL signal
 - with internal source of adjustable frequency between 1 and 1000 Hz
- robust tripod – positioning and tilting with respect to longitudinal and lateral light sheet axes
- π Shaper homogenised beam profile
- standard TTL signal output for synchronisation with recording device (camera)



▪ Internal arrangement



▪ Visualization of vortex ring

Solid-state laser light sheet

The laser light sheet is designed for visualisation and measurement of fluid flow. It is a unique, custom-made, compact, portable system of long-time operation. It employs high power Nd:YAG laser of adjustable power as a light source and generates a beam which is treated to result in a wedge-like light sheet. The light source allows the geometry of the light sheet as well as the beam convergence to be set up.



TYPICAL APPLICATIONS

- visualization and measurement of fluid flow
- suitable for research on fast processes that exhibit 3D flow character
- jet visualization by introducing particles, smoke or He-filled bubbles (available devices: Safex smoke/fog generator, Sage bubble generator, TSI 3433 powder disperser)
- image recording: Olympus i-Speed 2 high speed camera or digital SLR camera
- suitable for application with fluorescent particles such as Rhodamine B marked particles.

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