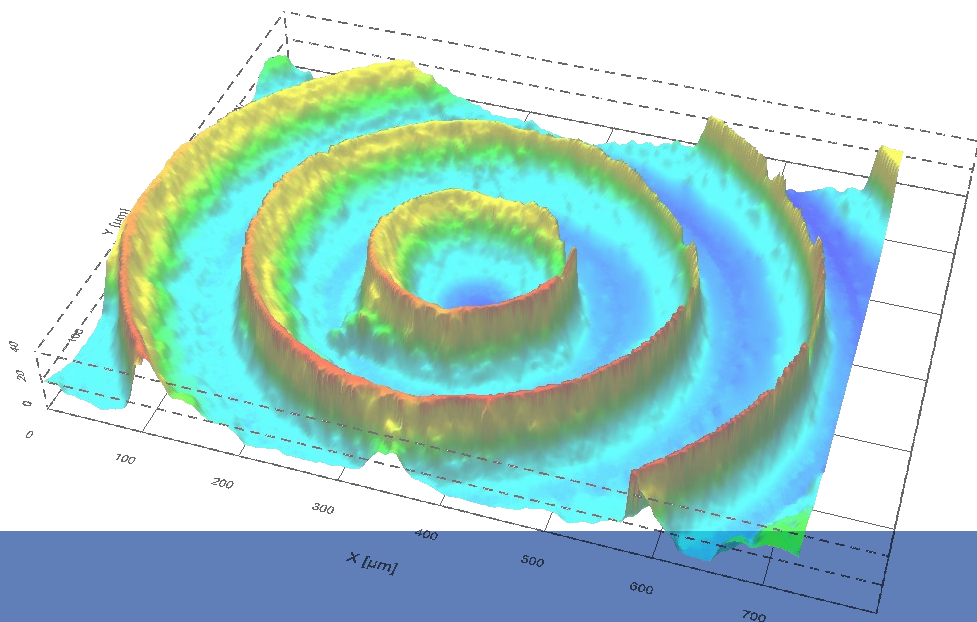


# WAVERUNNER

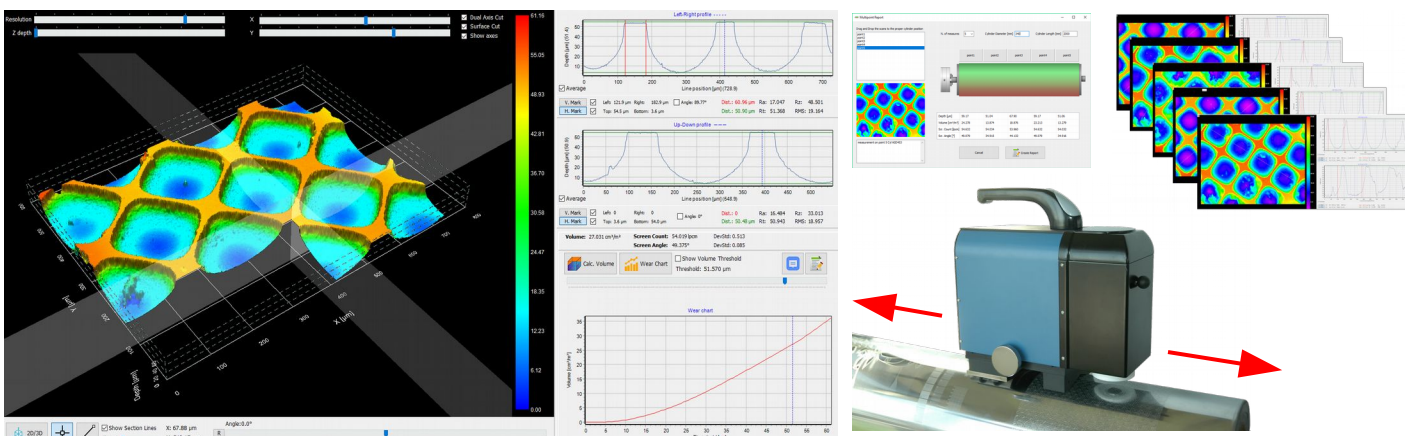


DV INTERFEROMETER

**DV S.r.l.**  
Viale dell'Industria 62 - 35129 Padova ITALY  
Tel. +39 049 8070024 – [www.dvoptic.com](http://www.dvoptic.com)  
[infospectroscopy@dvoptic.com](mailto:infospectroscopy@dvoptic.com)

## DV S.r.l.

Viale dell'Industria 62 - 35129 Padova ITALY  
Tel. +39 049 8070024 – [www.dvoptic.com](http://www.dvoptic.com)  
[infospectroscopy@dvoptic.com](mailto:infospectroscopy@dvoptic.com)



Our latest development is an instrument designed to satisfy the needs of precision measurement of 3D surfaces. WaveRunner embeds the art of high quality microscopy and interferometry since it can be used simultaneously as a microscope or an interferometer. WaveRunner and the software InterferoLAB® can perform the following functions:

- 2D High precision measurement by means of confocal or dark field microscopy.
- 3D measurement sub-micron precision.
- Profilometer.
- Surface characterization.
- Roughness measurement.

WaveRunner performs the measurements on various type of materials and the surfaces can be coated or uncoated, opaque or transparent. Applications are on Laser, mechanical and etched gravure, ceramic anilox, flexo and litho plate evaluation.

## HARDWARE

### WaveRunner Features:

#### SYSTEM

Type: White Light Interferometry System  
Objectives: 10x MIRAUI type  
Field of View: Objective 10x and native magnifications  
Combination 1 : 5x 730x550µm @1.14µm  
10x 360x275µm @0.6µm  
Fine focus travel 13mm  
Illuminator broadband light source LED  
Area Sensor: 1/2" colour CCD  
Data Link to Computer: USB 3.0  
Illumination Ring: Multi LED white and coloured illumination.

#### PERFORMANCE

Scan Range 2mm  
Scan step 50 nm  
Vertical Res.  $\leq 0.1\mu\text{m}$  independent of the magnification  
Data scan rate 10µm/sec

#### DIMENSIONS AND CONSUMPTION

Dimensions 240 x 120 x H221 mm  
Weight 3,95Kg  
Input voltage 24V 60W (Power supply 230VAC)

#### ENVIRONMENTAL

Temperature 10 to 40°C  
Humidity 5-95%relative, non condensing

## SOFTWARE

### InterferoLAB Features:

#### USER INTERFACE

- User friendly acquisition interface.
- Works on multiple scans simultaneously in separate windows.
- Automatic positioning of the axis based on the radius of the scanned cylinder or flat sample height.
- Autofocus
- 2D representation with selectable palette indicating the depth.
- 3D representation with rotation / zoom / pan.
- X, Y profile chart on point selected in the 2D image.
- Chart of a line drawn freely from two points in the 2D image.
- Angular inclination of the X, Y axes plotted on the charts.
- Surface section on 3D image with plot of the profile.

#### MEASUREMENTS

- Line and angle screen calculation.
- Measure of distance and depth on the plot by positioning markers.
- Roughness calculation, Ra, Rz, Rt and RMS
- Automatic calculation of the cells volume with manual refinement.
- Wear chart - graph of the volume of the cells according to the consumption of the cylinder.
- Correction of the curved surface of cylinder.

#### MISC

- Acquisition export in proprietary format TIFF or STL.
- Data export on cvs file.
- Printable report of main data and plots with customized logo.
- Multipoint report.

## APPLICATIONS

