Hi all. On this video OFH company presents the device for the laser beam parameter measurement. This device contains hardware and software parts.

Hardware consists of:

1. Laser holder with adjustments

2. Camera

4. Optical filter

The main think you must know about camera is a pixel pitch.

Now let’s review software.

After program run it is in static mode. In this mode user can load and analyze any images of laser spots. These images can be grabbed with help of any software.

Screen of the program is divided in several parts:

1. Image windows (for the b/w images and for the false color images)

2. Charts areas which provide charts with measurement result along x and y axes (with and without filters)

3. Spreadsheet with results of the measurement

4. Modes control buttons

5. Windows for parameters insertion (region of interest, pixel pitch, angle of the rotation, zero level)

After than user load an image of the laser spot program is showing whole frame. After clicking on image user can see in full resolution.

After this user can change parameters of the measurement to get required information:

- region of interest

- rotation angle

- zero level

- pixel pitch

User can use the “manual mode” checkbox to set position of the marker manually.

Software recalculates the parameters of the laser spot automatically for each marker position.

The measuring results are

Size of the spot along marker axe on full width at half maximum level

Size of the spot along marker axe on full width at e2 level

Both values are provided for cases with and without filter.

All measuring results can be saved to excel file.

Dynamic mode is used for grabbing of the image from camera directly. In this case user can see laser spot in the real time. In any moment user can switch to the static mode to process the measuring.

Also software can calculate divergence of the laser beam. OFH designed special hardware which make it possible. Full list of parameters of this device can be found on OFH website.

This device includes: IDS USB camera, Deltron slide, Mitutoyo micrometer drive, filter slot.

Laser diode is placed in the special slot. Then user should turn on camera and laser. Special optics focuses laser beam in camera sensor plane. After that user should receive the image of the spot with help of any camera software and analyze divergence of the laser beam whit help of OFH software. It has special divergence mode for that.