# NEWSLETTER – Q2 2018

## COME VISIT US!

LASER World of PHOTONICS CHINA
MARCH 14-16, 2018 | SHANGHAI NEW INTERNATIONAL EXPO CENTRE

**Laser World of Photonics China:**

Shanghai New international Expo Center

March 14-16 2018

Hall W2

Booth 2703

*Cinema2Go (C2G) MoGo Product*
*https://www.cinema2go.biz/*

Holo/Or would like to thank everyone who came to our booth at BiOS and Photonics West Exhibitions! In case you missed it, we will be exhibiting at **Laser World of Photonics China** in Shanghai.
Our experienced engineers will be happy to meet you there.

## Publications

### "Diffractive Optical Elements: Minimizing Zero Order"

Holo/Or is very proud to have a new publication featured in **Photonics Spectra** magazine (February 2018 issue), discussing new design and manufacturing techniques which allow for challenging configurations of beam splitters and diffractive axicon beam shapers.

Read the full article here.

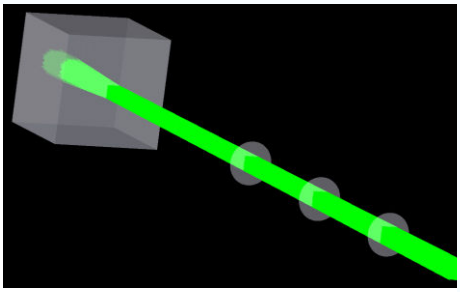
## What's New?

### Business Collaboration with Cinema2Go (C2G)

Holo/Or is happy to announce a new strategic partnership with Cinema2Go (C2G). C2G is a start-up developing novel solutions in low vision/near eye displays based on bi-ocular magnifiers, AR and VR technologies.

The currently commercially available, 6x times enlarging, Prismatic Lenses are installed in MoGo – Movie-on-the-Go, optical headset to watch 2D video on a smartphone screen without losing pixels (as an alternative to VR headsets that lose 75% of the pixels in 2D for wide aspect ratio videos).

By combining Holo/Or's diffractive optical design capabilities with C2G's novel concepts, we believe that we will take the technology one step further, providing unique value to the VR/AR and low vision fields.



*Collimated Top-Hat module converts a Gaussian input beam into a collimated Top-Hat shaped beam.*

### Top Hat CUBE – collimated Top-Hat element

Top Hat cube is Holo/Or's tailored solution for converting a Gaussian beam into a collimated Top Hat beam. Just place this element in front of your laser and see your Top Hat beam output.

This element is simple to align, compact, and lightweight. It is also a Polychromatic element, designed for use at all wavelengths in a range of 320nm-2000nm.

Typical applications include material processing, illumination, laser heating, and more. Read here for more information.

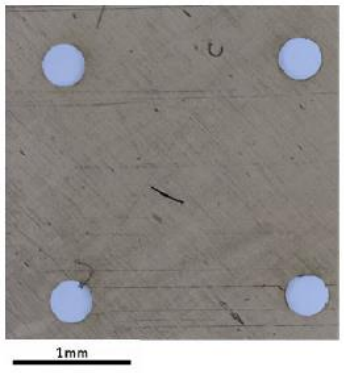
## Applications

### High Precision Laser Micro-Drilling and Micro-Cutting Using DOE

As part of our cooperation with the Department of Micro-structuring and Nano-structuring at **Fraunhofer ILT** (within the framework of the Eurostars Multilas project) , Holo/Or's DOE were used for helical drilling and helical cutting of multiple materials. These experiments utilize a 2x2 Multi-Spot element for high power, ultra-short laser - 50w, 6ps, 515nm, and a 500um substrate thickness.

The DOE provides high-quality results in terms of the hole shape and minimizes damage of surrounding material.

Thanks to the high precision of the splitting angles, high laser damage threshold and precise shaping DOE are the go-to solution for these applications.




*Drilling of cylindrically shaped holes in stainless steel using a 2x2 Multi-Spot DOE*
*Source: SPIE digital library*

## Contact Us

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## Technical Tips

### DOE - Myth or Fact?

To celebrate our 29th anniversary, Holo/Or has decided to refute some of the common myths about Diffractive Optical Elements.
We hope this will help to reassure potential customers and to provide more information about our unique products. Read the full paper here.