

# Over Cutter Camera – OCC

**The Over Cutter Camera – OCC captures all register marks in the working area of the cutting system with a single shot – automatically and in a matter of seconds.**

The OCC is an intelligent, fully automated optical registration system. It is designed to digitally capture registration marks with a camera mounted above the center of the cutting system, either attached to a support frame or suspended from the ceiling.

As expansion to Zünd's proven ICC technology, the OCC prepresents significant advances in registration speed and, consequently, in overall productivity.

Regardless of the thickness of the printed substrates, high-end optics reliably capture all register marks in a single image and process them in a matter of seconds.

Until now users were applying register marks fully aware that reading each individual mark would take precious time and that, especially

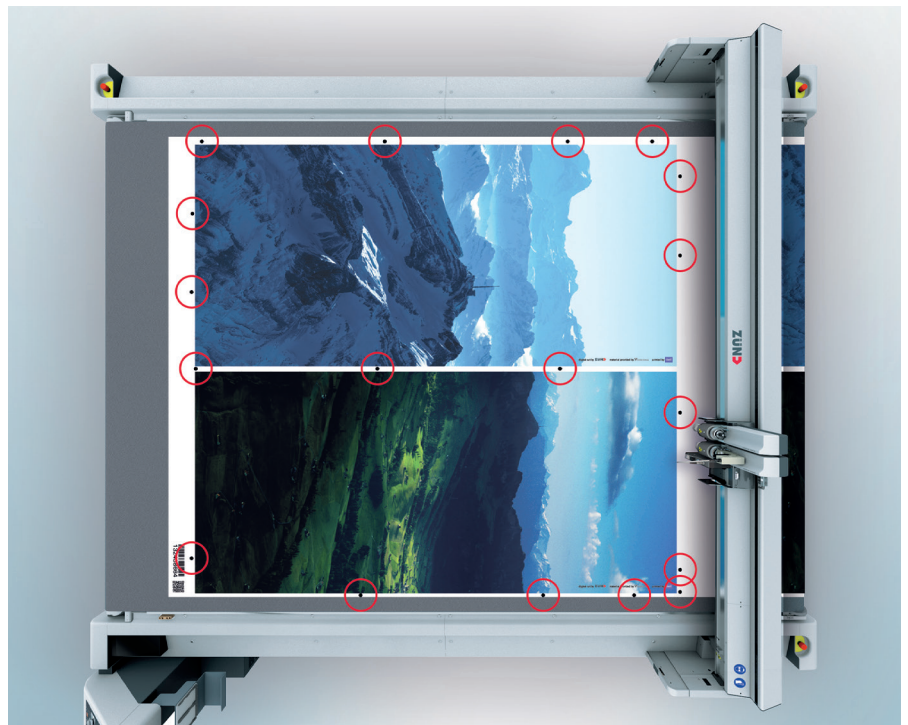
on larger systems and extra-wide materials, the beam-mounted ICC camera would have to travel long distances to capture all the marks. The new, one-shot technology of the OCC renders all of these considerations obsolete. It no longer matters how many register marks are added or where in the cutting area they are located. This makes the system and in turn the production workflow significantly more productive.

The data processing functions are completely integrated in the ZCC software: in seconds, powerful algorithms analyze the data captured by the camera and simultaneously compensate for any distortions.

Following each material advance, the OCC automatically captures and processes a new

image. Once this registration process is complete, production continues automatically. Boards and sheets can be placed anywhere in the working area since the OCC determines location and orientation with a single shot. Exact placement of the material is no longer relevant.

For jobs that require the highest possible degree of accuracy, the proven ICC technology is always an option. The ICC camera is attached to the beam and individually captures all register marks necessary for perfect registration. ICC is also still used for automatic file retrieval via QR-code. The two systems complement each other perfectly and provide the user with the best possible solution for every type of production scenario.



## Details

Over Cutter Camera field of view: 3200 x 3200 mm (126 x 126 in)  
(covers working area of all machine sizes)

Recommended register-mark size: 6 - 12 mm (1/4 - 1/2 in)

Compatible with all Zünd tools/modules incl. those requiring hoses (see back for details)

Both ICC and ZCC camera option required

Lighting in the working area may affect image quality and the ability of ZCC to process image data.

Supported in ZCC Version 3.0.1 and above

Compatible with **G3** cutters.

## Benefits at a glance

One-shot technology captures all register marks at once, resulting in significant time savings and productivity increases.

Reduces manual intervention in the production workflow to a minimum.

Completely supported in Zünd Cut Center - ZCC with algorithms that intelligently process image data in seconds.

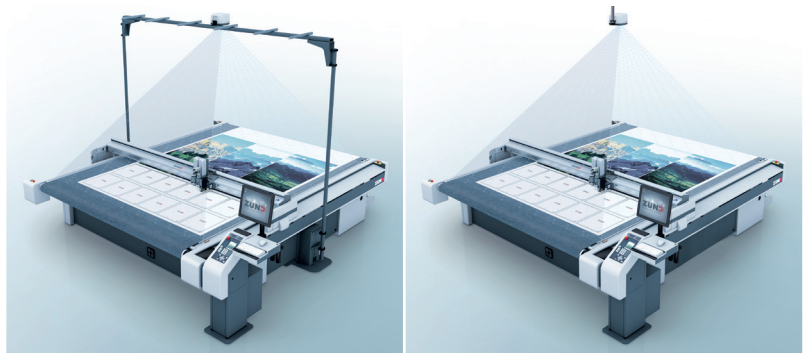
Fully compatible with ICC camera; seamless switches from one system to the other.

# Mounting

The OCC camera can be suspended from the ceiling or mounted to the support frame and is generally compatible with all modules/tools; depending on the configuration, certain conditions may apply:

Some modules or tools require vacuum hoses, air lines, or other supply cables. Depending on cutter size, ceiling height, and the need for accessibility to the working area from the side, the hose support and guidance system may involve either a gantry, support frame, or ceiling mount.

The following compatibility matrix for mounting the OCC is a result of the many factors and possible combinations involved:



Mounting on support frame

Ceiling mount

## G3 cutter sizes

		M-1600	M-2500	L-2500	L-3200	XL-1600	XL-3200	2XL-1600	2XL-3200	3XL-1600	3XL-2500	3XL-3200
<b>OCC without modules/tools requiring hose support</b> Unless hose support is required and depending on cutter size, the OCC can be mounted on a support frame or suspended from the ceiling:		B	B/A	B/A	B/A	B	B/A	B	B/A	B	B/A	B/A
<b>OCC</b>	without hose support for modules/tools	B	B/A	B/A	B/A	B	B/A	B	B/A	B	B/A	B/A
<b>OCC in combination with tools/modules requiring hose support</b> The following modules/tools affect the options for mounting the OCC. Depending on whether the hose support involves a gantry, support frame, or ceiling mount, the following OCC mounting options are available:												
<b>RM-A</b> <b>RM-L</b> <b>URT</b> <b>PRT</b>	on gantry	B <sup>*)</sup>	B <sup>*)</sup>	B <sup>*)</sup>	B	B	B	-	-	-	-	-
	on support frame	-	A	A	A	-	A	-	A	-	A	A
	on ceiling mount	-	-	-	-	-	-	-	-	-	-	-
<b>LM</b>	on support frame	-	A	A	A	-	A	-	A	-	A	A
<b>Ink-Jet</b>	on gantry	B <sup>*)</sup>	B <sup>*)</sup>	B <sup>*)</sup>	B	B	-	-	-	-	-	-

**Ceiling height requirements:**  
 Support frame: min. 3.2m (10.5ft.)  
 Ceiling mount with/without hose support: 3.2m – 4.4m (10.5ft. – 14.4 ft.)

**Exceptions:**  
 Ceiling mount with hose support M-line: 3.2m – 4.0m (10.5ft. – 13.1 ft.)  
 Ceiling mount with hose support L-line: 3.2m – 4.2m (10.5ft. – 13.8 ft.)

**Legend:**  
 A Mounting on support frame possible  
 B Ceiling mount possible  
 - No mounting possible

**\*) Note:**  
 Operator must tie back hose and cables when module/tool is stored in module holder.