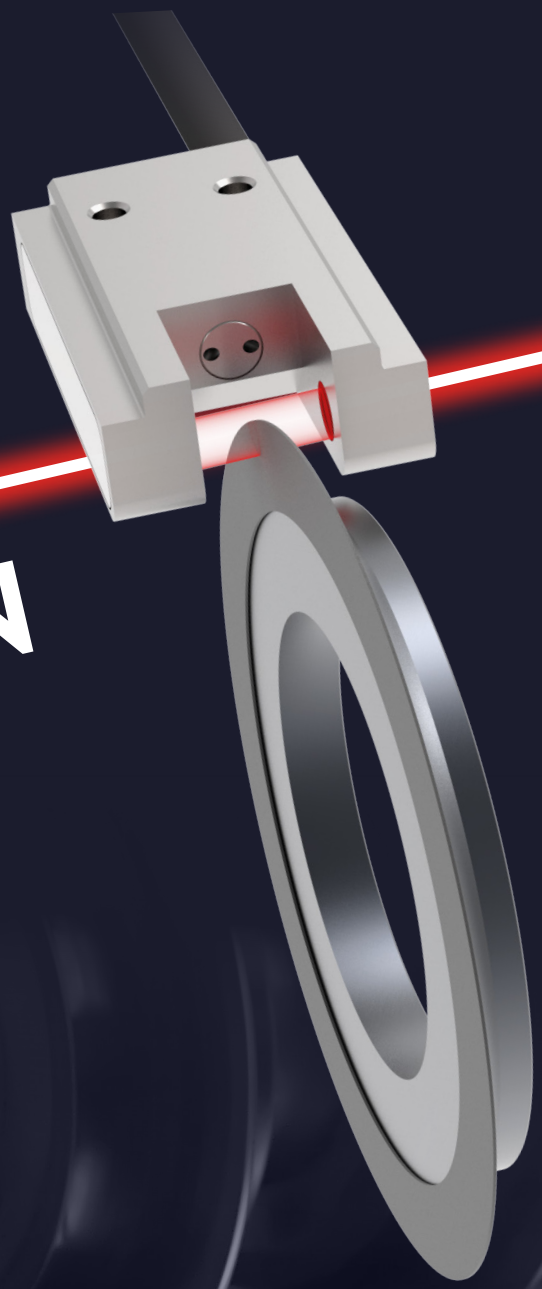
VBI

VISUAL BLADE INSPECTOR

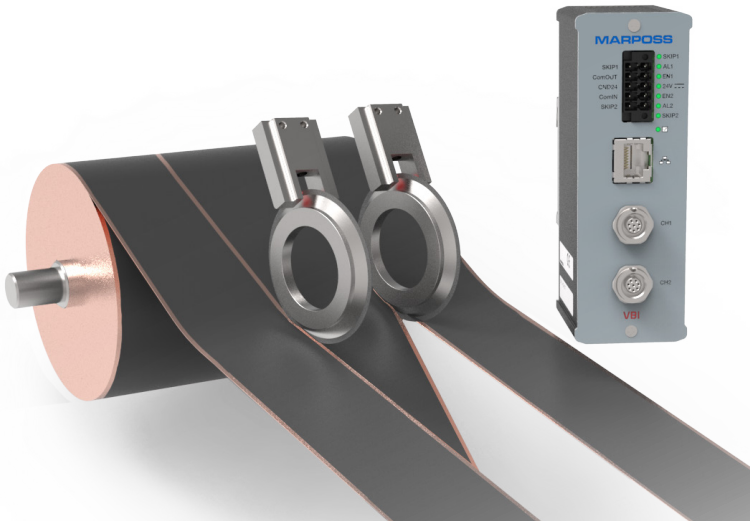


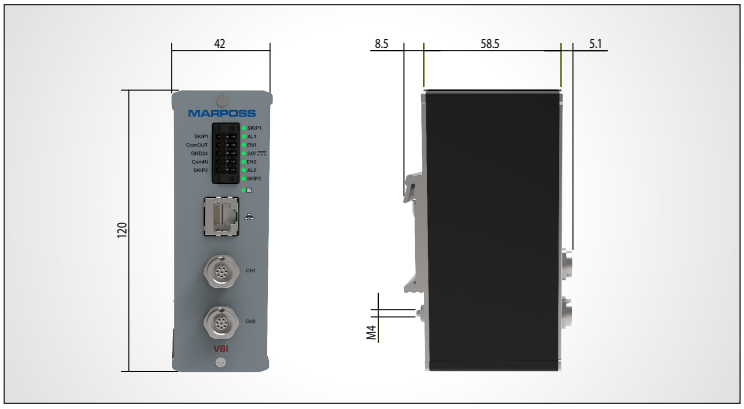
PRECISION IN EVERY CUT

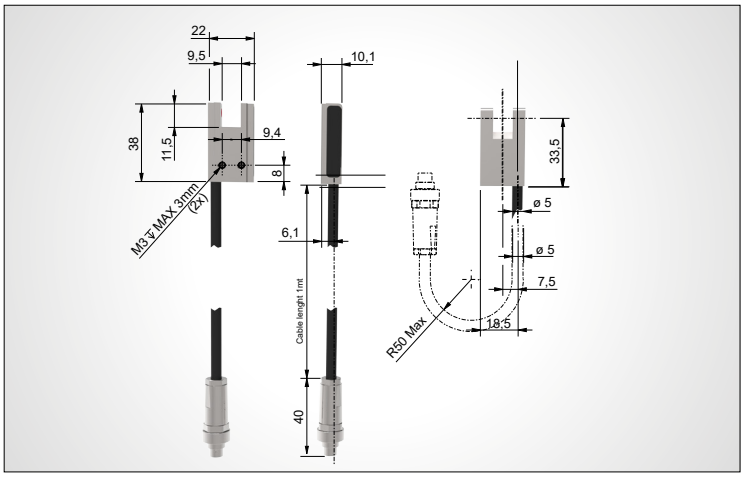
MARPOSS

Visual Blade Inspector

Marposs offers a unique and comprehensive solution for manufacturers of electrodes and separators into R2R processing, acting as a single-source provider from the initial coating process all the way through calendaring to the final slitting operation. By leveraging advanced measurement, inspection, and monitoring technologies, Marposs ensures the highest quality standards are met at every stage of production.
In the cutting process, individual electrodes and separator sheets are separated using a shear blade from the web mother coils. The advantage of shear blade processes is that very clean cut edges can be achieved. This makes it possible to meet the highest quality requirements.
However, a disadvantage of this process is that the cutting tool comes into direct contact with the electrodes. This causes wear on the blade, which requires maintenance and reconditioning. The wear of the blade also negatively influences the cutting result, since the quality of the cutting edges decreases continuously.
As above described every steps in electrodes and separators production are crucial, but the slitting process is one of the most delicate challenges, every cut must be perfect. This is where our innovative VBI (Visual Blade Inspector) sensor comes in, designed to monitor the blades during cutting, ensuring excellent and reliable results while reducing scrap.
VBI is the first ultra-high frequency and fully digital system.
We offer a solution that not only enhances existing monitoring cycles, but enriches them with advanced functionality: our linear sensor allows real-time measurement of blade wear and shape. With an intuitive interface and digital connection, our system allows for quick and easy set-up via a WebServer, eliminating the need for complex interventions.







VISUAL INDICATORS	Power and I/O state, activity state and link state
INTERFACES	1 x Ethernet for external communication
MAXIMUM NUMBER OF PROBES	2
IMAGE SAMPLING SPEED MAX	125 KHz
PROGRAMMABLE CYCLES	NCS (non contact setup) BBD (blade breakage detection)
I/O	Isolated Sink Source connection type (see example below) Input circuits Type 1 - 24 Vdc Output circuits 24 Vdc / 100 mA max
POWER SUPPLY / CONSUMPTION	24V direct current SELV - PELV type.
PROTECTION DEGREE *Standard IEC 60529*	IP30

PROBE	
EMITTER TYPE	LED
RECEIVER TYPE	Linear image sensor
PROTECTION LEVEL	side sensor IP68 side connector IP50
MAXIMUM EXTENSION LENGTH	1 m

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