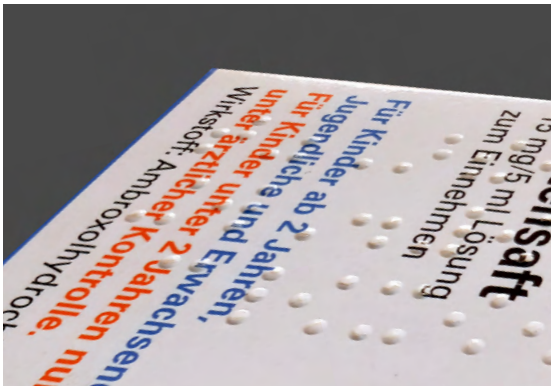
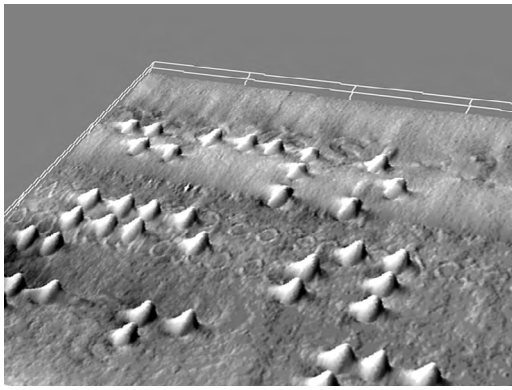
Tichawa *Vision* GmbH





IMAGING TECHNOLOGY FOR THE FUTURE – made in Germany

Industrial CIS Scanner with Shape-from-Shading / Photometric Stereo

See the structures on your surface

Vision Systems DESIGN 2022 Innovators Awards
BRONZE HONOREE

Your advantages at a glance

- Robust 3D Imaging
- Single housing contains light, sensor and control
- Scanwidth up to 4 m with 100 x 100 mm cross section
- High Speed
- Proven performance for inspecting
  - metal
  - ceramics
  - leather
  - plastic
  - paper
  - liquids
  - glass
  - cardboard
- Optional intensive lighting for dark samples
  - battery foil
  - fuel cells

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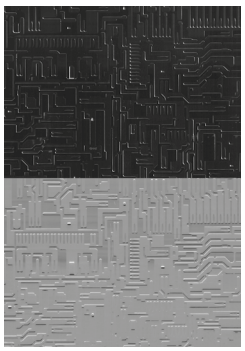
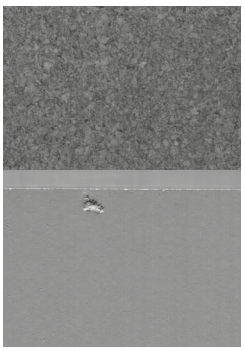
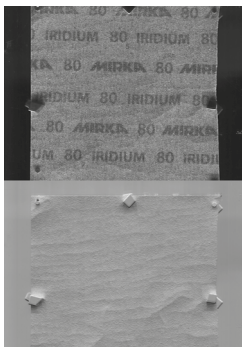
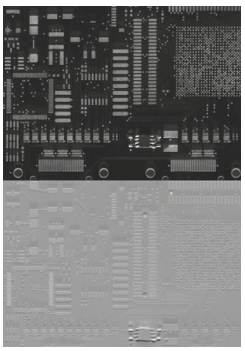
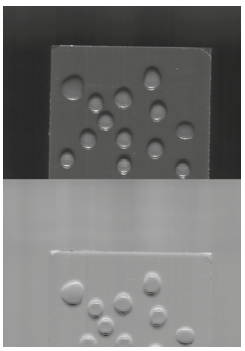
Samples with Shape from Shading – TOP results!


Metal board


Cork


Sand paper

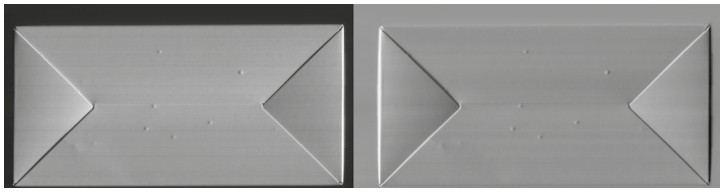

Printed Circuit Board


Water Drops on Glass Plate

Tires


Coins

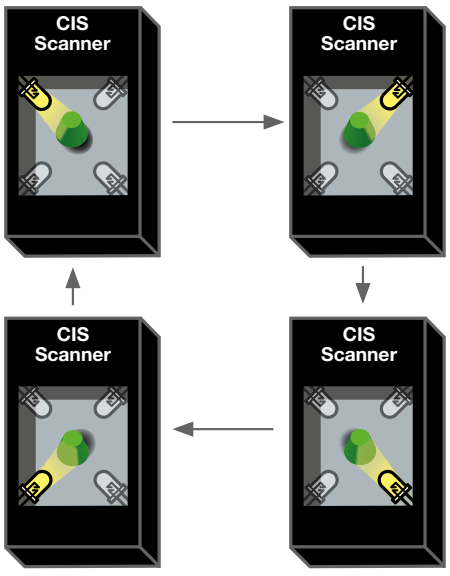

Wire


High gloss cardboard

Fabric decor / Cloth decor

“Arrangements with four illuminators offset by 90° produce more homogeneous light and accommodate the row/column structure of image sensors.” (Dictionary of image processing: inVISION, Sep 19, 2019)
https://invision-news.de/allgemein/shape-from-shading

Scanner for Shape from Shading / Photometric Stereo



Technical Data

Resolution nominal		300	600	1200	dpi
		84	42	21	µm
Max. Line Rate for square pixels kHz	**STD**	22.5	14	7.8	kHz
	FAST	250	250	250	kHz
Max. Moving Speed for square pixels		1.9	0.6	0.16	m/s
		114	36	10	m/min
Interface		Min. Camera Link Medium 4 Ports			
		Max. 4 x Camera Link Full 8 Ports			
Trigger		Freerun, CC1, external RS-422			
Scanwidth		420–2000 mm			
Illumination Geometry		Slant = 63°, 60°, 63°, 60°			
		Tilt = 13°, 90°, 193°, 270°			
Illumination		white or red			