

SWISS FLEXIBLE AUTOMATION SOLUTION

 available in
DESKTOP version



DEEP LEARNING
— I N S I D E —

Automated Optical Character Recognition (OCR) machine

DESCRIPTION

Based on self-learning technology, the **Optical Character Reader** machine automates optical character recognition (OCR) on parts with variable geometry and any texture type. The **Optical Character Reader** automatically locates, orients, reads

and converts characters such as serial numbers or product names into text files. By mimicking human functions, the technology makes it possible to automate inspection tasks that are difficult for traditional industrial vision systems to perform. An autonomy system for unstacking and stacking trays is available as an option.

ADVANTAGES



Turnkey

It is no longer necessary to develop a complicated code for optical character recognition (OCR).



Easy to use

The parts are simply placed in a tray. It is not necessary to orient the parts for inspection.



Flexibility

The machine can inspect parts of various geometries, dimensions and textures.



Performance

The OCR function reliability is superior to the best quality controller.



Reproducibility

The OCR function provides guaranteed reading consistency.



Speed

The recognition cycle time is optimised.



Traceability

The machine saves all the recognition operations performed.



Service

Assistance via remote maintenance and diagnostic.

OPERATING PRINCIPLE

1 Image acquisition

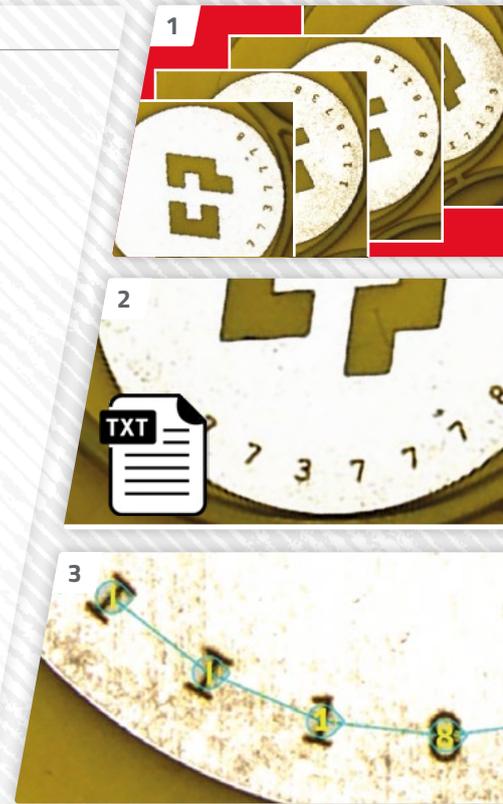
The user directs the machine to acquire a collection of statistically representative images which covers all the characters to be recognised.

2 In-depth teaching

The user indicates for each character in the images the character in text format. The built in computer creates a model (artificial intelligence algorithm), which will be used in production mode. No lines of computer code are required.

3 Production mode

Once teaching has finished, the equipment works automatically in production mode. Each image and its associated characters in text format are saved to the database.



TECHNICAL FEATURES

Cell dimension (without standalone module)	1000 x 1100 x 2250 mm (L x D x H)
Cycle time	< 1 s / recognition
Positioning	motorised linear XYZ axes (Gantry)
Field of view	45 x 48 mm (option : 11 x 14 mm, 70 x 70 mm)
Lighting	coaxial / brightfield
Average operator training time	~ 2 h
Machine self-learning time	~ 1 h / recipe
Machine user	non-specialised operator
Weight	800 kg
Power consumption	220 V / 50 Hz 10 A

TECHNICAL DRAWING

