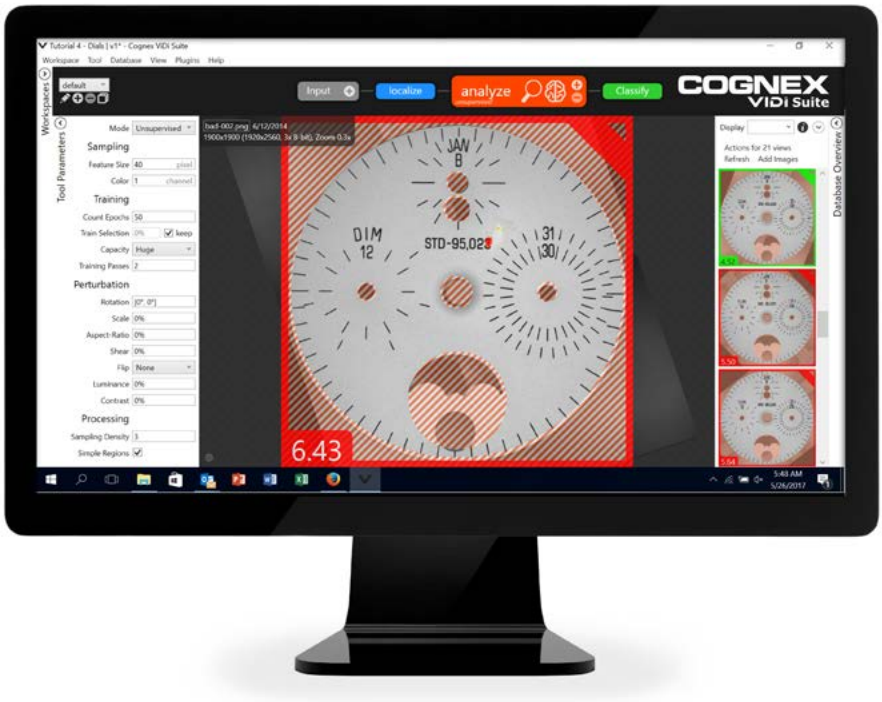
COGNEX

COGNEX ViDi SUITE

Deep Learning-based industrial image analysis

- Automated detection, inspection and classification
- Human-like
- Self-learning
- Powerful



Cognex offers the first ready-to-use Deep Learning-based software dedicated to industrial image analysis. Cognex ViDi Suite is a field-tested, optimized and reliable software solution based on a state-of-the-art set of algorithms in Machine Learning. It allows tackling otherwise impossible to program inspection & classification challenges. This results in a powerful, flexible and straightforward solution for countless challenging machine vision applications. The Suite consists of 3 different tools:

blue

Feature localization & identification

Cognex ViDi blue is used to find and localize single or multiple features within an image. Be it strongly deformed characters on very noisy backgrounds (OCR) or complex objects in bulk; the blue tool can localize and identify complex features and objects by learning from annotated images.

To train the blue tool, all you need to provide are images where the targeted features are marked.

red

Segmentation & defect detection

Cognex ViDi red is used to detect anomalies and aesthetic defects. Be it scratches on a decorated surface, incomplete or improper assemblies or even weaving problems in textiles; the red tool can identify all of these and many more problems simply by learning the normal appearance of an object including its significant but tolerable variations. The red tool is also used to segment specific regions such as defects or other areas of interest. Be it a specific foreign material on a medical fabric or the cutting zone on lace; the red tool can identify all of these regions of interest simply by learning the varying appearance of the targeted zone.

green

Object & scene classification

Cognex ViDi green is used to classify an object or a complete scene. Be it the identification of products based on their packaging, the classification of welding seams or the separation of acceptable or inacceptable defects; the green tool learns to separate different classes based on a collection of labelled images.

To train the green tool, all you need to provide are images assigned to and labelled in accordance with the different classes.

SPECIFICATIONS

Graphical & application programming interfaces		Windows based graphical user interface (GUI) with plugin support C library (Windows DLL) for runtime and/or training Microsoft .NET library (Wrapper for C library and WPF GUI components)
Hardware & OS Requirements	CPU	Intel Core i5 (minimum), Intel Core i7/Xeon (recommended)
	Optional GPU	NVidia Graphic Card (CUDA compatible, compute capability ≥ 3.0) For training purposes, a minimum of 3 GB graphic memory is recommended. Note: ViDi Suite performance — in terms of processing time — will depend on hardware selection.
	RAM Memory	4 GB (minimum), 8 GB (recommended)
	USB	1 free USB port (for the license dongle)
	OS	Windows 7 – 64
Supported image file formats		PNG, BMP, TIFF, JPEG
Supported image properties		1–4 channels, 8 or 16 bits

COGNEX

Companies around the world rely on Cognex vision and barcode reading solutions to optimize quality, drive down costs and control traceability.

Corporate Headquarters **One Vision Drive Natick, MA 01760 USA**

Regional Sales Offices

Americas

North America	+1 844-999-2469
Brazil	+55 (11) 2626 7301
Mexico	+01 800 733 4116

Europe

Austria	+49 721 958 8052
Belgium	+32 289 370 75
France	+33 1 7654 9318
Germany	+49 721 958 8052
Hungary	+36 30 605 5480
Ireland	+44 121 29 65 163
Italy	+39 02 3057 8196
Netherlands	+31 207 941 398
Poland	+48 717 121 086
Spain	+34 93 299 28 14
Sweden	+46 21 14 55 88
Switzerland	+41 445 788 877
Turkey	+90 216 900 1696
United Kingdom	+44 121 29 65 163

Asia

China	+86 21 6208 1133
India	+9120 4014 7840
Japan	+81 3 5977 5400
Korea	+82 2 539 9980
Singapore	+65 632 55 700
Taiwan	+886 3 578 0060

Lit. No. ViDi-DS-201709

www.cognex.com