EvoTegra GmbH
Kreuzwingert 11 • D – 55296 Gau-Bischofsheim

EVOTEGRA
CONCEPTS & INTEGRATION

Evotegra A-Eye

What is it?

Evotegra "a Eye" is an AI based surface inspection system designed to learn and monitor arbitrary surfaces in less than 10 minutes. It is the first self-learning surface monitoring system that requires no infrastructure and can be deployed even in harsh environments.

Examples

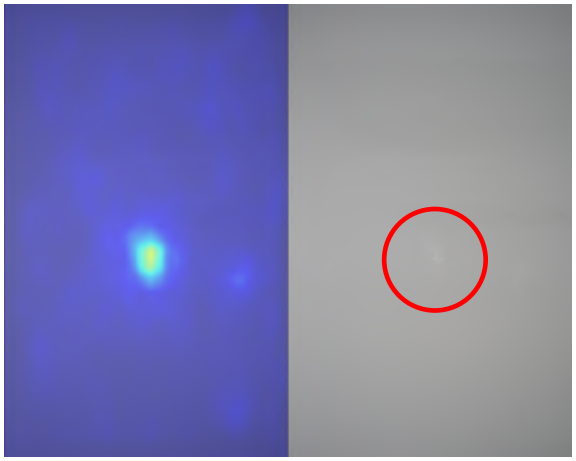

Figure 1: Subtle scratch marking

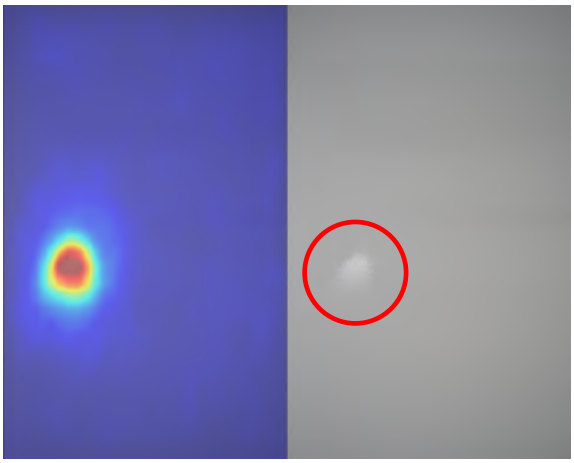

Figure 2: Distinct scratch marking

How it works?

To learn the system requires about 1000 images of the standard surface which typically can be acquired within minutes. After the successful image acquisition, the system needs 3-10 minutes to learn the relevant features of a normal surface. After learning the system is able to detect all anomalies that occur on the monitored surface. The system is able to detect even subtle deviations in e.g., gloss or pattern distribution.

What do I need?

No-Cloud, No-Datacenter, No-Infrastructure
Contrary to existing solutions the system can be deployed directly next to the machine and using a maximum of 50W the system can be deployed even in harsh industrial environments.

What are the use-cases?

Use-case are any kind of surface monitoring tasks, especially in environments where the surface is changing frequently. e.g., production of flooring, tiles or any kind of fabric

What are the technical specifications:

Power Consumption: < 50W
Training data: 1000 images of a normal surface, automatically acquired during the startup phase
Phases: Image acquisition -> Learning -> Monitoring
Startup time: 5 Minutes+
Performance: 20+ images per second using a 512x512 image resolution