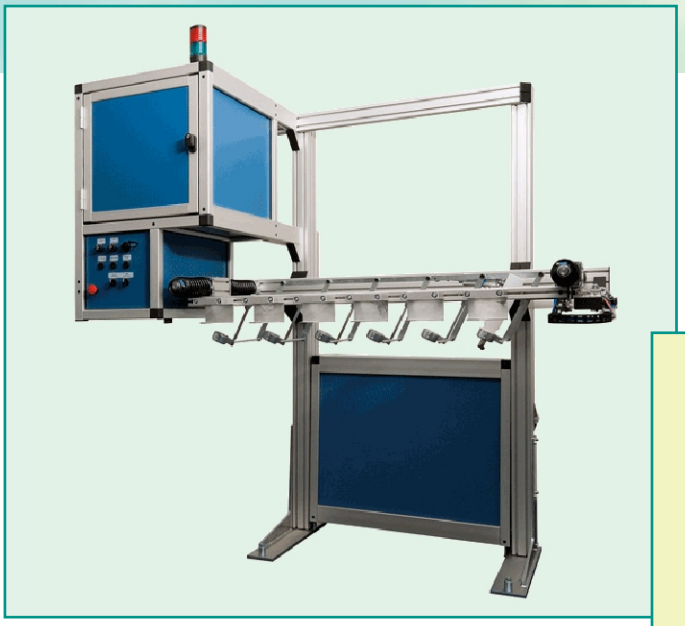
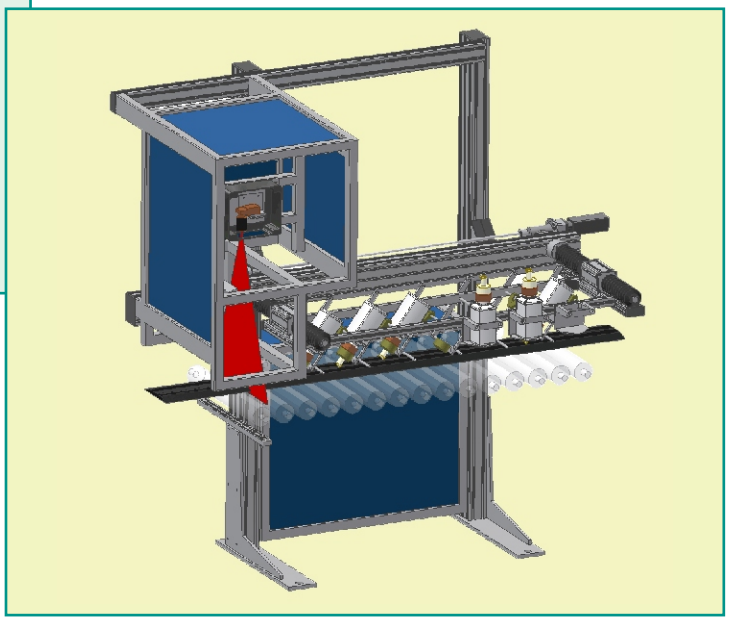
COLOR INSPECTION

Extruder Line Color Inspection





Description

ME-Inspection's Extruder Line Color Control is integrated system intended for application of color codes on rubber tread just behind the extruder. Painting cartridges can be anchored in a frame with pneumatically driven lift that enables controlled start and stop of painting session.
Additionally, the painting frame is attached to a servo-driven frame for horizontal positioning. The applied color code is then checked in a visual measurement stand with industrial color camera.The recognized code is compared with database receipt code and deviations are indicated on a user LCD screen.
When in automatic mode, the system utilizes information about overall code position to correct it by the servo feedback. In manual mode, user has full control over code application and positioning.
A robust color detection algorithm has been recently developed at ME-Inspection laboratories.
The color recognition algorithm is integrated into the Micro-Epsilon iConnect environment that serves as hi-level control and visualization frontend.
At low level, Beckhoff TwinCAT software PLC running on Beckhoff industrial PC is utilized for automation tasks.

Features

- integrated tire color code application, close loop positioning control system and width measurement of tire tread
- detection of missing lines, extra code lines, spotted lines
- painting frame is positioned to maintain constant color code position
- indication of correctness and accuracy of color code application on LCD screen

Parameters

Profile Width Accuracy	0.2 mm
Color Cartrige Positioning	0,2 mm
Repeability	< 0,1 mm