Product Focus

Real-time image processing with Halcon

Machine Vision can be profitably used in almost every industrial sector today, be it for identification, measuring, object recognition, position recognition or quality inspection. However, for an effective implementation of potential vision solutions, strict requirements regarding reaction times between camera, image processing library and control need to be met. In order to enable many such applications in the first place, Kithara RealTime Suite (KRTS) has a real-time extension for the program library Halcon.

The Halcon Extension combines the globally used, comprehensive standard software for industrial image processing by Munich-based company MVtec with the high-performance and flexibly applicable real-time operating system by Kithara. Users benefit from the integrated development environment HDevelop as well as the utilization of more than 2200 operators of the vision library within a coherent real-time environment. These include OCR, matching, segmentation and even cutting-edge technologies such as 3D vision or deep learning.

Furthermore, Kithara also provides the necessary real-time capabilities for the entire machine vision process. This includes not only image capture with industrial cameras which is feeding Halcon but also immediate control responses to processed image data. This way, by executing HDevEngine directly from the real-time context, machine vision processes can also be integrated into automation systems such as EtherCAT.

The latest information about Kithara products as well as a free 90-day trial version can be found › **on our website**.