

Quality control in smart manufacturing, ID: FOF-11-2020

MATADOR Automation developed own system for industrial control part recognition. Our trademark MATADOR Vision System is successfully used for bin picking applications. MATADOR Vision System (MVS) contains from 2D or from 3D camera for recognition, tailormade gripper and from whole integration to robot control system. Next future of our system is quality control system.

With MVS we provided test for physical features such as position of joints (rivet, spot weld, arc weld), size of joined part, RPS points etc. In serial production of body in white systems we are checking just significant value of joined parts. We want to check all parts in the end of each joining process in body in white systems. We will integrate MVS directly at the end of every production line and collect all information about each part. For this approach we are preparing structures for mechanical concept and algorithm for vision recognition.

We are looking for experienced consortium of institutions dealing with IoT and big data. Our goal is to create a big databank of parts and checking quality trends in our lines according to collected scanned data.

Artificial intelligence for manufacturing, ID: ICT-38-2020

MATADOR Automation was first company in VW Group, which integrated fully collaborative robot without any fences or scanners. We have integrated more than 1800 robots in the EU and in Russia. For our production lines we are using virtual reality simulation and we are on cutting edge of robotization in CEE region. Our services range from concept to commissioning.

We are using virtual commissioning and virtual reality simulation for each of our lines. Systems are ready to be installed as digital twin. Our own control system standard contains of elements spanning from IoT and predictive maintenance to fully robot integration.

For bin picking we have developed our own MATADOR Vision System and successfully integrated it to our production lines. We are looking for experienced consortium, where we are able to continue our development of standardization and data collection in lowest layer of production companies.

Robotics in Application Areas and Coordination & Support, ID: ICT-46-2020

Research and Innovation boosting promising robotics applications, ID: ICT-47-2020

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For bin picking we developed our own MATADOR Vision System and successfully integrate it to our production lines. We have got a lot of experience with industrial robots and collaborative robot integrations. We could be a part of consortium for simulation, engineering and tests in real integration of cognitive algorithm.