



Digital Twin: A Twin for all cases

Digital twins, the virtual image of machines or processes revolutionize the industry. These are born with the product idea accompany the design process and also stand according to the production each time with their physical twin in contact. Industry 4.0 automation Big Data and the Internet of Things (IoT) make it possible.

According to Deloitte Reports “boundless interconnected Digital Twins in the Sporting pits, the number of IoT final products will raise by 2020 worldwide more than 10 milliard. The estimates of firms in consequence fall to out of which 750 million in Germany. The internet-connected objects would in future cater for million times Digital twins with data. For the industry there is a huge potential in the digital images of real products. Finally with these the machines and the production ways not only simply watch over and control but also in the shortest time recognize errors and develop solution strategies.

More efficiency in wind-energy: The digital twin is placed in energy production plants among others. Therefore as for example ZF Friedrichshafen and Schaeffler both the suppliers of wind power industry want to utilize the digital twin technology in order to improve the efficiency of wind power gear mechanism. Jointly they develop a cloud-based platform for the windpower sector. Our calculations and modeling systems consider

of individual rolling contact on the bedding upto the complete mechanism of the whole system in details. The analysis of the real operation data in common with ZF set up. ‘Virtual twin of the rolling offers the operators useful evidence on the condition of the plant clarified Dr Stefan Spindler, Chairman, Industry with Schaeffler with the announcement of the projects in November 2017. To that the virtual twin takes care for that the energy acquirement with every weather plant, optimizes as also important maintenance works are predicted and can be better planned – keywords predictive maintenance.

Digital Twin in Motor Sports: Also the motor sport has acknowledged the chance of digital twin. The US – American racing stable team Penske wants to make their racing cars with the help of the PLM-Tools (Product Lifecycle Management) of Siemens virtual imaging of their racing cars. Sensors record with that thousands of data for example of speed, motor temperature of tire pressure which are carried over to the twin. That helps engineers with those motor configurations to simulate new parts to develop and to predict racing results at the right time, it is meant on the behalf of Siemens.

Anil Kumar Ghosh

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