

Foreword

By: Dr. Andreas Bauer, Chairman IFR Industrial Robot Suppliers Committee



Dear Reader,

Dear Robotics Community,

I have the honor to announce some of the highlights of the booming robotics industry:

- The sixth consecutive year with the highest level of an annual unit sales volume ever recorded: approximately 422,000 industrial robots were sold in 2018 (+ 6% units compared to 2017). Thereof, more than every third robot (36%) was installed in China.
- By the end of 2018, approximately 2,4 million units (+ 15% compared to 2017) of industrial robots have been in operation worldwide. Thereof, approximately 26% of all globally installed robots.

Looking to the near future, this historic global growth is expected to continue. From 2020 to 2022, almost 2 million units of new industrial robots are expected to be installed in factories around the world. (CAGR 12%). Total global annual sales will reach over 580,000 units in 2022, with Asia still at the top both in sales and stock, followed by Europe and the Americas.

Our world is changing and evolving at an ever-increasing rate. It is impossible to forecast with any accuracy what kind of challenges companies will be facing five years from now. Shortened product cycles, networked production sequences, volatile markets and scarcity of resources – these are only a few examples of the parameters that will shape the new market economy.

Those who want to retain their entrepreneurial freedom and strive to see their manufacturing companies flourish will need to respond to new trends and market developments in an anticipatory and flexible manner and create leeway for refinement and growth.

Smart robotics technologies enable companies to react to changing infrastructural conditions, varying capacity requirements, requirements for greater product variety and consumer trends in an agile and effective manner. That is why the consultancy company PwC expects that trade conflicts and barriers might even bolster investments in robotics and automation solutions. They argue that for many years the stable global free-trade environment led to global supply chains. Now, with trade barriers and other kinds of political headwinds, there was a need for more flexibility in production. ¹

¹ PwC: Industrial Manufacturing Trends 2019

Besides the increasing demand for industrial robots in general, two technology trends may boost the growth of the robot market in the next years:

- The adoption of human-robot collaboration is on the rise, but still at a very low level (see chapter 2.5). The combination of collaborative robots and mobile platforms, e.g. AGVs, offers new use cases that could increase the demand for collaborative robots substantially.
- Cloud connectivity is an enabler for a growing market for robot leasing (aka. Robots-as-a-Service, RaaS). This business model has advantages for small and medium-sized enterprises (SMEs): no fixed capital, fixed costs, automatic upgrades and no need for robot operators. Again, however, given the relatively low level of digital connectivity within manufacturing production, cloud robotics and RaaS may still take some time to achieve ubiquity.

Robotics and automation will increasingly shape the way we work in the future, with enormous potential for improvements in productivity, quality, safety, remuneration, and manufacturing competitiveness. For me, this sounds like a very exciting future lying ahead of us. The best is yet to come!

Best wishes,

Dr. Andreas Bauer