

European Mechanical Engineering sector: impact of COVID-19

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Mechanical engineering numbers among the largest sectors in the EU, with approximately 3 million workers in production, design, installation and maintenance, and with 9.5% of the industrial value added. The sector is highly export-oriented with an 36% share of the world market, and it is dominated by small family owned companies.

COVID-19 has an immense impact on the sector, as the companies are characterized by a high manufacturing intensity, and as they are highly dependent on intact supply chains. As many companies rely on Chinese suppliers, and as production in Asia has already resumed, this particular aspect might be mitigated. But with the lockdown still going on in many European countries, with temporary halts in productions and the cancellation or delay of orders, the companies are faced with enormous challenges, which only add to the downturn in the sector which already began before the sanitary crisis. Also, the demand on the European market is stagnating, as key industries such as automotive are only slowly resuming their activities.

ORGALIM has published [Suggestions for the prioritisation of the Commission's work in 2020](#).
VDMA has published the results of a [survey](#) among its members on the consequences of the crisis.

Country reports

France

Around 55%-60% of the production facilities are still online. This figure varies significantly depending on the nature of the companies: more than 80% of the plants of the ancillary industries in the automotive sector have closed, as many OEMs have shut down their production and therefore do no longer take the parts. In contrast, 80% of the plants operating for the food industry are still operating, as the demand is still unchanged.

- In the forge and foundry industries, 75% of the production has been put to halt. However, there has been a slight recovery in activities with contractors in the automotive sector starting to replenish again.
- In industrial boilermaking, many companies are on standby and ready to meet the demand of contractors in the petrochemical, chemical and energy industries. They are now asking to reopen the sites to perform maintenance work and therefore the companies resume their activities.
- In the sector of manufacturers of production equipment, 60% of the production sites are shut down. There has been a slow recovery in activity in the automotive sector as well as in aeronautics.
- In the construction equipment sector, the steel sector, and the pump and valve manufacturing sector, 40% of businesses are in normal activity, 40% have reduced activity and 20% are shut down. Yet, with the exception of maintenance, all activity in the construction equipment sector has come to a standstill and activity in the handling equipment sector is down to less than 50%. Activity in the fluidic equipment sector is down to 30% for pumps and 60% for valves and fittings, with the observation of a sustained recovery in export activity (especially to China). In mechatronics, 50% of manufacturers are shut down. Those who remain open face transport and logistics problems as only few businesses are still open and shipping costs have increased significantly. Export activity continues notably with Germany. 30% of surface treatment companies are down, 50% have

reduced their activity to 20 to 50% and 20% have brought down their activity to 50% or more.

- For hardware manufacturers who mainly produce for the building sector, 90% of business activities are down and they face a drop in orders of 75%.
- For manufacturers of laboratory devices, 50 to 80 percent of businesses have resumed operations in early April. The sector faces problems installing equipment on construction sites.
- In the bar turning sector, 45% of companies working with the automotive sector are completely shut down. Bar turning for the aeronautical sector is slowly resuming.
- In the cutting, stamping, press tooling, fine sheet metal and embossing sectors, 50% of the activity is suspended.
- For manufacturers of kitchen utensils, baking utensils, cutlery, table accessories and smoke and chimney pipes, 80% of businesses are in partial activity. There is already a 50% drop in turnover and an estimated 75% drop in turnover for April. The online sales sector remains dynamic. The rest of the sector has been shut down since the end of March.
- For large kitchen equipment, 75% of businesses are down, but 50% of them plan to restart within 15 days. 80% of companies have used the short-time working scheme. Commercial activity is at a standstill.
- In the area of abrasives and carbides, 60% of companies are shut down with an 80% drop in turnover.

Germany

- Even before the crisis, German Engineering Association VDMA projected a decline in production around 5% in 2020.
- Sub-sectors such as agricultural engineering, the construction industry, industrial valves and textile machine engineering benefit from a positive order situation which can now be worked through.
- The number of incoming orders, yet, is declining and the investment climate has worsened. The companies in the sector start to adapt their production capacities, and mainly those who depend on the automotive sector are struggling.
- Many companies have so far been able to compensate supply disruptions through other suppliers. Yet, they prepare themselves for short-time work, as they expect loss of production any time soon, especially in textile machine engineering, in construction machinery engineering and in the heating industry.
- Some plants have already been closed, as their supply chains are already damaged, e.g. production of hydraulic pumps or wiring harness for the construction materials industry has stopped.
- Most of the works councils hold weekly meetings with the management to closely monitor the situation
- Extensive measures are in place: safety distances have to be guaranteed, hygienic measures are in place, protective masks are being distributed where possible and appropriate.
- Production has been switched to a two-shift system, with extensive switchover times in place to avoid any contact between the shifts.
- White-Collar workers are mainly WFH.
- Workers in the services, especially fitters, suffer from an insufficient provision with basic supplies, they often face problems upon using the sanitary facilities. There is often no risk assessment for external activities in light of Covid-19 in place.
- Trade unions and works councils will closely monitor the implementation of the binding guidelines and minimum standards concerning occupational safety as published by the Federal Ministry of Labour and Social Affairs.

- Trade unions and works councils negotiate how workers in risk-groups and jobs, in which the safety distance cannot be guaranteed, can be included in the restart.
- IG Metall strongly advocates to start/continue investing in future oriented fields, and to connect the investments to the socio-ecological transformation of the industry. Necessary investments have to be made to meet the climate protection targets.
- In the mechanical engineering sector, companies should especially invest in digitalisation and in new business fields.