

300 milimeters wafer fab in Dresden

July 13, 2022

PI 11315

General information

- Total investment approx. 1 billion euros
- Site approx. 100,000 m²
(about 14 soccer fields)
- Total floor space approx. 72,000 m² of production area
and office space

As of 2022: new construction of
a development and laboratory building
(in the design phase) as part of
IPCEI 2
- Clean-room area Currently approx. 10,000 m²,
addition of some 3,000 m² starting in
2022 (available as of 2024–2025)
- Construction timeline Groundbreaking in spring 2018
Machinery installed at the end of 2019
First fully automated
production run in January 2021
Opened in June 2021
Full-scale production in July 2021
- Associates in the completed
plant up to 700
roughly 380 associates in July 2022

- Qualified professionals needed
 Experts from the semiconductor industry, such as process, production, or maintenance engineers, mathematicians, software engineers as well as professionals and graduates with degrees in physics, chemistry, or microsystems technology
- Manufacturing technology
 Highly automated wafer production (300 mm silicon substrate wafers with structures up to 65 nm in width)
- Manufactured products
 Application-specific integrated circuits (ASICs) and power semiconductors

 MEMS manufacturing on 300 mm wafers (SOP in 2026)
- Fields of application for semiconductors
 Mainly automotive electronics and devices by Bosch Power Tools
- Connected manufacturing
 At the wafer fab in Dresden, production data is generated at a rate of 250 MB/second, which corresponds to the data volume of 400 HD videos running simultaneously.

Details on the building

- Total building volume
 600,000 m³
- Concrete
 approx. 66,500 m³
 (about 8,300 concrete mixer trucks)
- Steel
 approx. 16,400 metric tons
 (about 30 A380 passenger jets)

- Earth moved/excavated approx. 90,000 m³
(some 7,500 truckloads)
- Bored piles for the foundation approx. 860
- Floor slabs 100 cm thick
- Length of pipeline approx. 80 km
(from Dresden to Berlin and back)
- Funding Construction of the new wafer fab in Dresden received funding as part of IPCEI 1 (Important Project of Common European Interest) from the German federal government – more specifically, the Federal Ministry for Economic Affairs and Climate Action (BMWK).

Bosch continues to invest at its location in Dresden. An expansion of the clean-room area by 3,000 m² and the construction of a development and laboratory building at the Dresden site are currently in the design phase. This project is expected to be funded by the BMWK as part of IPCEI 2. Approval for the early start of measures has been obtained.