

300 mm wafer fab in Dresden

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PI 11315 BBM Fi/af

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
- ▶ Construction timeline
Groundbreaking in spring 2018
Machinery installed at the end of 2019
First fully automated
Production run in January 2021
Start of production in July 2021
- ▶ Associates up to 700 in the completed plant;
roughly 250 associates in May 2021
- ▶ Qualified professionals needed Experts from the semiconductor industry,
such as process, production, or
maintenance engineers, mathematicians,
software engineers as well as
professionals with degrees in physics,
chemistry, and microsystems technologies
- ▶ Manufacturing technology Highly automated wafer production
(300 mm silicon substrate wafers with
with structural widths (nodes) up to 65 nm
– 1 nm equals one millionth of a
millimeter)

- ▶ Manufactured products Application-specific integrated circuits (ASICs), and power semiconductors

- ▶ Fields of application for semiconductors Mainly automotive electronics

- ▶ Connected manufacturing Every second, the machines transmit one gigabit of production data. Every day, the volume of data produced is equivalent to more than 42 million written sheets of paper, weighing 22 metric tons.

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

- ▶ Length of electrical cabling approx. 380 km
(from Dresden to Berlin and back)

- ▶ Subsidies Funding for the new building is being provided by the federal German government, and more specifically the Federal Ministry for Economic Affairs and Energy.