



Photo courtesy AMD Saxony

**AMD Advanced Micro Devices FAB 30  
200mm Semiconductor Facility  
Dresden, Germany**



**Case Study**

**INTEC International Construction  
Consultants GmbH & Co. KG**



View of the office building & fab

**Client**

AMD Advanced Micro Devices  
 Dresden, Germany  
 www.amd.com  
 www.amd-saxony.de

**Project- & Commercial Management**

I N T E C International Construction Consultants GmbH & Co. KG

**Project Management**

Hanscomb International Construction Consultants Berlin

**Design & Build Contractor**

M+W Zander Facility Engineering GmbH Stuttgart

**Architects & Engineers**

Alfonso Mercurio (AMA Group)  
 Rome, Italy  
 Achammer Tritthart & Partner (ATP)  
 Innsbruck, Austria  
 M+W Zander Facility Engineering GmbH Stuttgart

**Concept**

New construction of a 200mm wafer fab for AMD Advanced Micro Devices in Dresden, Germany. This was AMD's first international project outside of the USA.

A three-level fab consisting of:

- Lower level for equipment and sub-main services.
- Mid-section level for process support services.
- Cleanroom level with circulating air return area and plenum in the roof truss area including filter fan units.

**Location & Features**

The newly built development is located on company grounds in the north of Dresden just 3 km from Dresden Airport. The total developed project as built and in operation as of Sept. 1998 was 231.000m<sup>2</sup>. The total greenfield site consists of approximately 450.000m<sup>2</sup> allowing for future development on the same premises.

The major building elements include: The FAB, spine, central utilities building (CUB), remote and office building. In addition, a 23 MW co-generation plant was constructed on an adjacent site to supply the facility with power, heating and cooling services.

**INTEC Services**

We were consultant and client representative for both the facilities & finance infrastructure departments.

Our scope of works for the finance department included budget & cost control, claim- & change order management, bank reporting & cashflow forecasting, weekly & monthly cost /- construction reports to the client. During Hook Up phases 1 to 3 we performed quantity surveying services checking remeasurements and auditing invoices.

Our scope of services for the facilities department included oversight and co-ordination of AMD's construction management & the design/build contractor. Tender negotiations, quality control, guarantee & warranty issues were also successfully managed by our team.

INTEC compiled an extensive Comparison Benchmarking Document of both AMD's Fab 30 (Dresden) and Fab 25 (Austin, Texas) facilities including a Lessons Learned Analysis of design and construction during the base build phase. This very important and confidential document identified issues, defined roles, objectives & responsibilities while highlighting and recommending necessary improvements for AMD to follow in order to make future projects successful.



View inside the Cleanroom

Photos courtesy of AMD Saxony

**Project Data**

Total developed site area:	231.000 m <sup>2</sup>
Other building and support areas:	
• Fab & support	64.300 m <sup>2</sup>
• Office	21.000 m <sup>2</sup>
• Cleanroom (SMIF)	14.000 m <sup>2</sup>
• Category	100 Turbulent
• Technology generation	0.13µ ( Logic )

**Milestones**

Groundbreaking:	Oct., 1996
Beginning of Construction:	April 1997
Tool Move-In:	May, 1998
First Silicon:	Dec., 1998

**Total Investment**

US \$ 2,4 Billion ( building and equipment as of 2003 )  
 Design & build contract with open book procedure.

**INTEC**  
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