



From shiny raw material ...



... to environmentally friendly
energy production

Poly-silicon

Answers for industry.

SIEMENS



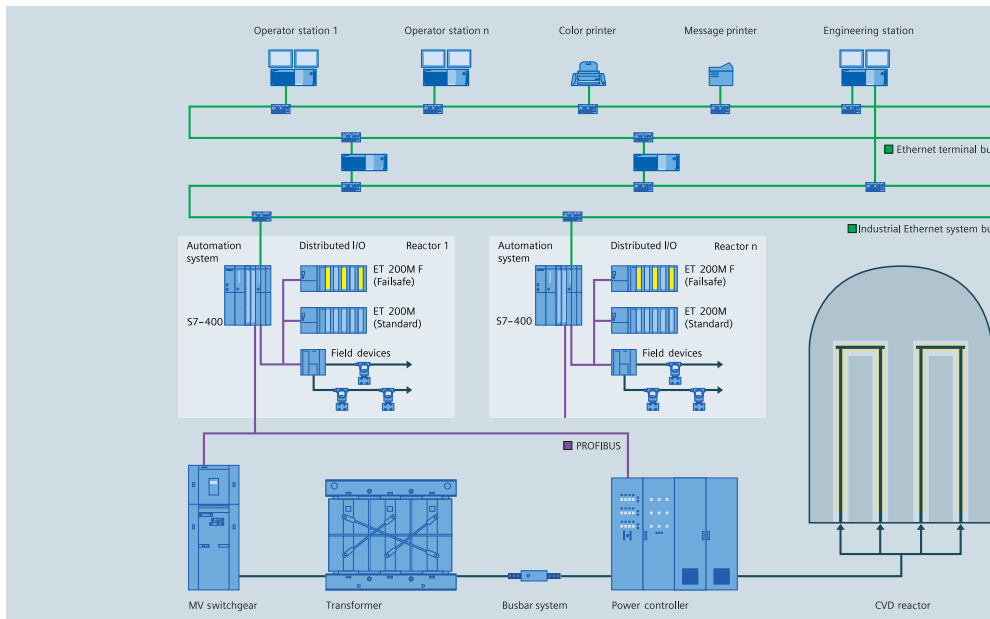
Your benefits at a glance

- One-stop shopping and one face to the customer
- Reliable partnership
- High quality standards for all Siemens products and services
- State-of-the-art technology
- Siemens' TIA philosophy avoids the need for interfaces
- Shortest after-sales reaction time
- Security of investment and quick return on investment



The all-in-one solution for your CVD reactors and facilities

The demand for polycrystalline silicon is expected to rise during the next years. As energy demand and energy prices are dramatically rising, energy production from renewable sources plays an increasingly important role. The increasing awareness of the need for CO₂ reduction also contributes to renewable energies becoming more and more important. Experts predict a significantly rising demand of poly-Si for the production of solar cells in the future.



Siemens is the partner on your side who understands the particular requirements of poly-silicon production. From electric equipment up to the process control system, Siemens offers a one-stop solution for your CVD reactors and facilities.

With Totally Integrated Automation (TIA) and Totally Integrated Power (TIP), we offer numerous benefits for you to profit from. A high degree of standardization shortens the period of time until commissioning, simplifies maintenance, and reduces expenses. To further advance these developments, we cooperate with plant manufacturers (EPC), mechanical engineers (OEM), and system integrators (SI).

In close cooperation with our customers, we design tailored solutions – solutions that make your processes more transparent and reproducible,

solutions that enable a verifiable documentation of your quality standards. Based on the combination of process and automation expertise, we offer solutions that permit you to maintain reproducibility, output, and, above all, high quality throughout the entire production process.

Supported by the SIMATIC PCS 7 process control system, which is specially designed for the process industries, all subprocesses are ideally harmonized and monitored. An up-to-date asset management, which does not only reference the core process but also takes the management of performance and equipment into consideration, allows you to look at the entire “utilization history” of every single investment, including the conservation of value and preventive maintenance in order to avoid failures. SIMATIC PCS 7, equipped with a comprehensive branch-specific library of function blocks, is the key system of the solution for the poly-silicon production process.

SIMATIC PCS 7 enables unlimited data exchange on all levels and guarantees central plant-wide engineering. The PROFIBUS fieldbus system provides integrated data communication from the field level to the ERP level at a high degree of standardization.

Our portfolio also includes the entire electric equipment for your deposition reactors – medium-voltage switchgear for the full range of 6 kV up to 24 kV as well as type-tested and certified busbar systems for the low and medium voltage range from 200 up to 2,000 V, all tailored to the individual requirements of your production process. Alongside, Siemens offers resin-encapsulated dry type transformers and integrates thyristor control into your facilities.

Trend recognition is one thing, transforming trends into real opportunities and standardized solutions is another. We make it possible.

Get more information

www.siemens.com/poly-silicon

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