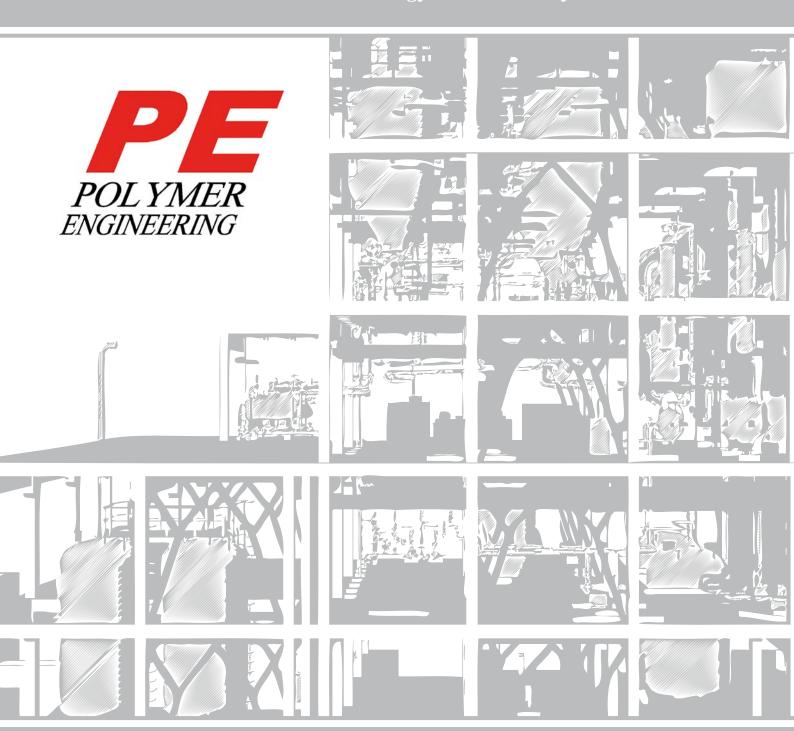
YOUR COMPETENT PARTNER IN PLANT CONSTRUCTION

The world wide technology leader in Polyamide



TECHNOLOGY THAT CONVINCES CUSTOMERS ALL OVER THE WORLD

The town district of Rudolstadt-Schwarza is a seat of industry with a more than 60-year tradition in the development and production of polyamide-6 products. It was based upon this know-how that Polymer Engineering Group (PE) was founded in 1990. Having developed over 30 patented processes, the company is today a world-wide technology leader in the development and construction of polymerisation plants. Well-known plastics- and yarn-producing companies that benefit from PE's intelligent solutions include Bayer AG (Germany), Lanxess (Germany & Belgium), Domo (Germany), Hongfu (China), Hangding (China), Kuibyschev Azot (Russia) and Thai Taffeta (Thailand). As allround service provider, PE is able to carry out entire projects, from consulting and detailed planning to supplying equipment and performing installation and commissioning. In doing so, PE adapts each plant design concept to our customers specific market requirements. Co-operation with us always starts with in-depth consultancy.

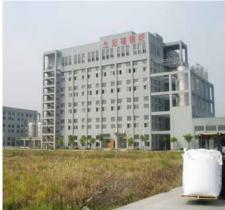


WE DEVELOP QUALITY AND EFFICIENCY

PE designs PA-6, PA-6.6, copolyamide and special polyamide plants for the production of engineering plastics, films, tyre cord, carpet yarns and textile threads. The outstanding technical features of our complex plant systems provide our customers marked competitive advantages. PE realised the world's currently largest polyamide plant, with a production capacity of 254 tonnes of PA6 per day in one line. Using technologies we have designed, production is possible of different polyamide grades in one plant. PE is also the only plant system specialist that offers the dimer hydrolysis process patented by PE. Optimum material economy with 100 per cent utilisation and enormous throughput provide efficient, cost-effective production. Likewise, an outstanding product quality is obtained, which can be demonstrated by sample quantities from our industrial pilot plant and guaranteed by relevant parameters. Existing plants can be examined by us and revised to increase efficiency, it being possible to make adaptations to changed production requirements for products with a different type of use. This applies especially to plants built by other companies, but also to older PE plants. Significant benefits for PE customers result in light of constantly changing demands of the market.









IN-DEPTH CONSULTING, PERFECT PLANNING

The basis of an outstanding plant is detailed consulting, in the course of which the customer's product and production requirements are analysed and possibilities are explored. When the contract is awarded, the designing phase begins with basic planning and subsequent detailed planning. Processes are defined precisely, and the structure and components are determined. Here PE works closely with the contractors executing the work for all the subsections. The provision of pieces of equipment not supplied directly by PE can thus be put out to tender by the customer according to our specifications, or else the purchase can take place through us as the general contractor. PE assumes the complete project execution and management, providing for professional implementation, both technically and organisationally with its experience and maximum level of competency.





AN EYE ON QUALITY

Only using the best components can a perfect system be created. We therefore work intensively with world-renowned equipment suppliers, because tried-and-trusted elements guarantee a reliable result. In addition, PE rigorously monitors the production of components necessary for the plant, continuously examining the quality of their materials and workmanship. Experienced staff check all the relevant parameters on-site at the suppliers' premises, paying meticulous attention to make sure all the components comply with the detailed planning. Extensive tests ensure compliance with the highest quality standards, providing for a production plant that is not only convincing in every respect but also proves itself over the long term.





Hot? Hot!

Hot is a matter of definition, Bertrams Heatec AG, a member of The Linde Group knows this. Bertrams Heatec AG designs, manufactures and supplies thermal fluid systems, the combination of various fuels and is specialized in combustion engineering and thermal energy storage systems for solar power plants.

It is our experience that cost-effective production and problem free plant operation are for our customers closely linked to a dependable supply of accurately metered process heat.

Safe process heat on tap. Whether you need a system designed for temperatures up to 650°C using molten salts, a heater system with organic thermal fluids or a thermal energy storage system for a CSP plant, Bertrams Heatec AG is your partner.



If you have a project with a process heat transfer system, we would be pleased to support you with our knowledge to make your project a success.

Bertrams Heatec AG

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AT THE COMPLETION THERE IS ALWAYS PERFECTION

When all the equipment has been obtained as planned, PE monitors the setting up and installation of the complex systems in a technically correct manner at the customer's site. Commissioning is usually carried out by our staff, and is always controlled and monitored by us. This ensures smooth breaking-in of the plant as well as any integration there might be into existing production processes, and far-reaching errors are ruled out. After the project is completed, PE is still available as a go-to partner and can make improvements to the production plant when needed, allowing it throughout its service life to live up to the highest standards in terms of quality, efficiency and market requirements.

BENEFIT FROM OUR EXPERTISE AND EXPLOIT OUR POTENTIAL TO SHARPEN YOUR COMPETITIVE EDGE







Kreyenborg Group ★*

OUR RESEARCH - YOUR COMPETITIVE EDGE

The PE Development Centre offers ideal conditions for professional research. Highly qualified staff and outstanding facilities with variable multipurpose experimental reactors and an in-house chemical laboratory enable meaningful testing with specific utility. Special polymers can be developed there by customer order, and their properties tested right away. Testing can be easily done of any modifications to the plant there might be, and it is also possible to produce sample quantities to be marketed before the start of regular production at the customers site. The plant is suitable for 24-hour operation according to the order, and the data for all the processes continuously recorded.

Research is not an end in itself to us, but rather serves to continuously improve specific results in terms of product quality and economic efficiency.







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- Infrared Technology
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BEST TECHNOLOGY INSIDE!

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PE Polymer Engineering Group

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