



**SCREWS AND BARRELS FOR THE
PETROCHEMICAL INDUSTRY**

Screws and Barrels for the Petrochemical Industrie

Heart of Extrusion
Since **1995**

GermanTwinscrewS GmbH has been shaping extrusion technology for more than 30 years. From co- and counter-rotating twin screws to large single screws for compounding, injection molding, and rubber processing. Our products are used in over 100 countries worldwide. Quality, energy efficiency, and long-term customer satisfaction are at the heart of everything we do.



Responsibility for Today and Tomorrow

Sustainability is not a trend for us — it's a commitment. With our motto "Green German Technology", we actively contribute to environmental protection and social engagement. From eco-conscious product development to investments in local youth projects, we strive to leave a lasting positive impact on society and the environment.

GTS Quality Promise - Reliable by Design

At GermanTwinscrewS, precision and durability are not optional — they are engineered into every product. From concept to completion, we combine advanced materials, decades of process know-how, and state-of-the-art manufacturing to deliver screw and barrel systems that meet the highest demands of the petrochemical industry.



Tailored to your Equipment

We manufacture screws and barrels compatible with all major extruder and compounder brands, like JSW, Coperion or Kobe. With decades of experience in global applications, we provide systems engineered for maximum throughput, optimal melt quality, and extended process windows in all melt flow ranges.

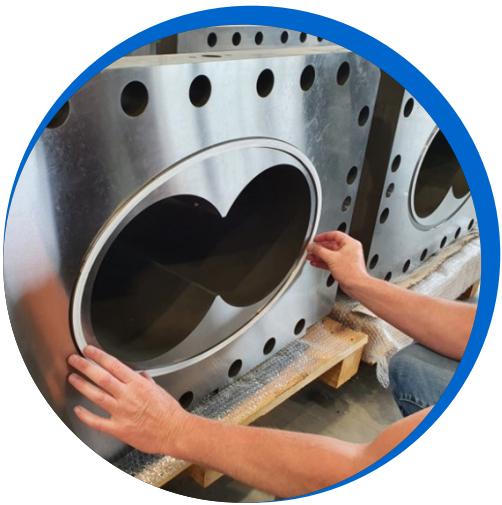


Large Counter-Rotating Screws

High-performance solutions for PVC and polyolefin processing up to 80 t/h.

Originally developed for PVC applications, our large counter-rotating screw systems now set standards in high-output polyolefin compounding. Our systems can achieve outputs of up to 100 t/h — e.g., with 360 - 600 mm diameter non-intermeshing designs. For technical polymers, we also offer modular systems with advanced wear protection like PTA, laser cladding, or bimetallic liners.





Large Co-Rotating **Screws and Barrels**

Engineered for Complexity with output up to 110t

Designed for the chemical industry, our co-rotating screw systems range from 170 mm to 420 mm diameter, including shafts up to 12 m length. These systems are optimized for energy efficiency and product versatility. Our experienced team of engineers provides full process simulations and support during installation, restarts, or performance adjustments.

By customer request GTS can do optimizations to increase the production range, so that with the same screw design the full range of molecular weights can be produced.

Barrel segments can be heated by oil and water, as well as special electrical heaters.



Large Single Screws and Barrels

Single screws with or without degassing units are used in special polymerisation processes, particularly for LLDPE. Our screws can be operated under pressure or without, and fed with powders, liquids, or combinations. A vacuum port can also be integrated for high efficiency venting processes.

Large single screws from GTS are designed for continuous, high-speed operation over many years. Their precise geometry and compression ratio ensure maximum throughput and crystal-clear, defect-free resins. The barrels are liquid temperature-controlled to guarantee stable and reliable processing.

At GTS, we use high-alloy steels and deep gas nitriding for outstanding wear resistance and longevity. Combining steel expertise with advanced screw design, we deliver customized solutions — or exact replicas of existing units if needed.

GTS manufactures screws and barrels for all applications, including extrusion, compounding, and injection molding, as well as large cooling screws for high-output foam production.

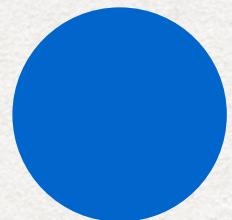
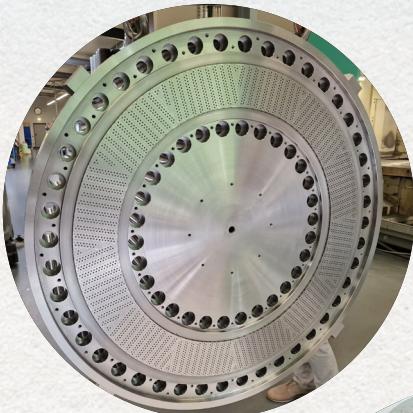


Precision in **every** Dimension

Our production capabilities include small segments and full-scale screw systems:

Counter-rotating twin screws:

Ø up to 600 mm /
Length up to 9.5 m



Single-piece screws:

Ø up to 900 mm



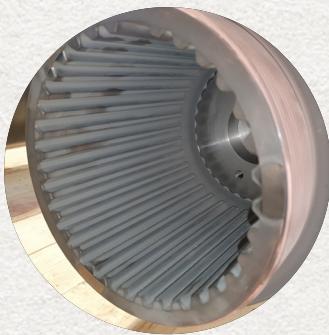
Screw elements:

Ø up to 420 mm



Barrel segments

Ø up to 600 mm /
Length up to 2.0 m



Screw shafts:

up to 12 m



Why choose GTS? — Your Key Benefits

More Than Just a Supplier

Long-term
performance & wide
process window



Global customer base
and 24/7 service



Own R&D lab and
design simulation tools



Fast communication
and short delivery
times





- Tailored screw designs for every polymer
- Spare parts for all extruder brands
- High energy efficiency and wear protection
- Market insights and management training



GermanTwinscrewS GmbH

-  Segelmacherstraße 4, 26605 Schirum, Germany
-  +49 4943 9999 110
-  sales@germantwinscrews.de
-  www.germantwinscrews.de

We invite you to contact us to learn more about our products and services. Our team is ready to discuss your specific requirements and offer customized solutions.

Best regards,
Your GermanTwinscrewS GmbH Team

 of Extrusion

