



# GROCHE TECHNIK

Plasticizing Units



*Hard as steel  
... and your plastics  
just melt!*



2010

# Experience and competence for more than 35 years

2005



2000



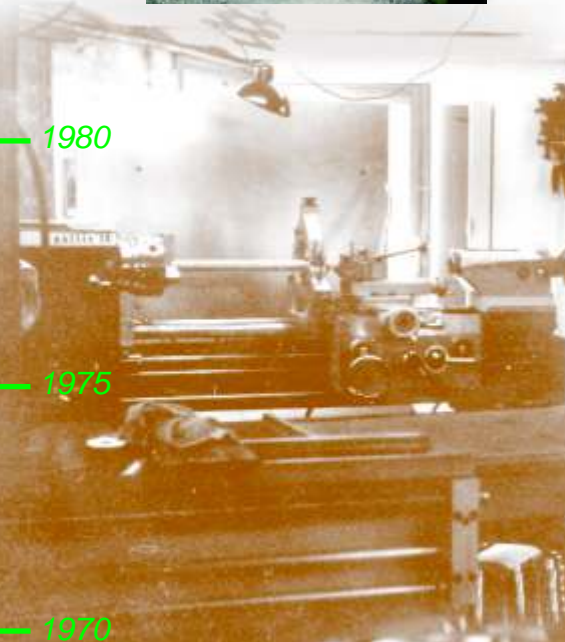
1995



1990



1985



1980



1975



1970

The company Groche & Tilgner was founded in February 1970. The company was initially active for a period of five years as a contract turning business for various injection moulding machinery manufacturers.

Reorganisation in 1975 made the company into a renowned specialist business for the production and repair of plasticizing units.

The company moved in 1992 from the space that it had rented up to then into its own, newly constructed production halls in Kalletal-Langenholtzhausen, Germany.

Continuous and dynamic business development led to further expansion. This gave a reason for the company to expand the production area to what has meanwhile become 2,000 square metres.



**A**fter 35 years, company founder Rolf Groche handed over responsibility for the company to his son Armin, who had been working in the business already for 18 years.

The newly reformed management under Armin Groche, in 2004, promises to resolutely pursue the successful strategy in order to ensure sustainable stability for the company.

### Manufacturing capabilities

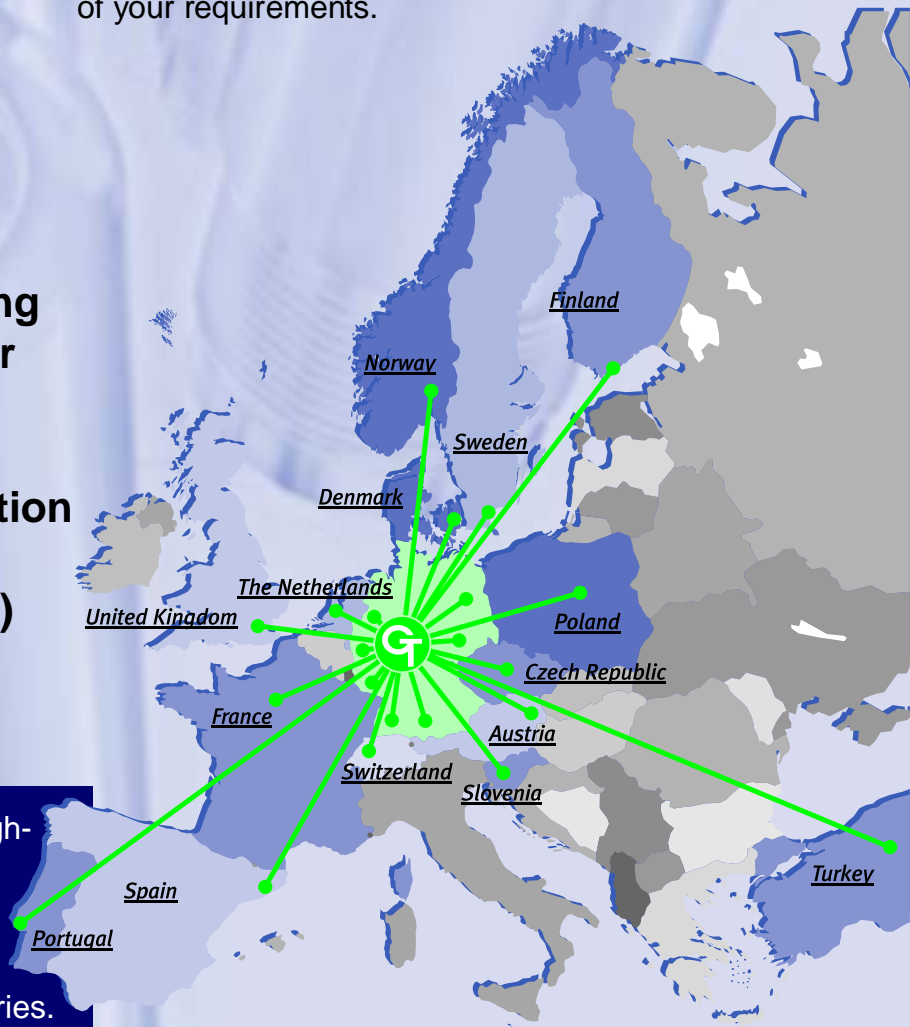
- P Conventional and CNC turning**
- P Conventional and CNC milling**
- P CNC whirling**
- P Boring mill operations**
- P Drilling work**
- P External circular grinding**
- P Honing (internal circular grinding)**
- P Flat grinding**
- P Plasma powder application welding**
- P Tungsten inert gas (TIG) welding**
- P Vacuum tempering**



**A** motivated and well qualified team of more than 30 employees is available to you for all manufacturing areas.



**T**he highly qualified back office as well as sales and service team guarantees trouble-free handling of all of your requirements.



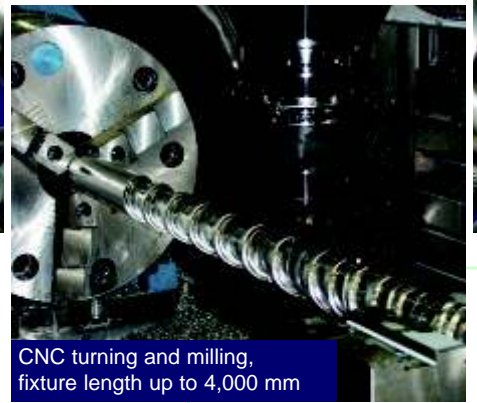
Our widespread sales network throughout the entire country guarantees reliable just-in-time delivery. We offer individual local service through our European sales subsidiaries.

# Screws as individual as the polymers

Our processing centres and machines that are always kept up to the latest state-of-the-art enable us to comply with the high quality requirements of our customers. The new or regenerated plasticizing units produced by us are characterised by long life and their ability to handle above-average demands. This is an essential quality factor, in view of the wear caused by a number of thermoplastics.

We produce optimized wear and corrosion resistant high performance screws in diameters between 14 mm to 200 mm and in lengths up to 6 m.

The screw flanges are armoured with high grade alloys in the plasma powder application welding process.



CNC turning and milling, fixture length up to 4,000 mm



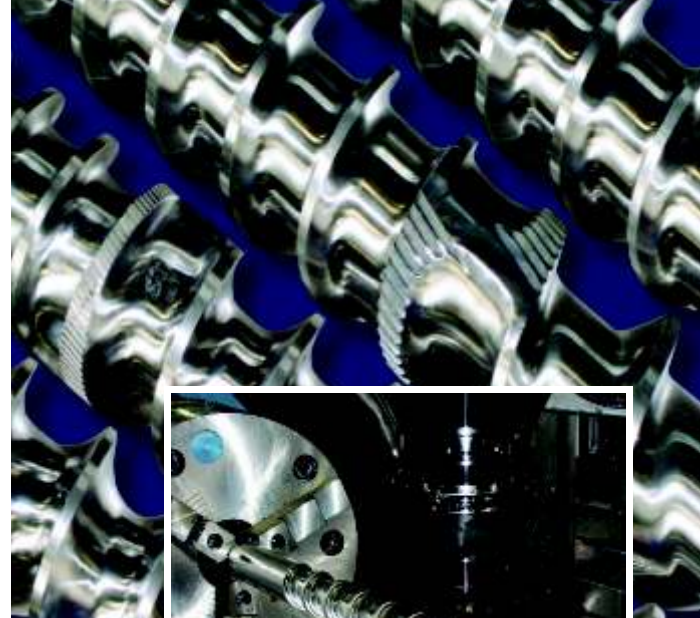
CNC turning of screws and barrels



Whirling technology with a Siemens control system, fixture length up to 4,500 mm

We offer optimum solutions for demanding customers. Our screws are equipped with geometries that are fine tuned to the individual requirements and the type of application.

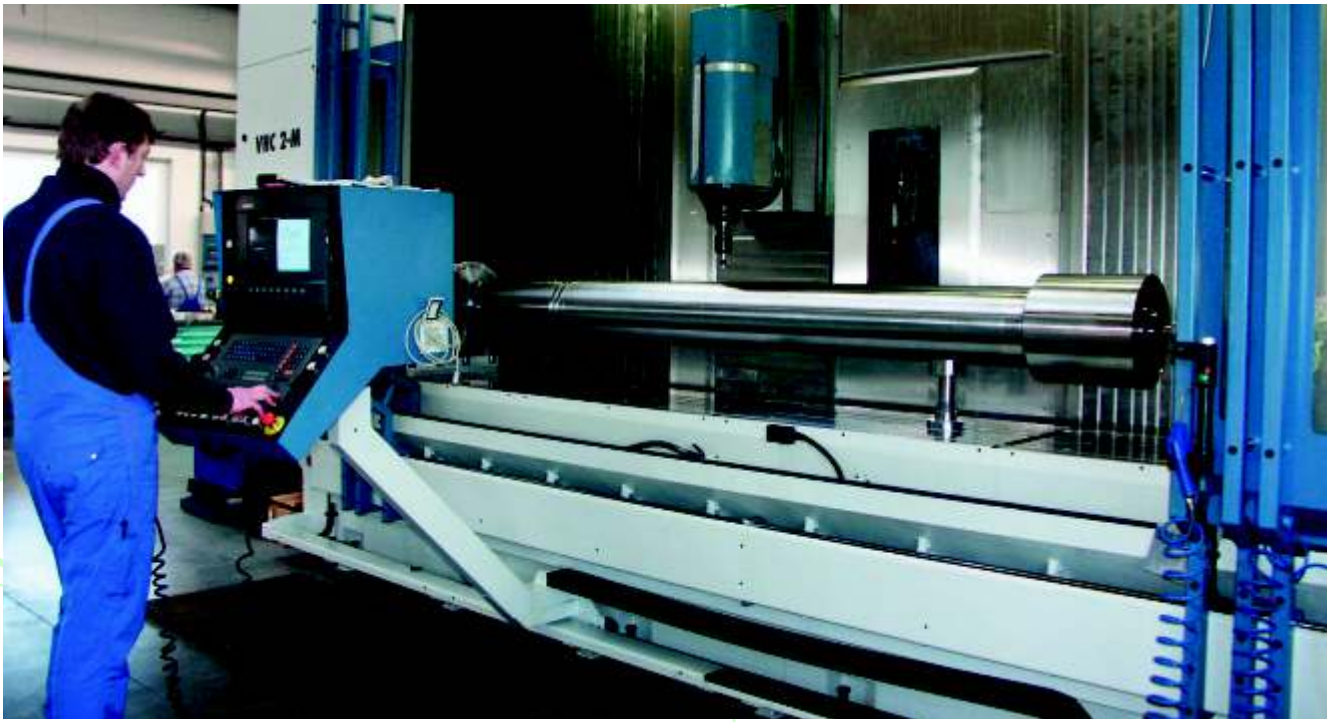
We count on CAD/CAM applications in the design of our plasticizing units.



20  
10-0,25

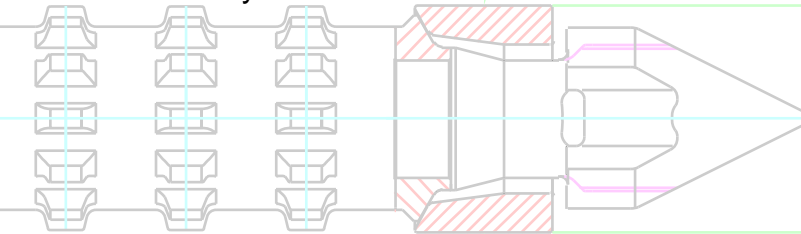
W  
iffe

1.6  
0,5



## Barrel production sets highest yardsticks

We use high grade materials for barrels that are in ideal harmony with our high quality screws, an aspect that guarantees high process security



CNC turning and milling, fixture length up to 1,500 mm



CNC turning and milling, fixture length up to 4,000 mm



Just-in-time means having the required material and products available at all times. Our claim to service is delivery of top quality within the shortest time.

# The non-return valve

## - the heart of the plasticizing unit



The 3-part non-return valve (RSP) presents a good compromise with its screw tip and non-return and pressure ring.

It is our service claim to deliver just-in-time for all, ex stock.



Latest technologies such as CNC turning machines with a bar loading system and five-axis milling machines are used in the production of

- Non-return valves
- Mixers (static and dynamic)
- Nozzles
- Needle shut-offs
- Nozzle adaptors
- Filter nozzles

# Perfectly homogenised

## - ideal mixing

The interaction of the various individual components is of decisive importance for your smooth everyday production. Our production and quality assurance are performed in close accordance with the ISO-9001 standard.



... will be achieved by you with our static and dynamic mixers



# Creating value through regeneration

An extract from our regeneration programme

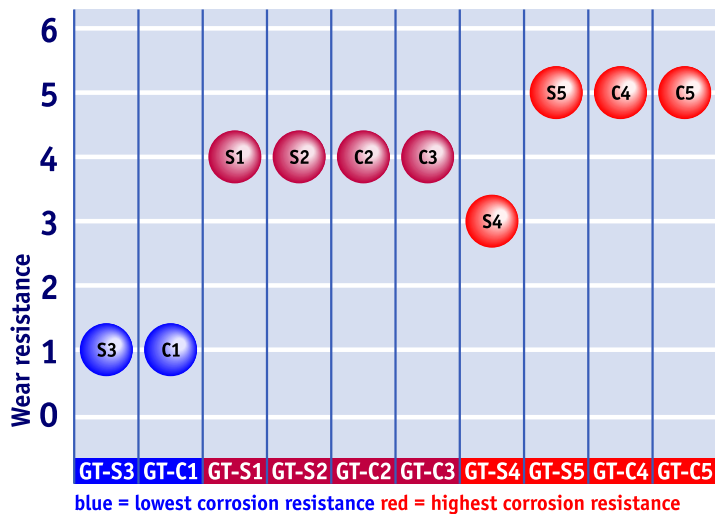


**W** We regenerate used extruder screws and injection moulding screws in a special plasma power application welding process. This presents a cost effective alternative to a new screw. Let us advise you.



**O** Our professional renovation measures for your barrels consist of: sleeving in the exit zone, oversize honing and pat regeneration.

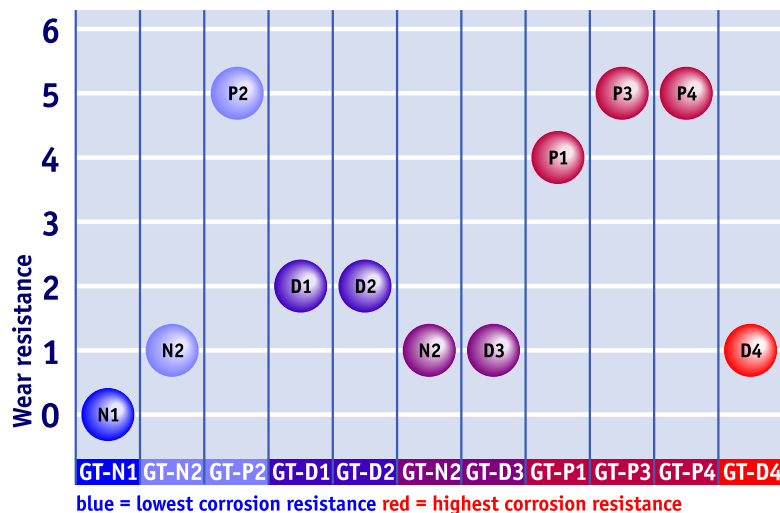
## Armouring and coatings



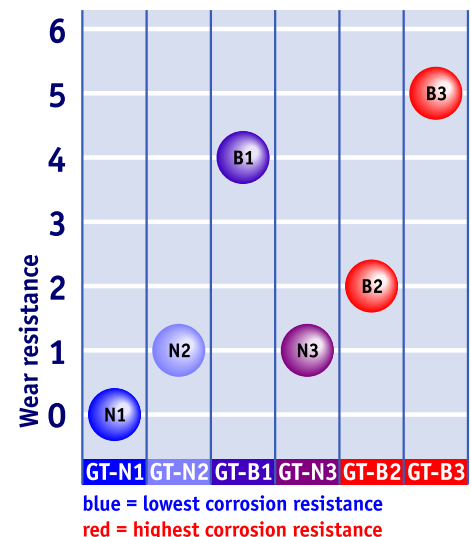
## Wear and corrosion resistance

**T** The most frequently used types of steel are nitrided steels tempered (hardened) and sintered powder metal steels stainless Austenite or Martensite steels. Special alloys such as Hastelloys or Inconels are needed for special applications. Special surface treatments such as chemical nickel, hard chromium or PVD (Plasma/Vapour Deposition) coatings are available if desired.

## Screws



## Barrels





# GROCHE TECHNIK

Plasticizing Units



Competence and experience  
for more than 35 years  
in the production and  
repair of plasticizing units

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