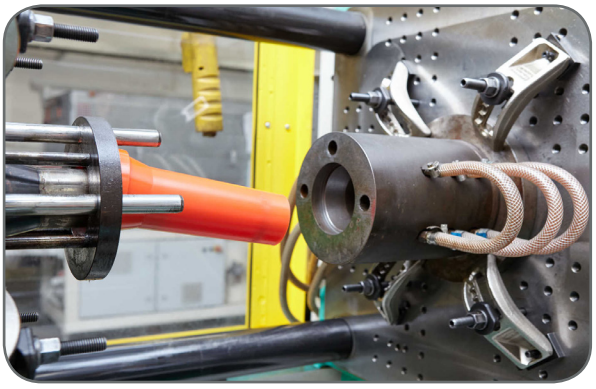
Product features Materials and manufacturing methods

Plastics processing - precision from a single source

For the supply of water and gas to private households and public institutions, as well as for the discharge of waste water, safe and precisely closing connections are required. For many decades the operation of the valves should be guaranteed without any functional restrictions.

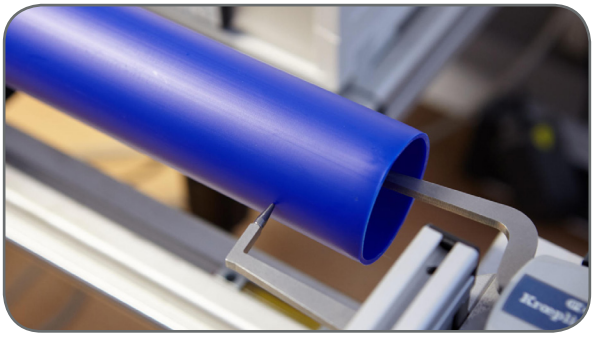


YOUR ADVANTAGES

- high forming variety and accuracy
- short production times
- low component costs
- low weight
- heat and sound absorbing as well as electrically separating
- weather and chemical resistant
- no postprocessing
- good colouring even without lacquering

In order to do justice to this functional safety, we develop and manufacture specially designed protection tube systems in our company. The plastic extrusion for pipe production as well as the injection moulding production for the production of cover caps, round bells, adapters etc. form the basis for this. From standard plastics, but also from specially developed plastics, we produce precision parts with a wide variety of shapes and flexibility. The necessary work steps leading to the desired component are carried out quickly. Using an injection mould, the plastic heated to melting temperature is injected under high pressure into the cavity of a mould. In order to maintain the required dimension of the mould permanently, the material is then pressed under low pressure until the plastic is compacted. It then cools down and the workpiece is automatically removed from the tool.

Compared to other materials such as glass or metal, plastic enables mass production components within an optimised cost framework. Nevertheless, a high quality and enormous resistance of the product is guaranteed. Highly detailed components can be produced in large quantities in a short time. Manual reworking is possible if required, but not absolutely necessary.



Due to the numerous advantages of plastic, we also use a wide variety of thermoplastics in our products, as well as talcum or glass or natural fibre-reinforced materials. We use processes such as extrusion and injection moulding. For example, with a clamping force range of 500-1,500kN, we realise part weights of 4-200g in the injection moulding process, depending on the workpiece, and extrude pipes with diameters of up to approx. 70mm.

Our professional service accompanies you through all phases of product development, from the design and construction of the appropriate tool through to series production of the required products.

booth 08/2018

Schönborner Armaturen GmbH
Finsterwalder Chaussee 17a
03253 Doberlug-Kirchhain
www.schoenborner.com

Stainless steel - quality by brand

Stainless steel, probably the most commonly used production material today for areas where moisture plays a decisive role. As early as 1958, the trademark „stainless steel“ was introduced in order to clearly identify the products of quality-conscious manufacturers, processors and suppliers. We are also allowed to use this trademark for our products because we offer quality that is recognizable at first glance.

YOUR ADVANTAGES

- high corrosion and temperature resistance
- good thermal conductivity and permanent tightness
- premium quality
- optimal hygienic conditions
- high strength and resilience
- easy processing and high material elasticity
- long product life and low follow-up costs
- low maintenance
- resistant to frost, UV rays, acids and moisture

From the 120 different types of stainless steel known today, the most frequently used stainless steel is the material number 1.4301. A high proportion of 17.3-19.3% chromium, which must be dissolved in the austenitic or ferritic mixed crystal, repels any aggressive substances such as moisture, frost or UV rays and even acids. Depending on the application, V2A or V4A stainless steel is used. The V2A stainless steel is the stainless steel used in everyday life, e.g. for vehicles or fittings, whereas the V4A stainless steel with around 2% more molybdenum is even more resistant to corrosion and is therefore frequently used in swimming pools, seawater or the chemical industry. In addition, temperatures of up to 300 degrees Celsius cannot negatively affect the quality of stainless steel 1.4301.

The proverb „as hard as steel“ therefore applies to the extent that damage to the stainless steel by external influences is virtually impossible. The increase in corrosion resistance can not only be achieved by adding molybdenum, but also by adding nickel and other alloying agents.

SCHÖNBORNER ARMATUREN GMBH
Finsterwalder Chaussee 17a
03253 Doberlug-Kirchhain
www.schoenborner.com

Zinc flake systems - More than just corrosion protection

Zinc flake coatings mostly consist of a combination of zinc and aluminium flakes, which are connected by an inorganic matrix. They are often used where corrosion protection is of major importance. The zinc lamella is particularly convincing when working with mass-produced small parts such as screws or spring band clamps due to its extremely low layer thickness and high load-bearing capacity.

INNOTEC 25.0kV 9.2mm x 1.50k BSE-COMP 30.0µm

YOUR ADVANTAGES

- high resilience
- wafer-thin film thickness
- high accuracy of fit
- no hydrogen reduced stress corrosion cracking

At just 8-12µm, the zinc flake is much thinner than conventional corrosion protection systems such as powder coatings or hot-dip galvanizing - even thinner than a human hair. TNevertheless, it guarantees a protective effect of up to 1,000 hours against base metal corrosion in the neutral salt spray test according to DIN EN ISO 9227. Consequently, the zinc flake coating is particularly suitable for products that require high resistance and a perfect fit.

If you have any questions or require additional information, please contact the person listed below.
We will be happy to advise you.

If you would like to find out more about zinc flake coatings, please visit the Dörken MKS website. There you will find everything you need to know about coating solutions: **www.doerken-mks.de**

This product sheet is part of the Schoenborner product catalogue. If you would like to place your collected forms in a Schoenborner folder, simply send us an e-mail with your contact details:
info@schoenborner.com

We will gladly send you the free folder.

Your contact person:
Mr. Thomas Ebert
Tel.: 035322 5110-0
E-Mail: info@schoenborner.com

booth 08/2018

SCHÖNBORNER ARMATUREN GMBH
Finsterwalder Chaussee 17a
03253 Doberlug-Kirchhain
www.schoenborner.com