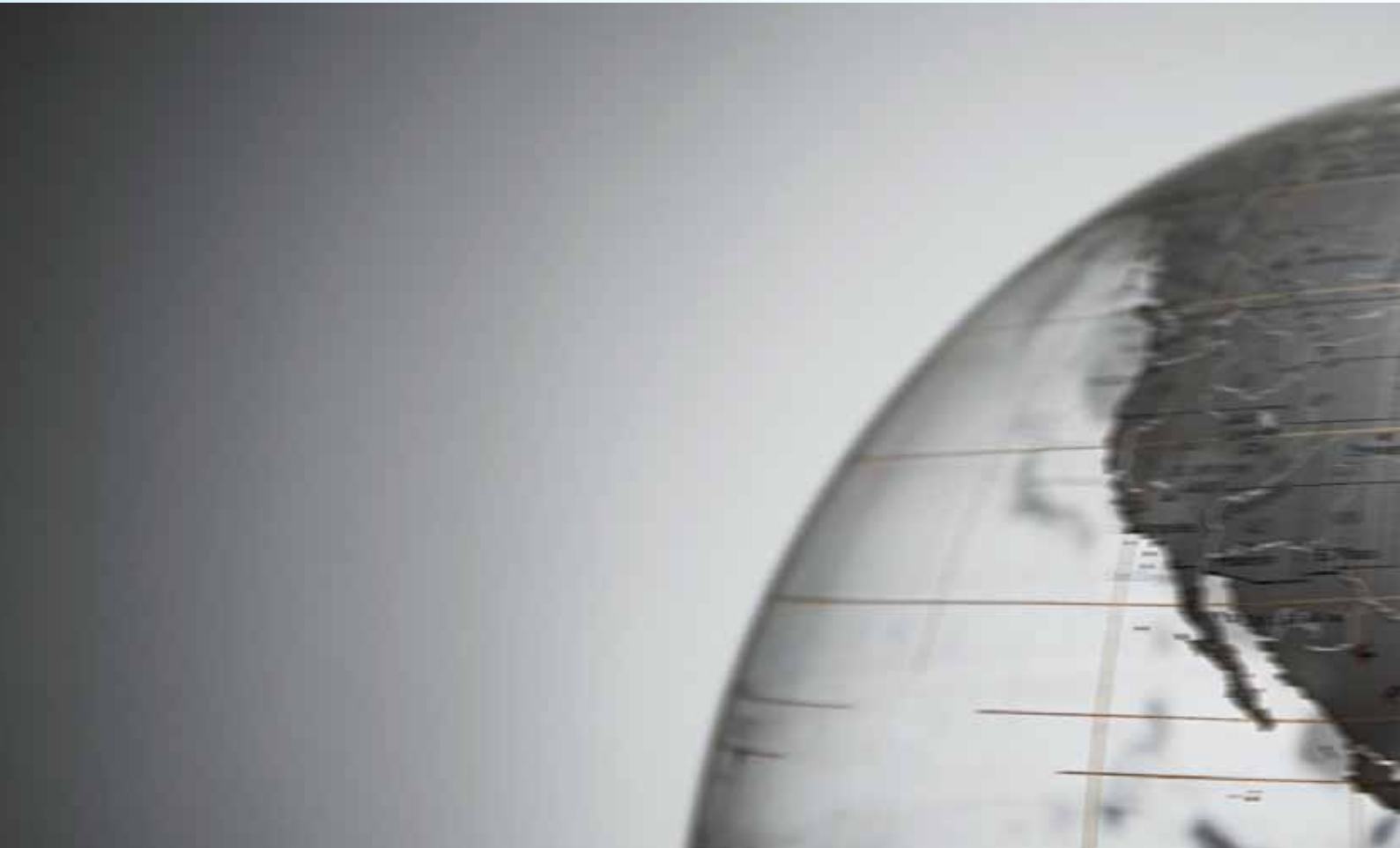


**DROSSBACH CORRUGATED PIPE SOLUTIONS**

**WATER IS LIFE.**





*"Nature does nothing in vain."*

*Aristotle, (384 - 322 B.C.), Greek philosopher*





## Water – the key to development, health and prosperity.

Essential to the existence of all life on earth, water is a complex issue. It encompasses humanitarian, cultural, economic, environmental and technical factors of themselves inherently complex, yet at the same time mutually related. As disastrous for health, life expectancy or the realisation of human potential a lack of drinking water or sanitation may be, the effect of any progress achieved in these areas using intelligent sustainable measures, can be equally significant.

Get inspired by DROSSBACH's innovative, ground-breaking and sustainable Corrugated Pipe Solutions.

## The world in change

### Water is our life.

**Water supply and sanitation are the key issues of the 21<sup>st</sup> century, because life on our planet is based on the precious and fragile resource – water.**

The history of water management has always been dominated by the natural tension between too much and too little water. Dedicated efforts to assure quality, availability and reliability of supply have been associated down the ages with concern about hygiene and public health, giving rise along the way to some extraordinary techniques and laws for overcoming existing conflicts.

In the last three hundred years – and particularly during the second half of the twentieth century – humanity has asserted increasing control over the continental waterways, regulating their distribution for agriculture (70%), industry and manufacturing (25%) and drinking water and sanitation (5%).

This has led in many regions to the overuse of available fresh water resources, the result being a lack of water in both economic and physical terms. Nevertheless, the challenges currently being faced can rarely be attributed to a lack of water, rather mismanagement, that is – the unsustainable use – of local water resources is the real problem.

**Take care – because water is life!**

### Sanitation protects health and the environment.

“Toilets, washing facilities, waste removal, wastewater disposal, storm water drainage: sanitation services such as these are a prerequisite for clean, healthy household and community living environments, particularly in dense settlements. Such sanitation services are also vital to safeguard environmental quality more broadly, especially the quality of water resources.” (UN Water, International Year of Sanitation 2008)

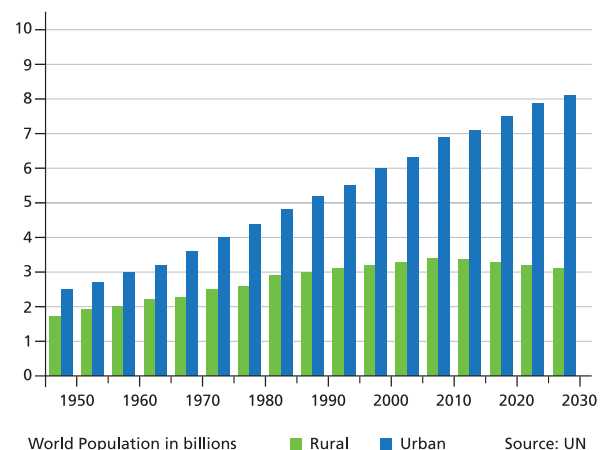
Since it ties up a large amount of a community’s capital, the quality of the subterranean infrastructure plays a vital, long-term role in efficient centrally controlled supply systems: tight for many years, resistant to pressure, displacement and abrasion, low maintenance and easy to install.

For sewage, rain water and drainage applications, DROSSBACH’s corrugated pipe systems are first choice – no matter what the perspective.



*“Every era has its task; by solving it, humanity moves on.”*

*Aristotle, (384 - 322 B.C.), Greek philosopher*





**Sustainable solutions are needed, to achieve set goals**

## **Future challenges.**

**The ongoing population growth and the global climate change, pose in the upcoming decades additional challenges to humanity and its water infrastructures.**

The earth's population is currently growing by approximately 70 million people a year. An end to this growth is not expected until about 100 years from now – by which time some 11 billion people will inhabit the planet.

Land use is also entering a new phase as the population continues to expand: that of global urbanisation. Although approximately 75% of the population in Europe, where growth is stagnating, already live in cities and densely populated areas, this figure is restricted between 30% and 50% in countries experiencing dynamic growth. In twenty years, this will have reached 70% – and yet, if forecasts are to be believed, the trend will continue.

This will lead without fail to keen conflicts concerning land use, whilst also placing extraordinary demands on the infrastructure of these densely populated regions.

Moreover, it is expected that the climate change that we are currently witnessing on a global scale will generate a trend in more extreme weather conditions: more low rainfall periods will become droughts, precipitation will be less frequent, but all the more heavy when it does occur. For the management of water resources, this will entail, amongst other things, the reliable management of precipitation, efficient use of resources by agriculture and industry and zero tolerance when it comes to leaks in the water supply or sewage infrastructure.

For attaining the Millennium Development Goals, while considering the future challenges, sustainable and long-term tight water infrastructure systems are needed – because drinking water always gets sanitation.



*"Clean water and sanitation can bring decisively forth  
or abort the human development."*

*Report of human development 2006 UNDP/German society for the UN*





DROSSBACH GmbH & Co. KG is one of the leading companies in the international market for plastic corrugated pipe systems. The company focuses on the efficient development and know-how transfer of sustainable, state-of-the-art pipe systems for sewage, rainwater, drainage and cable protection applications. With the dawn of the 21<sup>st</sup> century, DROSSBACH (founded 1919) pursues a highly successful strategy of innovation. Through the combination of decades of experience in the production of pipe systems and mechanical engineering of corrugators, DROSSBACH transformed itself successfully into a know-how company.

We offer the following:

- Pipe Systems
- Service, Consulting & Know-how transfer
- Mechanical Engineering
- Joint Ventures

We name DROSSBACH's integrated concept of customer orientation, portfolio, strategy and corporate philosophy Corrugated Pipe Solutions – CPS®.

## Corrugated Pipe Solutions

### Solutions “Made in Germany”.

**Over 75% of all sewage worldwide, whether industrial, commercial or private, is still allowed to flow untreated into the planet's bodies of water and soils. As a result, the pollution of local drinking water resources with bacteria, viruses, parasites, fertilizers and pesticides has reached alarming proportions. 5,000 people are dying every day because of the consequences of contamination of drinking water by sanitation.**

In addition to the economic success of our activities, the achievement of major development goals in underdeveloped countries takes top priority: human dignity, poverty reduction and health care.

In the emerging markets and industrial nations, which are faced with the challenge of protecting public health, preserving fragile ecosystems and enabling a sufficient degree of agricultural activity, DROSSBACH is a respected partner for the provision of sustainable corrugated pipe system solutions in the fields of sewage infrastructure, rainwater management and drainage.

With its products and services, DROSSBACH supports industry, governments, non-governmental organisations and communities in the implementation of sustainable water sector policy and the management of available water resources. Supported by the know-how of DROSSBACH, our customers and partners around the world generate lasting added value for the environment, public health and the national economy – in line with the Millennium Development Goals.

The essence of our know-how and experience in the fields of corrugated pipe business, high-tech engineering and machinery as well as worldwide joint ventures, is combined in DROSSBACH's Corrugated Pipe Solutions - CPS®, as a holistic and sustainable approach to the challenges our world is facing in water infrastructures.

Together with its partners, DROSSBACH creates sustainable added value in the water infrastructure industry.

**Advantages at a glance:**

- Outstanding price-performance ratio throughout service life
- Dependability and sustainability based on professional business concepts and extensive service portfolio
- Innovative, sustainable and reliable, state-of-the-art technologies based on DROSSBACH's technological leadership
- Exclusive access to top know-how
- Economy of time through reduction of the learning curve by know-how transfer
- Strategic win-win-partnership
- Experience in worldwide joint ventures



*"Progress lies not in enhancing what is, but in advancing toward what will be."*

*Kahlil Gibran (1883 - 1931), Lebanese-American painter and poet*

To overcome current and future challenges facing the water sector, we not only need innovative ideas, mature technology and creative power, we need a coordinated approach. DROSSBACH is actively involved in selected networks.



Member of  
**German Water  
Partnership**



World Water Council



## Corrugated Pipe Solutions

### The CPS<sup>®</sup> experience.

**DROSSBACH has been working successfully to improve its goods and services in the interest of stakeholders, partners, and customers, around the world for over ninety years.**

Integrity and responsibility have always been our watchwords. A passionate dedication to quality and experience gained over decades in business development, pipe systems production and mechanical engineering, have made DROSSBACH a sought-after partner in the infrastructure industry.

Our company stands for environmental protection and sustainable economic activity, whilst also subscribing to the commercial profit motive and the creation of jobs at home and abroad.

It's our business to think innovatively and implement creatively. DROSSBACH broke through in the corrugated pipe business by its innovative pipe design and production processes. Corrugated pipe systems made by DROSSBACH stand for efficiency

in terms of material, power, workforce, maintenance and costs – while simultaneously outstripping all specified quality criteria on a regular basis.

Nevertheless, in order to meet the complex challenges facing the water sector in a sustainable, reliable and cost-effective manner, DROSSBACH has established an integrated corporate strategy, named CPS<sup>®</sup>, based on its core competences in production of sustainable corrugated pipe systems, mechanical engineering and know-how transfer by extensive services. Those enable DROSSBACH to make an active contribution to capacity development in the countries where our partners are based.

Thus our partners worldwide are able to enjoy lasting commercial success thanks to customised corrugated pipe solutions.



*"An ideal is often nothing less than the flaming vision of the truth."*

*Samuel Taylor Coleridge, (1772 - 1834), English poet*



Additional benefits through our CPS® competence.



### Innovation – Road to Success.

DROSSBACH technology is used all over the world in a variety of applications. In order to offer these opportunities to our customers and partners, the combination of continuous improvements, innovative thinking and synergies of win-win partnerships are playing an important role to create customised corrugated pipe solutions. DROSSBACH has been recently awarded as one of Germany's most innovative companies, as well as winner of the category "successful innovations" for CPS®. Interdisciplinary workflow, the DROSSBACH team spirit and the continuous striving for improvements of every employee, are the fundament for innovative and sustainable solutions in water infrastructures. DROSSBACH can look back on close, long-standing development partnerships with a number of customers, among them:

- Advanced Drainage Systems, USA
- Italiana Corrugati, Italy
- AL-COR, Croatia

## DROSSBACH

### The know-how company.

**Based on over 90 years of experience in the pipe business, DROSSBACH unites its know-how, in its Corrugated Pipe Solutions, for sustainable and long-term watertight infrastructures.**

The DROSSBACH GmbH & Co. KG employs some 160 people in the region around Munich and maintains an efficient global sales structure via a network of distribution partners.

The DROSSBACH business model puts emphasis on management consulting, knowledge of pipe business processes, quality assurance, strategic marketing and research & development.

When doing business with DROSSBACH, the main advantage for partners is that they encounter a competence centre by which they have access to the company's broad scope of know-how. This includes all forms of operational and strategical support, all day, every day. DROSSBACH engineering customers are entitled to comprehensive guarantees and warranties.

Therefore one tenet of our corporate philosophy is being able to react flexibly to all market requirements with a lean and highly motivated workforce supported by a network of specialised suppliers.

Furthermore, DROSSBACH conducts a reference production in Rain, to offer the opportunity for our partners, to take part in training and education programmes and experience the GIGASYSTEMS and their production.

### Innovative Technology.

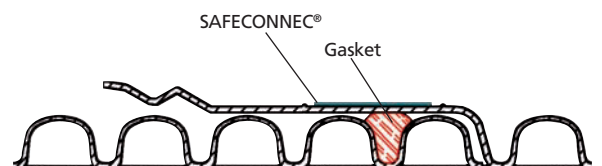
DROSSBACH operates according to the principles of solid German mechanical engineering: to create an outstanding corrugated pipe system, you need the best know-how. The latest generation of machines – the HD series – is the result of years of experience and fulfils all the needs of our discerning client base:

- High quality, innovative machines with outstanding efficiency according to the quality standards.
- Fast and flexible quick-change tool system for the reduction of machine downtimes to a minimum.
- Highest productivity thanks to tool compatibility of die heads and moulds plus innovative mould block insert technology.
- Process optimisation of complete production line incl. downstream equipment. Production performance that's guaranteed.
- Light, flexible and stiff corrugated pipe systems, which are long-term watertight.

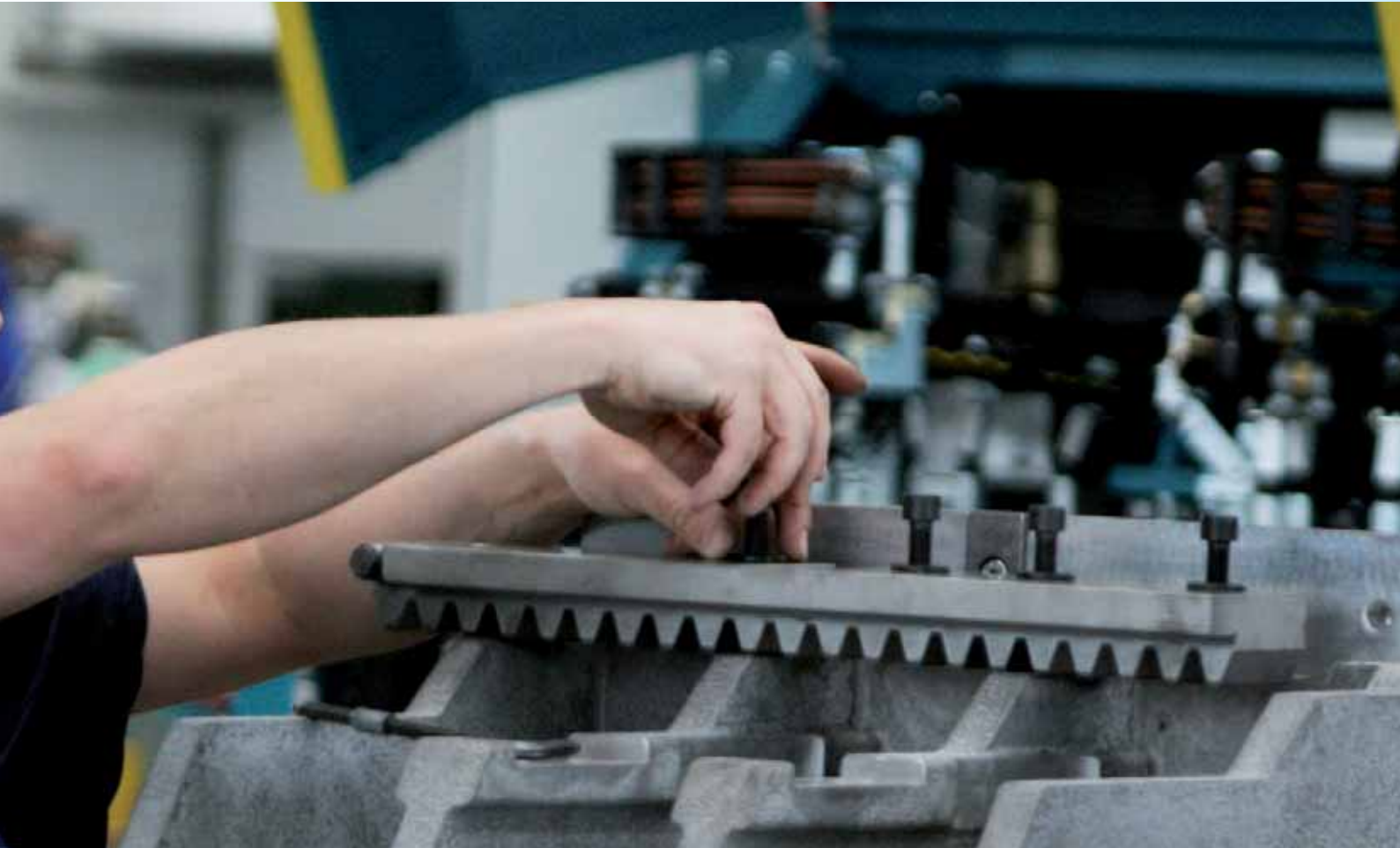


*"The ultimate is to be found where hard work and talent conjoin."*

*Johannes Kepler, (1571 - 1630), German astronomer*



DROSSBACH patented solutions – still hold tight when others have already been replaced three times.



## Sustainability at its best

### The pipe system of the future.

**Using the combined knowledge of decades of expertise in the production of corrugated pipe systems and mechanical engineering, DROSSBACH has developed solutions that set the modern standard for the entire industry.**

For decades plastic pipes have been considered a viable alternative for the installation of subterranean water infrastructure – and the percentage in all diameters is steadily increasing.

Particular advantages include amongst others: extreme longevity, comparatively low maintenance and installation costs and high chemical stability when exposed to most oils, alkalis and acids.

The corrugated pipe systems designed by DROSSBACH are available in all diameters between 40 mm inner and 1800 mm outer diameters. Compared to smooth plastic pipes, corrugated pipes require up to 60% less raw material. These corrugated pipe systems are used in pressureless applications such as sewage, rainwater/storm water and drainage, and set

standards in these areas in terms of ring stiffness, flexibility and installation qualities.

The innovative SAFECONNEC® technology of DROSSBACH ensures long-term watertightness of the pipe systems, whilst maintaining their flexibility and all other outstanding properties for 75 to 100 years.

Compared with other pipe systems, corrugated pipe systems offer the lowest lifecycle costs – investment, installation, operation and maintenance included.



*"We are not only responsible for the things we do,  
but also for the things we don't do."*

*Molière, (1622 -1673), French actor, theater director and dramatist*





#### DROSSBACH corrugated pipe systems:

- Long-term tightness – the innovative SAFECONNEC® technology keeps the pipe system watertight for 75 to 100 years
- Cost efficiency – top technology and lowest investment over lifetime
- Resource efficiency – optimised pipe design for low material consumption, combined with a maximum of both flexibility and rigidity, as well as complete recyclability
- Quality and innovation - even with simplest technical appliances corrugated pipes are more quickly to lay than any other comparative product

### Executive Summary

## Corrugated Pipe Solutions.

**Forty percent of the world population are without access to safe and sustainable sanitation.**

In most countries of our earth, considerable health threats for humans and animals arise, due to the contamination of ecosystems and drinking water by untreated sewage. Such impurities are mainly caused by, non existing, time-worn or corroded pipe networks. In transition and developing countries, for instance 50% of the registered diseases are caused by this contamination.

The ongoing population growth, urbanisation and industrialisation as well as the consequences of the global climate change, pose already today and in future, additional challenges to humanity and its water infrastructures.

For attaining the Millennium Development Goals, while considering the future challenges, sustainable, long-term watertight and cost-effective water infrastructures are needed – because

drinking water always gets sanitation. In order to meet these complex challenges in a consistent and efficient manner, DROSSBACH, as one of the leading know-how companies, offers extensive corrugated pipe systems for sewage, rainwater, drainage and cable protection applications.

Through the combination of decades of experience in the production of reliable corrugated pipe systems, high-tech mechanical engineering of corrugators as well as worldwide joint ventures, DROSSBACH combines its know-how uniquely in the holistic and sustainable approach, named Corrugated Pipe Solutions – CPS®.

DROSSBACH GmbH & Co. KG | Max-Drossbach-Straße 7 | 86641 Rain am Lech, Germany  
Tel: + 49 9090.702-0 | Fax: + 49 9090.702-399 | E-mail: [info@drossbach.de](mailto:info@drossbach.de) | [www.drossbach.de](http://www.drossbach.de)