



X-COMPOUND

Plastic compounding plants

Compounding Solutions for the Plastics Industry



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X-Compound

We design, develop and manufacture Continuous Kneaders since 1997 striving to optimize the technology invented in 1942 by Heinz List. We evolved into a worldwide leading manufacturer of Continuous Kneaders. Since 2011 X-Compound contributes to the international activities of the TROESTER Group,

with its renowned high-quality cable production lines and rubber extrusion and processing equipment. Our Continuous Kneaders and complete compounding plants are tailormade for your application and engineered to produce materials with the best quality at lowest operational costs. Our Kneaders are

exceptionally well suited to handle temperature sensitive, shear sensitive as well as highly filled materials for a broad range of applications.

We are also glad to be at your service, if you are planning to refurbish your existing Kneader line.



X-Compound GmbH

Foundation Year	1997
Managing Directors	Andreas Fischer
Staff	approx. 35 employees in R&D, manufacturing, mechanical and electrical design
Product Range	Continuous Kneaders, Compounding Plants, Service and Refurbishment
More Information	www.x-compound.ch



TROESTER GmbH & Co. KG

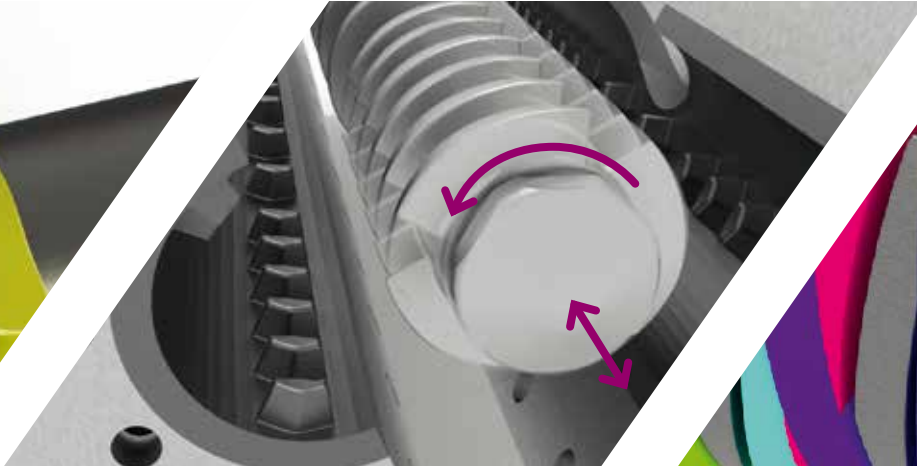
Foundation Year	1892
Managing Directors	Dr. Peter Schmidt (Managing Partner) Bernd Pielsticker
Staff	approx. 600 employees in R&D, manufacturing, mechanical and electrical design
Product Range	Cable extrusion lines and related equipment, Rubber extrusion and calendering lines, Service
More Information	www.troester.de

X-Compound Kneader

Continuous Kneader Technology



Interaction of stationary kneading pins and moving screw results in exceptional kneading and surface generation



Unique superimposition of rotation and oscillation



Colored paths of kneading pins show superior self cleaning properties

Continuous Kneader Technology

The Continuous Kneader applies a distinctive mixing principle. The screw oscillates and rotates at the same time. In combination with kneading pins, which are mounted in the barrel, excellent compounding results are obtained.

Due to the motion of the screw and with respect to the pins in the barrel every single point of the screw is cleaned, which results in narrow residence time distributions, and excellent self cleaning features. Another positive effect of the special principle of

motion is an ongoing reorientation of the product processed in the machine leading to excellent compounding results in minimum processing lengths even for very demanding tasks.

Application of Continuous Kneaders



Cable Compounds

- Halogen free flame retardent (HFFR) compounds
- Semi-Conductive compounds
- Peroxide cross-linkable compounds (Medium/High-Voltage)
- Silane cross-linkable compounds



Calender Feeding

- Soft/semi-rigid/rigid PVC compounds
- Medical grade compounds
- Flooring



PVC Compounds

- Highly filled compounds
- Extrusion compounds
- Injection moulding compounds
- Medical grade compounds



Vinyl Flooring

- Calender feeding
- Backing layer compounds
- Top layer compounds

Application of Continuous Kneaders



Elastomers

- Thermoplastic elastomers (TPO, TPU, TPS, TPA ...)
- Thermoplastic vulcanisates
- Rubber compounds



Masterbatches

- Carbon black masterbatch
- Additive masterbatch
- Filler masterbatch



Thermoset Compounds

- Toner
- Powder coatings
- Thermoset resins



Specialties

- Biobased compounds
- Reactive extrusion
- Technical polymers
- Conductive compounds
- Magnetoplastics

Outstanding Project Management

All projects are tailored to our customer's needs. This requires excellent project managers who are able to handle complex projects covering individual Kneader setups as well as entire compounding plants. X-Compound's project management goes even further. Our project managers are the link to our

technical and commercial department. With broad engineering know-how they are able to provide a customer-oriented realization of the projects. Our flexibility and experience allows us to send our service engineers and technicians to locations around the world at only a short notice.

Service and Refurbishment

Sometimes it is a good idea to provide well used machinery with a second life. Replacing worn out or outdated parts with state-of-the-art equipment results in increased efficiency at only a minimum required investment. Our well trained engineers apply their comprehensive expertise to your

Kneader lines. Common modifications include an upgrade of the electrical components, a replacement of the process parts as screw elements, barrel liners and kneading teeth and complete refurbishments of gear boxes.

Developing the Future

X-Compound has a well-equipped application centre where we transfer ideas into reality. Both customers and X-Compound researchers use the facility to verify the design of compounding plants as well as to show the feasibility of new equipment and process ideas.

Compounding lines of different sizes, where all kinds of peripheral equipment can be attached, are the basis for both lab and production scale trials. Our dedicated Application Centre Crew produces tailored solutions in time, using state of the produces art tools as databases, process expertise and simulation.

Manufacturing and Assembly



We put an emphasis on in-house manufacturing. Especially critical Parts that bear essential X-Compound know-how are manufactured parts using the broad range of manufacturing capabilities of the Troester Group.

In the past few years, the level of in-house manufacturing of X-Compound has steadily increased. By being able to produce these critical process parts we have unique possibilities and the flexibility to meet our customers demands and expectations. Short lead times and proven quality will let us continue this way.

Line Control/Electrical Equipment



Electrical Equipment and Line Control

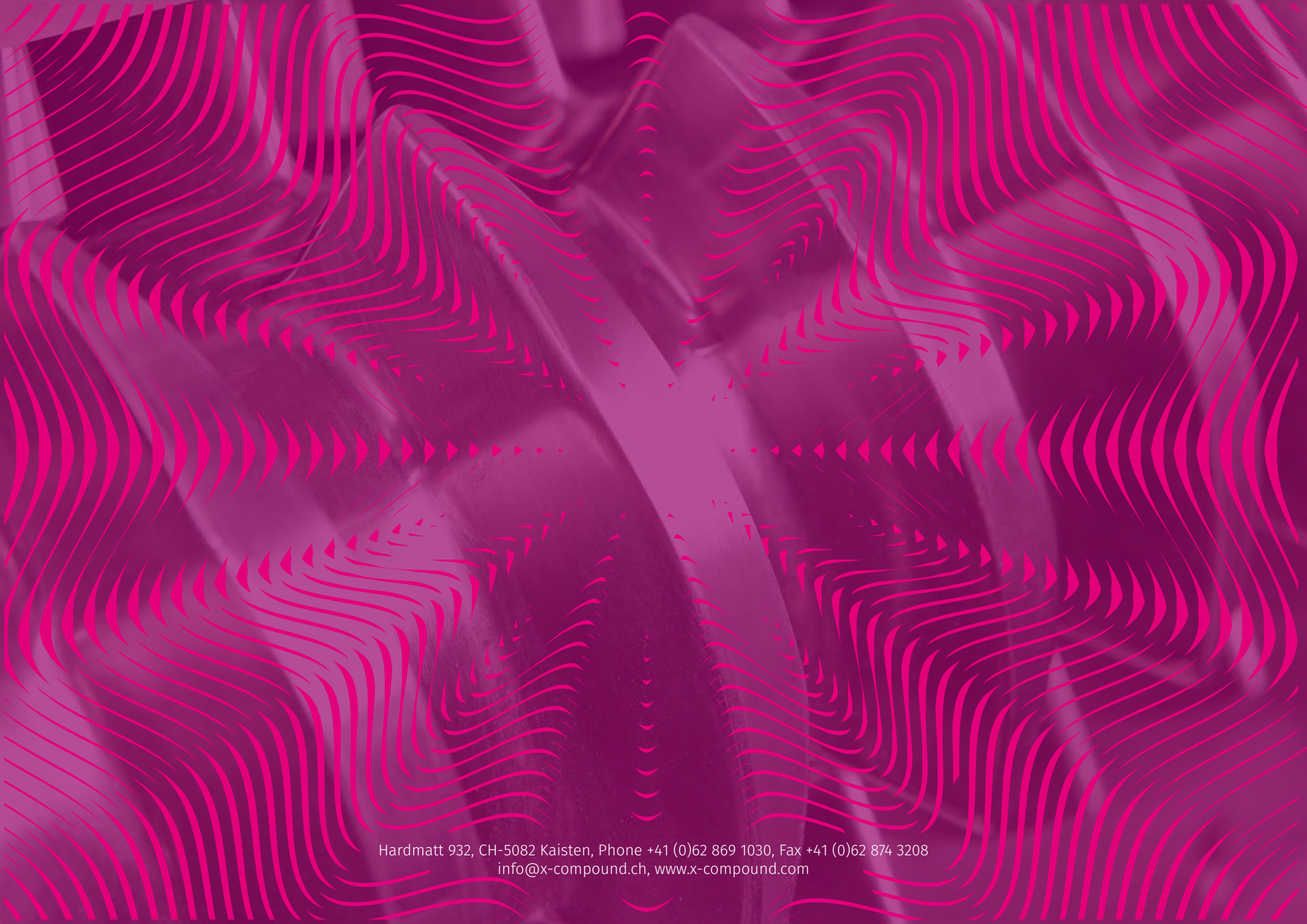
The extrusion line control systems as well as the design of electrical components are essential elements of our Kneader plants. The Kneader unit works with the peripheral equipment as a functional unit to achieve best product properties in all production stages. The control is developed, designed and programmed by inhouse specialists. The Line-PC is used for visualization and process trending, recipe handling and the long-term production and quality protocol. For each production run the production parameters as well as the quality results will be stored.



Process Engineering

Efficiency is essential in all aspects of our business world. Regarding der Kneader process a robust und reliable process design is the basis to achieve the goal. We'd love to discuss your specific demands and to cast this into a tailored Kneader line. Well connected to all kinds of experts and scientists, we cover all parts of compounding plants, and are your hub for next generation efficiency compounding. Our well experienced and highly trained process engineers are at your service to optimize existing lines or to create new plant designs tailored to your requirements.



The background of the entire page is a complex, abstract pattern of wavy, magenta-colored lines. These lines flow in various directions, creating a sense of movement and depth. In the center of the image, there is a faint, light-colored diamond shape that serves as a focal point. The overall color palette is dominated by shades of magenta and pink, with some darker tones in the shadows of the wavy lines.

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