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TELSONIC - Leader in Plastic Welding Technology.

PLASTIC WELDING | METAL WELDING | CUTTING | CLEANING | SIEVING

01 Ultrasonic Systems for Plant Engineers by Telsonic

Telsonic has established itself as a leading innovator and provider of welding technologies, with a special focus on ultrasonic and vibration welding processes. These technologies are crucial for the efficient and effective joining of materials in a variety of industrial applications. This report presents in detail Telsonic's specific welding techniques, their areas of application, and the extensive product range, which also includes special solutions for plant manufacturers.

Ultrasonic Welding Technology in Detail

Telsonic uses ultrasonic welding technology to join thermoplastic materials by converting friction and vibration energy into heat. The technology includes both longitudinal and torsional processes, suitable for various applications.

Longitudinal Ultrasonic Welding

This method is ideal for standard applications where high strength and tightness of the weld seam are required. The vibrations are introduced vertically to the joining parts to achieve an effective connection.

Torsional Ultrasonic Welding (SONIQTWIST®)

The patented SONIQTWIST® process is a specialized form of high-frequency friction welding. It is particularly suitable for sensitive parts, films, fabrics, and thin injection-molded parts, as it exerts minimal stress on the lower joining part.

Vibration Welding

In addition to ultrasonic, Telsonic also offers vibration welding systems, suitable for joining large and complexly shaped parts. This technique is often used in the automotive industry and other sectors.

02 Welding Systems

03 Installation of Welding Feeds

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Product Range for Plant Manufacturers
Telsonic offers a wide range of products and solutions specifically designed for plant manufacturers:

- TSP Press Series (Torsional Welding Presses):
  Ideal for applications requiring torsional ultrasonic welding.
- USP Press Series (Linear Welding Presses):
  For applications utilizing longitudinal ultrasonic welding.
- HandyStar Energy (Ultrasonic Hand Welding Device):
  A flexible tool for smaller or hard-to-reach welding spots.
- Soundproof Cabin SSK:
  Provides protection and safety for presses up to 5,000 N.
- Telso®Flex (Software for Systems):
  Advanced control software for optimal process control.
- MAG Welding Generators and Telso®Flex Control for Plant Construction: Specifically for installation in control cabinets and integration into production lines.
- VFFS Tubular Bag Module and SUP Head Seam Module:
  Innovative solutions for packaging plants.
- AC Feed Series: Designed for automated production lines.
- Vortex Booster (Sonotrode Cooling):
  Ideal for applications with high duty cycles.
- Swing Unit SONIQTWIST®: Specifically for torsional welding.
- SE Converter Series: For linear welding.
- Sonotrodes and Boosters:
  Acoustic tools that ensure efficient energy transfer.

Customer Benefits and Areas of Application
Telsonic technologies offer numerous advantages, including **high working speed, consistent quality through continuous process control, and reliable and tight connections.** They are used in various industries such as automotive, medical, textile, food, plastics, and packaging.

Conclusion
With an extensive product range specifically developed for plant manufacturers, we offer high-quality, reliable, and efficient solutions for a wide range of industries worldwide. Telsonic's commitment to technological excellence and customer satisfaction is underscored by its global presence and its broad offering of advanced welding solutions.

By Dirk Schnur, Chief Marketing Officer, Telsonic AG

04 Welding Generators for Switch Cabinet Installation

05 Sophisticated acoustic Tools for your Applications

06 Large Selection of standard Tools

07 Hardware and Software for Integration into Production Systems

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