



Anahita GmbH

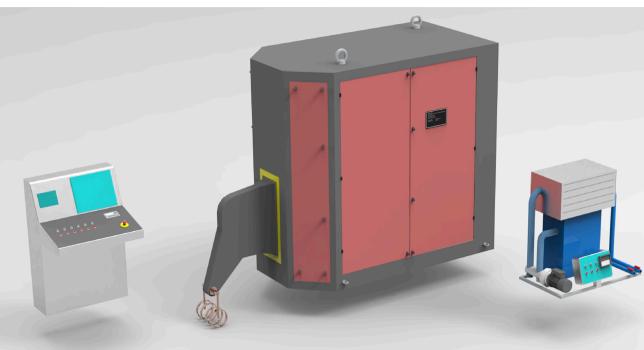
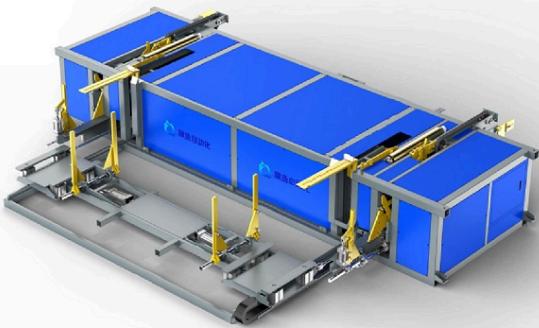
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## Design and manufacturing of Machines for pipe production



# High Efficiency Welder (SIC Series)

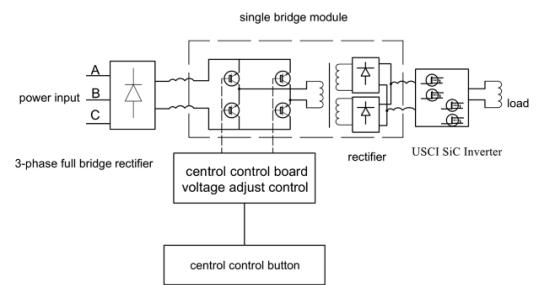
## Revolutionizing High-Frequency Induction Welding



Pipe Thickness	0,2 - 16 mm
Pipe Diameter	8 - 420
Number of Modules	3
technological advancements	2019 (industry latest technology)

### Elektrischer Aufbau

- Modular aufgebaut
- Neueste Halbleitertechnologie



### SIC Series at one glance

Low Conduction Loss : Enhanced energy efficiency and reduced operational costs.

Low Switching Loss : SiC-based Advanced zero-voltage switching (ZVS) technology enables faster switching speeds, allowing for a more precise and stable welding process with improved arc control.

Complete Protection Systems: Over-current, temperature, water shortage, and voltage protections ensure safe operation and reliability.

Harmonic interference with a power factor of 0.96 or higher compliant with energy standards.

Ensures precise current control, leading to a stable and reliable welding arc, which enhances the mechanical strength of welded joints

Designed for precision, efficiency, and reliability in straight seam welding of steel pipes

Utilizing advanced Silicon Carbide (SiC) power devices reduces Electromagnetic Interference (EMI)

The reduced thermal stress and higher durability of SiC components lead to less frequent maintenance, minimizing downtime and operational expenses.

**Modular Design leads to easy installation, maintenance, reduced downtime**

## High Frequency Welder (IGBT Series)

Specifications	IGBT Series
Technology	IGBT + MOSFET
Efficiency	≈ 90%
Energy Saving	20% compared to SCR
Installation expense	Minimal
Installation time	5 days
Power	60 kW to 1200 kW
Pipe Thickness	0,2 - 15mm
Pipe Diameter	8 - 398 mm
Number of Modules	3
Production speed	up to 120 Meter / Minute



### IGBT Series at one glance

Faster Dynamic Response – Instantaneous power adjustments improve weld consistency even at speeds up to 120 m/min for thin pipes

Is suitable for ERW pipes

Ideal for Steel and Aluminium Pipes

Low Noise and Energy Saving capability

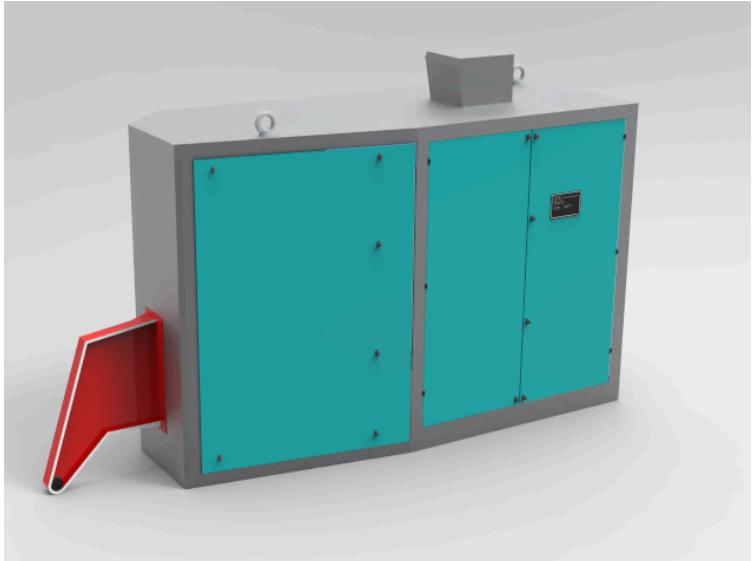
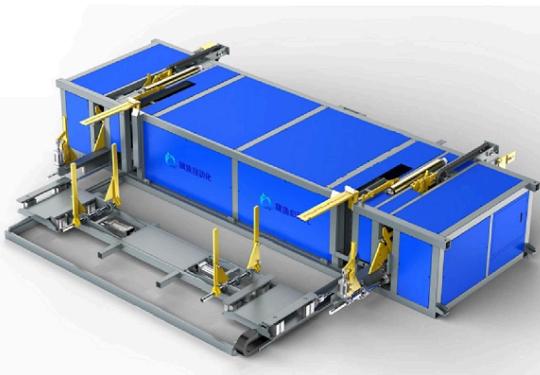
User-friendly design and intuitive controls

Advanced high-frequency regulation ensures consistent weld seam quality with minimal spatter or distortion.

Automatic start/stop button for easy operation and smooth workflow integration



## High Frequency Welder (SCR Series)



Pipe Thickness	0,2 - 15 mm
Pipe Diameter	8 - 398 mm
Guarantee	1,5 years (extendable)



### SCR Series at one glance

Premium Components and advanced thyristor and MOS leads to Long lasting build.

Reduced electrical stress on components and efficient heat dissipation contribute to longer operational life and lower maintenance costs.

US IR IRFP460 MOSFETs and Germany's IXYS DSEI60-06A rapid recovery diodes ensure robust performance.

Upper-voltage resonance circuits **eliminate the need** for an output transformer.

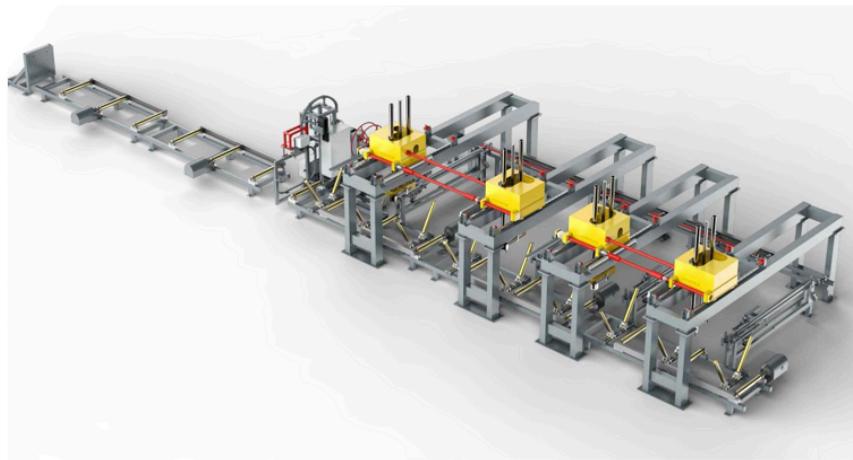
SCR and MOSFET technologies optimize power conversion, reducing energy consumption while maintaining **high output stability**.

With a high efficiency rating of 85%, it meets global energy standards.

Delivers full power output across a wide range of product sizes.

reduced downtime, and lower maintenance requirements result in significant long-term cost savings, and make SCR Series the preferred option for industries focused on stable, long-term growth.

## Automatic Pipe Stacking Machines



Specification	Electromagnetic
Application	round pipes, rectangular, even special shapes
Diameter and Thickness	A Wide range of Thickness and Diameter is applicable
Working Principle	PLC, Servo Motor, Pneumatic and Hydraulic
Protection of Surface	Very well
Collision	Collision Free
Dent, Deformation, Intenditation	Not even on thin walled pipes
Product quality	very high
remote diagnostic module	available and can be controlled remotely
Material to handle	Ferromagnetic steel (Carbon Steel, Alloy steel)
Lifting	contact free





Specification	Mechanical
Application	round pipes, rectangular, even special shapes
Diameter and Thickness	A Wide range of Thickness and Diameter is applicable
Working Principle	PLC, Servo Motor, Pneumatic and Hydraulic
controlled grip force	Available therefore better for coated or fragile pipes
Collision	requires physical contact
Precise Layering	available (Cross stacking)
Material to handle	Any Material, any steel, copper, aluminium
Lifting	clamps, grippers, forks, belts to hold pipe



Metowd (ZSHC Electrical Co., Ltd) and Anahita GmbH have formed a successful joint venture dedicated to designing and developing advanced machinery and equipment for pipe and tube production.

Anahita's top edge Design engineering and METOWDs excellent experience in manufacturing and access to the supply chain has led to creation of high-quality machinery.

We have so far gained significant success across Asian countries, We offer not only high-quality machinery but also professional support and services, ensuring long-term success.

## **Our Services and Support include:**

### **1 Pre-Sale Consultation**

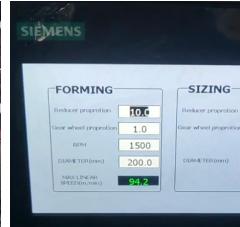
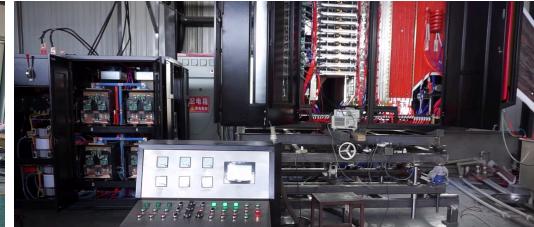
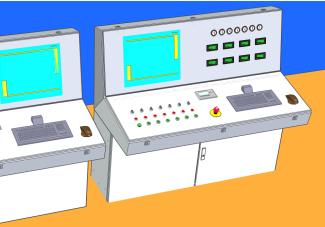
- We provide detailed technical specifications, feasibility studies, and customized proposals to help you make informed decisions.

### **2 Design Mechanical / Electrical**

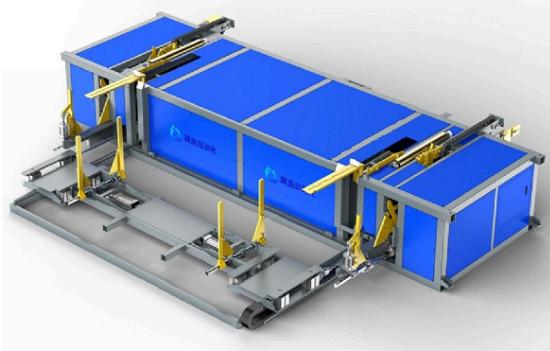
- Mechanical and Electrical Design: Tailored solutions to meet your production needs.
- No matter if custom designed control panel or stacking machine, we provide you with professional engineering expertise

### **3 Installation and Test**

- Expert installation and thorough testing to ensure optimal operation.



## 4 Training and Knowledge Transfer



for operators and maintenance teams.



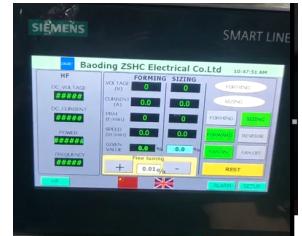
note troubleshooting, and on-site support.

Programs

e plans to minimize downtime and extend equipment life.

## 6 Spare Parts and Upgrades

- Genuine spare parts and performance-enhancing upgrades.



## 7 Remote Monitoring and Diagnostics

- Real-time diagnostics and proactive solutions to keep your operations running smoothly.