Meltech 7 Zone Strand Annealing Continuous Rod And Wire Furnace

Stock No	WEB495
Manufacturer	Meltech
Model	Strand Annealing Furnace
Year of Manufacture	2008
Serial	51169
Condition	From a working environment
Internal Size (WxDxH mm)	2 x Ø50 6 x Ø38
Max Temp	1100°C
Other Info	Open to offers that meet reserve
Location	Birmingham, UK
External Dimensions (WxDxH mm)	10000 x 1200 x 1200

Description

Metech, Annealing, Hardening, Patenting, Tempering And Preheating Strand Furnace

In the late 1940's continuous strand or strip annealing lines came into use in brass producing mills. The modern strand annealing tube furnace has for decades played the dominant role in annealing of wires, ropes and tubes made of high carbon steel, stainless steel and nickel alloys.

Process of an Annealing Furnace

An annealing furnace is a type of continuous furnace used to heat material at very high temperatures in such a way as to change its hardness and strength. Annealing is often associated with the production of steel and other metals. The process of annealing can help relieve internal stresses or non-uniformities in the material that may lead to early failure in the field.

The annealing process is also commonly used with other metals, glass, and even ceramics to make them less brittle and more durable and workable.

Steel is annealed to reduce the hardness, improve machinability, facilitate cold-working, or to produce a particular microstructure within the steel. This basically involves a heating and cooling cycle that softens the material so that it may be bent or cut easily.

For metals, an annealing furnace must be capable of heating the material to a specific temperature. This produces changes in the atomic structure and causes the metal to soften. While annealing temperatures vary depending on the material and application, a typical temperature for annealing steel is around 700°C (1,292°F).

An annealing furnace is designed for very uniform heating, followed by a gradual cooling process To prevent oxidation of the material, the heating chamber is airtight, with a slightly positive pressure. The atmosphere within the chamber typically consists of a combination of and End

After many decades of development the modern day horizontal tube based strand annealing furnace was specifically designed to facilitate the manufacture of high quality rods, wires, strands, and tubes made from various kinds of metals. These furnaces are ideally suited for copper, copper alloy, nickel, nickel chrome, titanium, stainless steel and other refractory metals.

The Meltech strand furnace is a cost effective solution to a wide range of production strand annealing processes.

Machine applications and processes

- Spring wire: Annealing
- Resistance: wire Hardening
- Saw blades: Patenting
- Scalpel blades: Tempering
- Transistor wire: Preheating

Technical Specification

- Products handled: Round wire, blades, strip and profile, cables
- Product materials: Carbon steels, stainless steels, copper and nickel alloys, precious and noble metals
- Max throughput: 400kg/h
- Min / max line speed:1- 50m/min
- Min product size: 0.76mm
- Max product size: 11mm
- Min temp: 500°C
- Max temp: 1100°C
- Number of Tubes: 8

- Atmosphere: N2 or a mixture as necessary are available fed through end manifold
- Tube sizes: 12 to 75 mm
- Tube material: ST 310 Stainless steel
- Element systems: Wire wound Kanthal
- Insulation materials: Ceramic fibre, and board
- Tube supports: SiC profile tiles
- Electrical supply: 380 – 415V 3 phase + neutral
- Installed heating: 144kW
- Zoning: 7 Individual zones each controlled by separate R type thermocouples
- Temperature controllers: West P6100 Control P6700 Alarm
- SSR type: Omron
- Tube access: Hydraulically-activated lid opening

** Price drastically reduced for immediate sale **
Reduced from £67,500 to £40,000

Photographs taken prior refurbishment. Our refurbishment service is not available on all machines.