

Induction Surface Hardening Machine

This machine tool employs medium frequency induction for surface hardening applications. Its digital control system enables precise heating, tempering, quenching, and annealing of metal components.



Overview

Precision Induction Hardening System

This industrial induction hardening machine is designed for efficient heat treatment processes including heating, tempering, quenching, and annealing. Featuring a digital control system and robust mechanical components like ball-screw transmission and linear guides, it ensures high reliability and accuracy. The system supports versatile operations, including both horizontal hardening for long axles and vertical quenching for gears and axles.

Technical Specifications

Control System Details

- 8-bit microprocessor control circuit
- Customized integrated circuit chip set
- Multi-layer circuit board construction
- 192*64 lattice liquid crystal display
- Integrated CNC and machine tool operating board

Mechanical Components

Component	Specification
Linear Guides	Heavy duty MSA series
Lead Screw Model	4010
Transmission Type	Ball-screw transmission with double nut flange
Tempering Pool Material	Stainless steel

Capabilities

Machine Configurations

Horizontal Hardening • Vertical Quenching

Supported Processes

Heating, Tempering, Quenching, Annealing