

# **HARDLINE<sup>®</sup> CIHM-C**

## CONVEYOR TYPE



**The HardLine CIHM-C is a range of EFD Induction conveyor-type systems for fast, reliable and cost-effective hardening and tempering of crankshafts. Suitable for use in continuous lines or as a stand-alone cell, each HardLine CIHM-C is packed with features to help ensure maximum output at minimal cost. Key benefits include:**

### **Unrivalled quality, minimal distortion**

Each HardLine CIHM-C comes with the powerful RTM-100 real-time process monitoring system as standard. The HardLine CIHM-C also features 'Active Power Variation' which dynamically adjusts the power in accordance with the crankshaft's angle of rotation during heating. This minimizes distortion by limiting heat seepage.

### **Aggressive cost control**

Become more cost-effective by exploiting the HardLine CIHM-C's high throughput (only 30 seconds for a four-cylinder crankshaft), minimal energy and water consumption, and durable long-life coils.

### **Smart capital investment**

Empower your production line. A HardLine CIHM-C can work with up to four heating stations. It can handle car and truck crankshafts up to 1,500mm long, with or without radii or split pins.



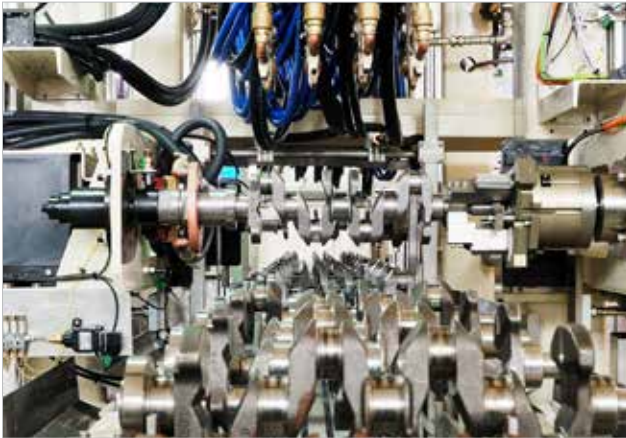
PUTTING THE SMARTER  
HEAT TO SMARTER USE

\*The system shown is for illustrative purposes only.

## PRODUCT FEATURES

### Fastest on the market

The HardLine CIHM-C crankshaft hardening system with walking beam is the fastest of its kind on the market. Thanks in part to an innovative suspension unit, it can treat one four-cylinder crankshaft in 30 seconds.



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### Versatile

A single HardLine CIHM-C machine can support up to four hardening stations. A single, multi-coil system can be powered by one power source. Alternatively, each induction coil can have its own dedicated power source. The HardLine CIHM-C hardens car and/or truck crankshafts up to a maximum length of 1,500mm.

### Ergonomic

The HardLine CIHM-C system is available in a 'trolley' version that lets an operator load and unload the machine from one position. Also, changing between car and truck crankshafts does not require any equipment changeovers—good news for throughput, and good news for operators.

### Customizable

EFD Induction specializes in designing, building, installing and maintaining solutions that are customized to your specific needs and budget. You can, for example, choose between manual or automated loading systems; between polymer quench or air cooling systems; between a walking beam or chain conveyor system. But whichever you choose, all elements are built to EFD Induction's renowned quality standards, and are rigorously tested by some of the most experienced people in the induction hardening industry.

## TECHNICAL DATA

### HardLine CIHM-C

Throughput	Up to 120 parts per hour, depending on workpiece
Power source	Sinac P range
Max. part length (mm)	1,500
CNC control system	Siemens Sinumerik 840D

Subject to modification