



*YOUR SOURCE  
FOR COMPLIANCE  
WITH CQI-9  
4TH EDITION*

*RELIABILITY, EXPERTISE,  
SERVICE, AND SELECTION*

# WHAT IS CQI-9?

*CQI-9 Special Process: Heat Treat System Assessment, 4th Edition was published in June 2020. We are here to help you achieve compliance with these new standards.*

## DEFINITION AND PURPOSE

According to the Automotive Industry Action Group (AIAG), CQI-9 4th Edition was developed in collaboration with volunteers from OEMs, Tier 1 suppliers, heat treat suppliers, and calibration companies that service the heat treat industry, the Special Process: Heat Treat System Assessment 4th edition (CQI-9) is a comprehensive audit covering the most common heat treat processes employed by the automotive industry, intended to provide a common approach to a heat treat management system for automotive production and service part organizations.

## COMPLIANCE PACKAGES AND OPTIONS

Our experts at Gasbarre have a comprehensive knowledge of CQI-9 Special Process: Heat Treat System Assessment 4th Edition. We will develop and implement a compliance plan for you. Although every situation is unique, we have two main options to get your thermal processes ready for this new revision.

	BASIC PACKAGE	ADVANCED PACKAGE
	<i>Provides the level of service required to ensure compliance.</i>	<i>All Basic Package points PLUS the next level of support, including devices designed with enhanced convenience features.</i>
INCLUDES	<ul style="list-style-type: none"><li>■ Paperless Recorders</li><li>■ New Flowmeters with Valve Controls</li><li>■ Water Temperature and Flow Sensors</li><li>■ Calibration Kit for Flowmeters with Calibrated Digital Manometer</li><li>■ Quarterly Calibration</li><li>■ Adherence to ISO 17025 Standards</li></ul>	<ul style="list-style-type: none"><li>■ Replace Programmable Logic Controllers (PLC)</li><li>■ Add Human-Machine Interface (HMI)</li><li>■ New Flowmeters with Valve Controls</li><li>■ Water Temp/Flow Sensors</li><li>■ Calibration Kit for Flowmeters with Calibrated Digital Manometer</li><li>■ Quarterly Calibration</li><li>■ Adherence to ISO 17025 Standards</li></ul>
BENEFITS	<ul style="list-style-type: none"><li>■ CQI-9 4th Edition compliance</li></ul>	<ul style="list-style-type: none"><li>■ CQI-9 4th Edition compliance</li><li>■ Seamless data access</li><li>■ Robust data analysis</li><li>■ Better process understanding</li><li>■ Process improvement</li></ul>

# NEW REQUIREMENTS: ARE YOU READY? ARE YOU IN COMPLIANCE?

Several key points required by CQI-9 Special Process Heat Treat System Assessment 4th Edition:



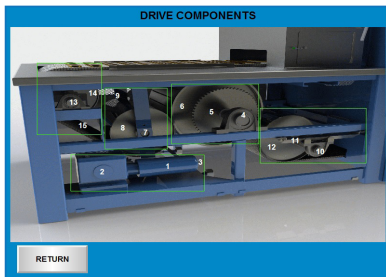
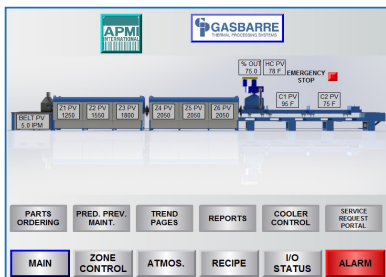
ISO 17025

MEMBER



- Digital instrumentation required
- Temperature recording required for each control zone
- Quarterly calibration of atmosphere controllers
- Recording instruments are required for temperature controlling devices and protective atmosphere monitoring
- Continuous temperature recording with an alarm system
- Continuous atmosphere recording with an alarm system
- Record cooling water temperature twice per shift, continuously record and sign off twice per shift, or alarm system with temperature recorder
- For sintering hardening, an alarm system is required for proper fan operation and fan speed verification every 15 minutes
- Continuous monitoring of furnace atmosphere required, automatically controlled, and documented

## PACKAGE COMPARISON



HMI Screen Examples

	BASIC	ADVANCED
Paperless Recorders	✓	
Replace PLC		✓
Add HMI		✓
New Flowmeters with Valve Controls	✓	✓
Water Temperature and Flow Sensors	✓	✓
Quarterly Calibration Requirements	✓	✓
Adherence to ISO 17025 Standards	✓	✓
Calibration Kit for Flowmeters with Calibrated Digital Manometer	✓	✓
Comfort and Peace of Mind Offered by Working With Our Experts	✓	✓



# EXPERTISE

The extensive product offerings and diverse experience and skill sets of our sales, engineering, and field service personnel allow us the insight and capability to solve any challenge of your unique thermal and material processing requirements.

# SUPPORT

Gasbarre's qualified technicians, trainers, and sales staff offer prompt and courteous assistance to help maintain your thermal processing equipment, and keep it running at peak performance. Consultation is available via telephone or email, or on-site through our worldwide network of factory trained technicians.

# SERVICE

Our customers require maximum up-time, and Gasbarre offers unmatched field service to deliver just that. In addition to emergency service, Gasbarre offers operation and maintenance training as well as custom designed maintenance programs performed by Gasbarre professionals. When our customers need help the most, we're only a phone call away.

## METALLURGICAL PROCESSES

Annealing ■ Brazing ■ Carbonitriding ■ Carburizing ■ Co-firing ■ Drying ■ Enameling ■ Ferritic Nitrocarburizing ■ Glass-to-Metal Sealing ■ Hardening ■ Inert Atmosphere Processing ■ Nitriding ■ Normalizing ■ Quenching ■ Sintering ■ Soldering ■ Spheroidize Annealing ■ Steam Treating ■ Stress Relieving ■ Tempering

## SPARE PARTS, REBUILDS & SERVICE

Replacement Parts ■ 24 Hour Service ■ Rebuilds ■ Preventative Maintenance Programs ■ Evaluations ■ Temperature Profiling ■ Start-up Assistance ■ Turnkey Installation ■ Calibration Services ■ Repairs ■ Upgrades ■ Training



*Powder Compaction  
Presses*

*Coining/Sizing Presses*

*Precision Tooling*

*Automation*



*Atmosphere & Vacuum  
Furnace Systems*

*Continuous & Batch  
Furnace Systems*

*Auxiliary Heat Treating  
Equipment*

*Automation*



*Engineering & Design*

*Custom Fabrication*

*Machining*

*Electrical Assembly*

*Integration*



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MEMBER

