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P.O. Box 688 / Muskegon, MI 49443 / Phone (231) 755-3741 / Fax (231) 755-3740

# Heat Treat VENDOR SURVEY REPORT of

Company Name:

Survey Performed by                      Date

Reviewed by                                      Date

Survey Number

- Vendor:
- Approved
  - Not Approved
  - Conditional Approval

**VENDOR SURVEY REPORT**

**FACILITY DATA**

Supplier		Telephone	
Street	City	State	Zip
Number of Employees	Total	Quality	Production
Number of Plant Locations		Annual Sales \$	Years in Business
Major Customers			
Major Product Lines			
Union	Contract Expiration Date	Last Strike	
Parent Company			

Are You (Check): <input type="checkbox"/> Small Disadvantaged Business Concern <input type="checkbox"/> Larger Business Concern <input type="checkbox"/> In a Labor Surplus Area – Code Number <input type="checkbox"/> Small Business Concern <input type="checkbox"/> Women-Owned Small Business Concern	Attach Copy of: (only if marked) <input type="checkbox"/> Organizational Chart <input type="checkbox"/> Capabilities Brochure <input type="checkbox"/> Quality Improvement Program <input type="checkbox"/> Quality Manual <input type="checkbox"/> Latest Annual Report (Kaydon to Obtain Copy of D & B)
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**SUPPLIER PERSONNEL**

Chief Executive Officer	President
<b>Department Heads</b>	
Sales	Operational Mgr
Accounting	Purchasing
Engineering	Manufacturing
Quality Control/Assurance	Q.C. Second in Charge
Reports To	Title

**QUALITY SYSTEM ORGANIZED PER:**     MIL-Q-9858     MIL-I-45208     ISO 9000     Other

**Kaydon Corporation certification procedures require initial and periodic on-site review of process operations and procedures. This includes interviews with personnel directly associated with the process(es). With this understanding, the attached questionnaire has been completed and Kaydon Corporation is requested to consider the facility for certification as a source for the process(es) checked in paragraph 1.0.**

Please complete all blanks, use N/A if not applicable. Facility desires approval of the following process(es). Also note whether specification is available.

1.0	SPECIFICATIONS:	TITLE	APPROVAL DESIRED	SPEC. AVAILABLE (NOTE REVISION)
	MIL-H-6875	PROCESS FOR HEAT TREATMENT OF STEEL		
	ASTM D3520	MAGNETIC QUENCHOMETER TEST		
	ASTM E3	PREPARATION OF METALLOGRAPHIC SPECIMENS		
	ASTM E8	TENSION TESTING OF MATERIALS		
	ASTM E10	BRINELL HARDNESS TESTING		
	ASTM E18	ROCKWELL HARDNESS TESTING		
	ASTM E384	MICROHARDNESS OF MATERIALS		
	AMS 2750	PYROMETRY		
	AMS 2759	HEAT TREATMENT OF STEEL PARTS		

## 2.0 EQUIPMENT

2.1 LIST BELOW OR ATTACH A LIST TO THIS DOCUMENT OF ALL HEAT TREATING EQUIPMENT.

## 3.0 ATMOSPHERE

Indicate type(s) used:

- |   |   |
|---|---|
| <input type="checkbox"/> Air/products of combustion | <input type="checkbox"/> Vacuum         |
| <input type="checkbox"/> Argon                      | <input type="checkbox"/> Exothermic     |
| <input type="checkbox"/> Helium                     | <input type="checkbox"/> Endothermic    |
| <input type="checkbox"/> Hydrogen                   | <input type="checkbox"/> Nitrogen based |
| <input type="checkbox"/> Nitrogen                   | <input type="checkbox"/> Ammonia        |

#### 4.0 INSTRUMENTATION

- 4.1 Do furnaces and ovens have at least one control thermocouple in each zone and attached to a controller and recorder?
- 4.2 Do furnaces and ovens have overtemp controllers?
- 4.3 If refrigeration or subzero equipment is used, does equipment have at least one controller/recorder instrument?
- 4.4 Is calibration of furnace and oven controllers performed by outside contractors?  
Indicate name:

#### 5.0 TEMPERATURE UNIFORMITY OF EQUIPMENT

- 5.1 Are temperature uniformity of furnaces and ovens performed on a periodic basis?  
If yes, indicate name:  
If no, go to Section 5.6
- 5.1.1 Are furnaces that are used for final heat treating of steel parts surveyed for temperature uniformity?  
Every three months?          Six months?          Other?  
and held within  $\pm 25^{\circ}$  F?
- 5.1.2 Are ovens that are used for final tempering of steel parts surveyed for temperature uniformity?  
Every three months?          Six months?          Other?  
and held within  $\pm 15^{\circ}$  F?
- 5.2 Are nine minimum test thermocouples used to survey each furnace or oven (bath type) for temperature uniformity?
- 5.3 Indicate how many test thermocouples are used to survey temperature uniformity on semi and/or continuous equipment?
- 5.4 Is wire that is used for temperature uniformity surveys calibrated and certified?
- 5.5 Is each furnace and oven surveyed for at least 30 minutes?
- 5.6 Are system accuracy probe checks on equipment that is used for final heat treating being performed on a periodic basis?          If yes, what frequency?
- 5.7 Are equipment thermocouples calibrated?
- 5.8 Are equipment thermocouples replaced on a scheduled frequency?  
If yes, explain.
- 5.9 Are results of uniformity surveys and equipment records (test thermocouples, equipment thermocouples, etc.) kept on file and available upon our requests?

#### 6.0 QUENCHING EQUIPMENT

- 6.1 Do tanks used for quenching media provide adequate circulation?
- 6.2 Do tanks used for quenching media have temperature indicators?
- 6.3 Do baths have means of heating and/or cooling?
- 6.4 If oil is used for quenching, is the temperature maintained between 60°F - 160°F?

- 6.5 If oil is used, is it tested each quarter per requirements of MIL-H-6875?
- 6.6 Are low alloy and carbon steels that are quenched for hardness being tempered within (2) hours after quenching? If not, explain.

**7.0 TESTING EQUIPMENT**

- 7.1 List testing equipment utilized at your facility and indicated the frequency of calibration and/or service.