

Process Specification



2135 West Maple Road
Troy, MI 48064-7186

Specification: 473-A
Revision Date: 3/5/2008

INDUCTION HARDENING OF SHAFTS

1.0 General Specifications: P.S.1, P.S. 15 and P.S. 400

2.0 Pre-Treatment:

Harden: Thoroughly austenitize at 1475° - 1550°F. Quench in oil.

Temper: Approximately 825°F two hours at temperature. Air cool to room temperature.

Hardness: 400-444 BHW

3.0 Induction Hardening:

Harden areas designated on print, by induction.

Depth of hardness: 0.180"-0.375" (to HRC 50)

4.0 Tempering:

300°F to 325°F for one and half hours (1.5) to two (2) hours

5.0 Hardness (After Tempering):

Rockwell HRC 52-58 on induction hardened area.

Date	Change
03/05/2008 Level A Request 30272-10	Removed reference to 4340 material and added reference to P.S. 15
8/15/89	Revised hardening depth of 0.180" - 0.375".

Approved By: S. Foster
Vice President - Quality - CVS