# **Process Specification**



2135 West Maple Road Troy, MI 48084-7186 Specification: 473-B 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°F - 1550°F. Quench in

oil.

Temper: Approximately 825°F for 1.5 hours at temperature. Air

cool to room temperature

Hardness: Brinell 400-444

# 3.0 <u>Induction Hardening:</u>

Harden areas designated on print, by induction

Depth of hardness - .050" - .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 <u>Hardness (After Tempering):</u>

Rockwell HRC 52-58 on induction hardened area

Date	Change
03/05/2008 Level A	Removed reference to 4340 material and
Request 30272-11	added reference to P.S. 15
3/15/87	Revised

Approved By: S. Foster

Vice President - Quality - CVS