

PROCESS SPECIFICATION

DELPHI SAGINAW STEERING SYSTEMS

TITLE Tool Material Heat Treatment NUMBER E-2645
ISSUED BY C. R. Martin DATE 4/30/96 APPROVED BY _____
REVISION C REV. DATE 08JL2003 SHEET 1 OF 1

- A. Material to be heat treated: **Vasco Die**
- B. Heat treat in salt as specified:
1. Preheat at 1250°F. and equalize.
 2. Preheat to 1500°F. and equalize.
 3. High heat at 1850 to 1870°F., for 60 minutes.
 4. Interrupted salt quench at 1000°F followed by air cooling, to 125°F or below.
 5. Triple temper at 950°F for 3 hours, each temper.
- C. Stress relieve after final machining at 875°F.
- D. Using heat treatment shown above will give a hardness range of HRC 55-58.
- E. No carburization or decarburization allowed.
- F. Tooling must have holes cleaned of all salt.
- G. Heat treatment certification, when requested, shall include:
1. Heat treat shop number
 2. P.O. number accompanying job
 3. Type of material heat treated
 4. Size and quantity of tooling batch heat treated
 5. Resulting hardness
 6. Xerox copy of material tracking chart containing furnace times and temperatures.
 7. Date when hardness tester last calibrated.
- H. Heat treatment per this specification is to be carried out only by approved sources as listed in Specification E-2600.

Revision	Revision Description	By	Date
A	Distribution list updated.	CRM	5/16/96
B	Distribution list revised. Format updated.	DN	1/24/01
C	Distribution note removed. Approved source note added.	DN	08JL2003

http://www.delphisuppliers.com/vendor_documents/delphi-s/index.html

Note: The above specifications were developed without considering whether patents may or may not be involved.
In all cases, therefore, the supplier shall be required to assume patent liability.