

- **The Supplier should always follow any Customer flow downs or drawing specific requirements first. When these requirements or drawings do not specify, AIT specifications apply. AIT specifications for multiple types of surface coatings, stress relief, or heat treating for machined and fabricated parts can be found at the link below:**

https://www.aint.com/about_ait/quality/overview

The latest specification available at the link above applies unless otherwise noted on the PO.

If the Supplier believes there to be a conflict between any requirements, please contact the Buyer.

General Requirements

Material	Heat Treatment	Time / Temperature / Cool	Application
Invar 36	Full anneal	1hr at 1550°F or 2hrs at 1350°F, plus 1 additional hour for each 1.0 inch of thickness over 1.0 inch. Air or oven cool.	Following extensive forming or welding.
	Stress relief anneal	2hrs at 600°F plus 1 additional hour for each 1.0 inch of thickness over 1.0 inch. Air or oven cool.	Between rough and final machining. Following minor weld repairs.
Invar 42	Full anneal	1hr at 1650°F or 2hrs at 1550°F, plus 1 additional hour for each 1.0 inch of thickness over 1.0 inch. Air or oven cool.	Following extensive forming, welding, or machining operation.
	Stress relief anneal	2hrs at 800°F plus 1 additional hour for each 1.0 inch of thickness over 1.0 inch. Air or oven cool.	Between rough and final machining. Following minor weld repairs.

Notes

1. Maintain all AIT tags and markings as supplied.
2. Remove all plugs and masking prior to shipping.

Revision History



Supply Chain Specification
Stress Relief Specification for Invar 36 and 42

Document #
SCS-003

Revision
0

DCC #
DCC0000010x

Rev.	Date	DCC	Comments	Approved By
0	7-dd-2023	DCC000010x	Initial release	Robert Chianese