

**TEXAS HEAT TREATING, INC.**

REGIONAL HEAT TREATING CENTER

155 Texas Ave.
Round Rock, TX 78664
(512) 255-58845003 North Freeway
Ft. Worth, TX 76106
(972) 263-9755

Heat Treating and Testing performed at Ft. Worth location

AS91000 / ISO 9001:2015 certified quality system

ISO 17025:2017 accredited laboratory

**CERTIFICATION**Work Order: 402792
Certification ID: 402792-1
Date: 9/28/2021
Page: 1 of 1To: Powerhouse, Inc.
740 Aviator Dr.
Fort Worth, TX 76179 USA

Purchase Order No:	179539
Material:	4140

Spec(s):

Container Type	/	Qty
Ziploc Bag	/	1

Quantity	Part Number / Part Name / Part Description	Pounds
10	PHRASSP01011091-1 Timing Tensioner Stud	3
15	Washer Washer	0

Heat Treating Details:

- [1] Preheat, 1000°F
- [2] Harden, 1575°F, Oil Quench
- [3] Temper, Air Cool

Certification Statement:

Process: 4140-Atmos Harden-43:50 HRC-%-0:2.5 in-%-FW
In Accordance with Spec(s): Customer PO

Inspection Type	Units / Scale	Minimum Req.	Maximum Req.	Results	Qty Tested	Date / Comments
Surface Hardness - HRC (Method: E18)	HRC	43.0	50.0	46.3 , 50.0	3	Date Tested: 09-25-2021
Tensile Strength per ASTM E8 / ASTM A370	KSI	200.000		224.500 , 224.500	1	Date Tested: 09-27-2021

IMPORANT STATEMENT:

All test specimens and testing conform to applicable ASTM Standards, unless otherwise specified per written customer requirement. Results apply to the sample(s) tested and/or inspected and are not necessarily indicative of the quality of apparently identical or similar products and do not extend to the lot or batch from which the tested components were drawn. The information in this Certification is intended for the use of Texas Heat Treating's client and may not be published or reproduced except in full without Texas Heat Treating's expressed consent. Texas Heat Treating accepts no responsibility or liability for results due to non-representative test items, improper sampling, insufficient testing, or misinformation. Material submitted to Metallurgical Lab will be discarded after 30 days, except by prior written agreement. Inspection Types designated with an "*" are not included in the THT scope of accreditation for ISO 17025:2017.

Andrew Rubio
Quality Assistant
Texas Heat Treating, Inc.