



STACK METALLURGICAL SERVICES, INC.

5938 N. BASIN AVE. • P.O. BOX 17176
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(503) 285-7703 FAX (503) 286-5681



CERTIFICATION

Excellence in Heat Treating

Job number

0541815

Sold to

SNAKE BRAND GUIDES
13808 NE 242ND STREET
BATTLE GROUND, WA 98604



W/C

| Customer account number | Customer P.O. number | Date received | Customer shipper | Containers |
|-------------------------|----------------------|---------------|------------------|------------|
| SNABRAN | N/C VERBAL | 06/29/12 | | |

Quantity

Part Number/Description

Weight

3

FLY GUIDES
SURFACE LAYER HARDNESS

1

| Material | Hardness | Max. X-Section | Case depth/Electrical conductivity |
|---------------|----------|----------------|------------------------------------|
| NOT SPECIFIED | N/A | | |

P/O REQ.

| Process | Spec. Temp | Spec. time | Furnace # | Actual Temp | Time In | Time At Heat | Time Out | Q-delay Atmos/Dew Pt. | Q-med | Date |
|----------|------------|------------|-----------|-------------|---------|--------------|----------|-----------------------|-------|-------|
| LAB TEST | | | | | | | | | | 06/29 |

LAB TEST

06/29

THREE MICROHARDNESS TESTS WERE PERFORMED TO DETERMINE THE HARDNESS OF SNAKE BRAND'S PROPRIETARY SURFACE COATING.

THE TESTS WERE PERFORMED USING A STRUERS DURASCAN-70 AUTOMATED MICROHARDNESS MACHINE AND WERE DESIGNED TO TEST ONLY THE COATING LAYER, NOT THE UNDERLYING MATERIAL.

RESULTS ARE LISTED BELOW, WITH MEASURED VALUES IN VICKERS 100G AND CONVERTED VALUES IN ROCKWELL C.

819 HV100G - 64.6 HRC EQUIVALENT
 826 HV100G - 64.8 HRC EQUIVALENT
 786 HV100G - 63.5 HRC EQUIVALENT

| Test results | Qty. tested | Qty. accepted | Qty. rejctd. | Hardness results | Qty. tested | Qty. accepted | Qty. rejctd |
|--------------|-------------|---------------|--------------|------------------|-------------|---------------|-------------|
| | | | | N/A | 0 | 0 | 0 |

Quality control
LEOPOLDT, KURT for NORRIS, JESSE

Inspection
LEOPOLDT, KURT
Date
06/29/12

This Process Certification covers thermal processing and/or hardness testing only. No particular mechanical properties of any material should be assumed, or are implied, as a result of the thermal processing and/or hardness testing of this Process Certification.

Subject to Terms and Conditions Printed on Reverse Side