



NATIONAL TESTING STANDARDS INC.
RESEARCH AND TESTING LABORATORIES

Report No. 30204-1

November 30, 2009

Client: Jensen Swing Products, Inc.
 9327 Wheatlands Rd.
 Santee, CA 92071

Reference: Charvet Vecchio

Subject: Wear Comparison of Swing Bushings.

Sample Description:

Four sintered metal bushings were submitted by the Client and identified as listed in the "Results" section of this report.

Request:

Determine the comparative wear rates of the submitted bushings.

Method:

The four submitted bushings were compared for wear resistance using a modified version of the Tabor abrasion apparatus used in ASTM D-4060. The load on each bushing was 250 grams for 1000 cycles. The abrasive surface was 150 grit silicon carbide belt paper.

Results:

<u>SH No.</u>	<u>PO No.</u>	<u>Weight Loss (mg)</u>
114	6299	179
167	6299	173
105	6330	208
125	6330	190

NATIONAL TESTING STANDARDS

Lewis F. West

by Lewis F. West



NATIONAL TESTING STANDARDS INC.
RESEARCH AND TESTING LABORATORIES

Report No. 30204-2

December 7, 2009

Client: Jensen Swing Products, Inc.
9327 Wheatlands Rd.
Santee, CA 92071

Reference: Charvet Vecchio

Subject: Breaking Load of Swing Hanger.

Sample Description:

One completely assembled swing hanger was submitted by the Client and identified as part no. SH114 P.O. No. 6299, made in China.

Request:

Determine the ultimate tensile load capacity of the submitted assembly.

Method:

The ultimate tensile load capacity was determined using a continuous rate of extension (CRT) apparatus in accordance with ASTM D-76 and loading the swing assembly to failure.

Results:

The failure of the submitted assembly occurred at 9250 lbs. of load when the small yoke broke around the sintered bronze bearing.

Comment:

The broken yoke has been returned to the Client.

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A handwritten signature in black ink, appearing to read "Lewis F. West".

by Lewis F. West