

INTERMODAL MATERIÉL  
AND  
NAUTICAL/NUCLEAR ANALYSIS  
**IMANNA**  
LABORATORY INC.

# CERTIFICATION TEST REPORT

515 Gus Hipp Blvd  
Rockledge, Florida 32955  
Telephone (321) 632-2008  
http://www.imanna.com

Post Office Box 560933  
Rockledge, Florida 32956-0933  
FAX (321) 690-3360  
E-mail: imanna@yourlink.net

CERTIFICATION TEST REPORT  
16579-1  
MECHANICAL STRENGTH TESTS  
ON  
10-INCH STAINLESS CLEATS  
FOR  
ACCON MARINE, INC.

**CUSTOMER:**

ACCON MARINE, INC.  
13665 AUTOMOBILE BLVD.  
CLEARWATER, FL 34622

**MANUFACTURER**  
**OF TEST ARTICLE:** ACCON MARINE, INC.  
CLEARWATER, FL 34622

**DATE:** Feb. 18, 2005

**REPORT NO.:** 16759-1  
**IMANNA JOB NO.:** 16759  
**CUSTOMER P.O. NO.:** Verbal  
**CONTRACT:** N/A  
**PAGES IN REPORT:** 3

**STATE OF FLORIDA**

ROBERT L. WHITE, being duly sworn, deposes and says: The information contained in this report is the result of complete and carefully conducted tests and is to the best of his knowledge true and correct in all respects.

*Robert L. White*

SUBSCRIBED and sworn to before me this 18th day of February, 2005

*David H. Hudgins*



**David H. Hudgins**  
Commission # DD 010632  
Expires May 3, 2008  
Bonded Thru  
Atlantic Bonding Co., Inc.

Imanna shall have no liability for damages of any kind to person or property, including special or consequential damages resulting from Imanna's providing the service covered by the report.

IMANNA LABORATORY, Inc.  
TEST BY  
Alan Bell  
PROJ. MANAGER

1. TEST ARTICLE

Three stainless steel 10-inch pull-up cleats were received from Accon Marine in Clearwater, Florida for test.

2. MODEL NUMBER

Not Identified

3. REQUIREMENTS

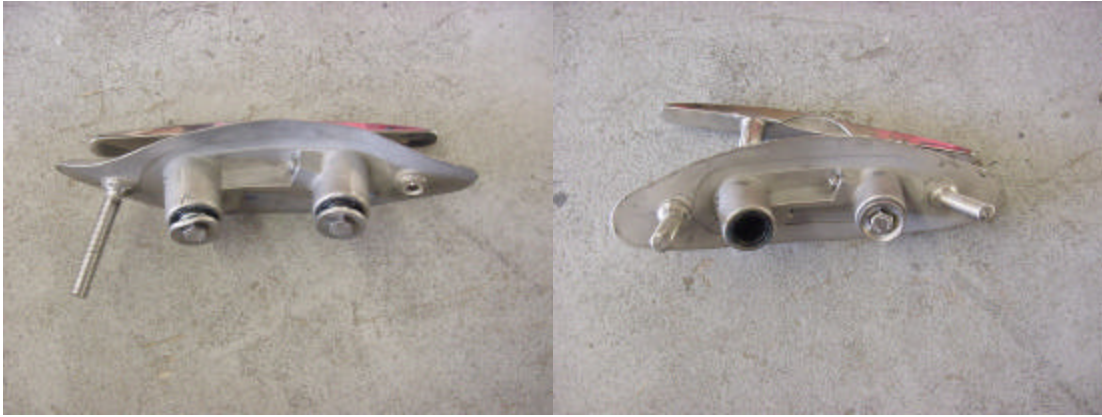
The requirements for this effort are to perform mechanical strength tests on the received samples to failure.

4. PROCEDURES

Each cleat was mounted to a 1" thick steel plate in the manner it would be mounted on a boat. The cleats were then subjected to an increasing side load to determine the point of significant bending and/or ultimate load capability (whichever occurs first) in the direction of pull.

5. RESULTS

SAMPLE	MAX LOAD (lbs)	FAILURE MODE
1	29,430	1 mounting bolt sheered off of cleat body
2	33,360	cleat pulled from cleat body
3	30,580	both mounting bolt sheered off of cleat body
AVERAGE	31,123	see photos



6. OBSERVATIONS AND COMMENTS

The results presented herein apply only to the test article as prepared and as tested. All equipment used in the performance of these tests was calibrated to standards traceable to the N.I.S.T.