

**REMINGTON ARMS COMPANY, INC.**

INTER-DEPARTMENTAL CORRESPONDENCE



cc: J.P. Linde  
J.W. Brooks  
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Lab File

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY" \_\_\_\_\_

February 1, 1979

TO: C. B. WORKMAN  
FROM: A.A. HUGICK  
SUBJECT: M/700 BDL LONG ACTION STOCK  
- REINFORCEMENT STRENGTH -

REMINGTON ARMS CO.  
RECEIVED

FEB 2 1979

ILION RESEARCH DIVISION

Work Order C1803

INTRODUCTION:

Three samples of M/700 BDL long action stocks with 3/16 inch o.d. through maple dowels with resorcinol glue reinforcement at the current brass screw reinforcement pin location were received for stock cracking strength determination. Also the pressed long stock M/700 with current brass pin reinforcement were also received for stock cracking strength determination. The ADL wood section was removed for BDL stock test apparatus.

TEST OBJECTIVE:

1. Determine stock cracking strength performance of wooden dowel and pressed long stock test samples.

TEST CONCLUSION:

1. The design test sample BDL M/700 long action stock strength was greater than current product samples with brass reinforcement screw samples.

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TEST CONCLUSION - (Cont'd)

2. The press long stock samples were comparable to current production sanded samples.
3. The data supplied in August 17, 1978, report does not agree with current test data, due to 9/78 equipment calibration errors.  
Note: Attached graph. (Approx. 1.8x)
4. Most of current production brass reinforcement screw stock failures were at end of screw which appeared to be lacking in depth of penetration on right side of stock.
5. X-ray of Winchester XTR 70 Stock by F.E. Martin indicated a steel reinforcement unit between wooden end plugs.
6. More resorcinol glue is needed to fill dowel grooves.

FUTURE WORK:

1. Test fire sample stock with wooden dowel and resorcinol glue for firing endurance strength.

RECOMMENDATIONS:

1. Combine feasibility of wooden dowel reinforcement with pressed long stock process when dowel is inserted in inletted stock blank.

*A.A. Hugick*  
AAH:js  
Measurement/Test Lab  
Ilion Research Division  
Attached