

UNITED STATES ARMY  
MARKSMANSHIP UNIT

**M-14 RIFLE ACCURIZATION**

(ALSO APPLICABLE TO M1A RIFLES)

*GUIDE TO NATIONAL MATCH ACCURIZING  
AS PERFORMED BY U.S. ARMY  
SHOOTING TEAM GUNSMITHS*



ACCURIZED NATIONAL MATCH  
M-14 RIFLE "M-14 (MTU-NM)"

## FOREWORD

Because of the many requests for technical information on accurizing the M-14 Rifle from individual rifle accuracy specialists and organizations within and outside the military services, the United States Army Marksmanship Unit offers this brief coverage of the procedures we believe necessary to achieve greater accuracy with this weapon.

Constructive comments are invited. Please address your correspondence to: Commander, United States Army Marksmanship Unit, Fort Benning, Georgia 31905.



**STANLEY J. ARMENTIER**  
Colonel, Infantry  
Commanding

**THE UNITED STATES ARMY MARKSMANSHIP TRAINING UNIT**  
**STANDARDS AND PROCEDURES**  
**FOR**  
**REBUILD OF RIFLE 7.62 MM M-14 NATIONAL MATCH**  
**TO MEET**  
**USA - MTU SPECIFICATIONS**

**1. COVERAGE**

1.1 The requirements for accuracy and stability of a rifle used at this level are much more refined than that used by the average soldier. The following rebuild specifications, testing procedures and grouping characteristics must be demanded for each individual rifle.

**2. REQUIREMENTS**

2.1 The procedures or characteristics specified here are in addition to those of Army Weapons Command for the National Match Rifle and supercede them when requirements are more specific or exacting.

**3. TESTING**

3.1 The rifle will be held in a recoiling type test cradle and must be tested in a completely assembled condition.

3.2 Test ammunition shall be cal 7.62 mm NATO M-118 Match.

3.3 Average extreme spread for three consecutive ten shot groups shall not exceed six (6) inches at a range of 300 meters.

(The above criteria is based upon ammunition with an extreme spread capability of 3.5 inches at 300 M). If the ammunition shows an extreme spread larger than 3.5 inch, the weapon will be allowed 2.5 inch greater than the capability of the ammunition.

#### 4. SPECIFICATIONS

4.1 Barrel. Must meet NM specifications with these additional requirements:

4.1.1 Bore diameter shall be 0.3004 plus or minus 0.0002, but shall not have over 0.0001 variation in any one specific barrel and in no case be larger at the muzzle end than at the breech.

4.1.2 Groove diameter shall be 0.3083 plus or minus 0.0002, but shall not have over 0.0001 variation in any one specific barrel and in no case be larger at the muzzle end than at the breech.

4.1.3 Shall be knurled on the exterior in that area designated to position the operating rod guide. Knurling to be straight in configuration and to increase the diameter at this point to 0.808 plus or minus 0.0002. Knurling will be done in such a manner as to alleviate any possibility of an internal constriction in the barrel. The purpose of this knurl is to provide a tight, non-rotating fit for the operating rod guide when in its assembled position on the barrel. See illustration "A".

4.1.4 Headspace will be held to the following dimensions:

"GO" gage..... 1.631"  
"NO-GO" gage..... 1.635"