

MASTER SMITH APPLICANT

# **ABS Master Bladesmith Performance Test**

#### I. ELIGIBILITY

- A. An applicant must be a member in good standing with the ABS, with all dues currently paid in full, to submit for Master Smith testing and judging.
- B. A Journeyman Bladesmith member may take the Master performance test with a recognized ABS Master Smith following one (1) year from the date they received the Journeyman rating by the ABS. However, an applicant is not eligible to apply for Master Bladesmith judging and rating, before a recognized judging panel, until he/she has held a Journeyman Bladesmith membership in the ABS for two (2) continuous, and uninterrupted, years from the date they received their Journeyman certificate from the ABS.

## II. PERFORMANCE TEST CONDITIONS

- A. The test must be observed and administered by an ABS Master Smith, with a current membership in good standing with the ABS.
- B. The applicant must make prior arrangements with the Master Smith whom he/she selected to supervise the performance test.
- C. The test may be conducted at the shop of the Master Smith or at any official ABS function where the facilities lend themselves to the safe and responsible conduct of the testing procedure (hammer-ins, etc.).
  - 1. Exceptional circumstances may occasionally exist wherein this is not possible, thus exceptions to this rule may be granted by the Chairman of the American Bladesmith Society; however, this approval may only be granted after conferring with the testing Master Smith **prior to** the proposed test date.
- D. Either the supervising Master Smith or the applicant may request that one or more witnesses be present during any or all testing procedures. This condition must meet with the approval of the Master Smith supervising the performance test.

- E. Blades, or any component of a completed knife, made in any instructional class will <u>not</u> be eligible to be used for performance tests or presented to the ABS Judging Panel for fit and finish examination for the rating of Journeyman Smith or Mastersmith.
- F. Reasonable and appropriate safety precautions must be followed. The applicant assumes responsibility for any injury incurred while performing the test.
- G. The applicant must have personally forged and performed all work on the test blade, with no other person physically assisting in its construction or heat-treatment.
- H. Once the test begins, no work, not even light stropping, may be done to the test blade.
- I. The applicant alone must conduct the test of the blade's performance under the supervision of the Master Smith who shall serve as the official ABS witness. No other person is to conduct any portion of the test, including the supervising Master Smith, except for the rope cutting test as specifically provided for in item 9 under "V. Testing Procedure, B. Rope Cutting" below.
  - 1. A special exception may be obtained for an applicant who has a disability that requires accommodation in order to perform the test. Such exception must have prior written approval from the Chairman of the ABS.
  - The applicant must supply all items and materials needed for the performance test, including:
  - 1. The ABS Performance Test Certification Form.
  - 2. All safety equipment including safety glasses, heavy shop apron, gloves, etc.
  - 3. A sufficient length of one (1) inch minimum diameter sisal or manila rope. If the applicant brings a larger rope, the applicant will be judged using the same criteria as though the rope was one (1) inch in diameter.
  - 4. A four (4) foot or longer length of 2x4 construction grade pine wood stud of the applicant's choice.
  - 5. The applicant's test knife.
  - 6. While not a part of the formal test, the applicant is <u>strongly</u> encouraged to bring several finished knives for the Master Smith to inspect for quality of workmanship, fit, finish, design, etc. The feedback from the Master Smith is intended to help the applicant better evaluate if the quality of his/her work (design, detail, finish, etc.) is likely to meet the criteria of the ABS Judging Panel.

#### **III. TEST KNIFE SPECIFICATIONS**

- A. Test knife dimensions:
  - 1. Overall Length of Knife (handle and blade combined): Maximum fifteen (15) inches (38.1 cm).
  - 2. Blade Width: Maximum two (2) inches (5.08 cm).
  - 3. Blade Length: Maximum ten (10) inches (25.4 cm) from point to the beginning of either the guard, bolster, or handle of the blade.
- B. Blade:
  - 1. Only forged blades may be tested.
  - 2. In order to adhere to blade length requirements, integral knives forged from round bar stock are not to be used for performance test blades.
  - 3. The Master Smith performance test must be performed with a forged blade that has a minimum of 300 layers of pattern-welded Damascus steel and was made by the applicant.
  - 4. The Master Smith test knife must be forged with a "stick" or hidden tang handle. A full tang is not acceptable as a test knife for Master Bladesmith.
  - 5. The test blade should be lightly etched so that the master may view the layer count.
  - Handle:
    - 1. Any handle configuration is acceptable with or without guard, bolsters, ferrule, etc. However, the test blade for the Master Bladesmith performance test <u>must be of a</u> <u>"stick tang" or hidden tang design.</u>
    - 2. Handle material is irrelevant and solely the choice of the applicant.
- D. Overall Design and Finish:
  - 1. No special handle or finish is required. This is a test of performance, and the test knife will ultimately be destroyed during the testing process. However, the condition of the knife should be such that no damage or flaws are present prior to the test that could lead to confusion concerning damage occurring during the test. For example, chips or rolls present on the knife edge before the test may disqualify the knife for testing.
  - 2. A test knife may be rejected for testing if the Master Smith deems any aspect of its construction to be unsafe. This does not count as a failure to pass the test and the applicant my proceed with the test if the issue can be corrected to the satisfaction of the supervising Master Smith.

#### **IV. SUPPLIMENTAL TESTS**

- A. The applicant may be required at the Master Smith's discretion to:
  - 1. Forge a non-Damascus blade of any style.
  - 2. Pass a verbal quiz regarding any aspect of blade forging.
  - 3. Forge-weld a billet of pattern-welded Damascus.

#### V. TESTING PROCEDURE

- A. The Performance Test must be conducted in the following sequence:
  - 1. Rope Cutting
  - 2. Wood Chopping
  - 3. Shaving Hair
  - 4. Bending
- B. ROPE CUTTING (The purpose of this test is to test the blades edge geometry and sharpness.)
  - 1. The rope is to be hung in a safe manner, so that the end of the rope to be cut hangs loose without touching the floor or any other object.
  - 2. As a safety precaution, the rope is <u>not</u> to be hand held by another person during the rope-cutting test.
  - 3. The hanging end of the rope is to be marked with tape or a marker to clearly indicate the area that is to be cut.
  - 4. The cut must be approximately six (6) inches from the end of the free hanging rope.
  - 5. A minimum of one (1) cut must be made.
  - 6. The applicant is to aim at the mark with a two (2) inch margin of high or low being acceptable.
  - 7. The applicant must sever the rope completely in two with one stroke.
  - 8. If the applicant fails on the first attempt, the Master Smith will allow two more attempts.
  - 9. If the Master Smith believes that the failure to sever the rope is due to the lack of skill or strength of the applicant, the Master Smith may attempt the rope cutting with the test knife. This is a test of the applicant's ability to make a knife, not to cut with it.
  - 10. If neither the applicant nor the Master Smith successfully cuts the rope, the applicant fails.

- C. WOOD CHOPPING (The purpose of this test is to demonstrate edge durability and toughness.)
  - 1. The chopping test is to be conducted with 2x4 construction grade pine wood stud.
  - 2. The 2x4 may be either hand held or clamped into a vise or other safe device.
  - 3. A chopping motion (no whittling) is to be used to cut the 2x4.
  - 4. The 2x4 must be chopped completely through a minimum of two (2) times.
  - 5. The applicant may choose the area of the 2x4 through which to chop.
  - 6. Following the chopping test, the Master Smith will inspect the edge to determine if there is any noticeable damage to the blade.
  - 7. Any nicks, chips, flat spots, rolled edges, or other deformations, or bending overall, of the blade will result in failing the test.
- D. SHAVING HAIR (The purpose of this test is to demonstrate edge retention.)
  - 1. After the Master Smith approves the quality of the edge, the blade will be returned to the applicant.
  - 2. The applicant must then shave hair using the section of the blade that was most frequently used in the cutting and chopping portions of the test.
  - 3. Enough hair must be shaved to demonstrate that the edge remains keen and shaving sharp.
- E. BENDING (The purpose of this test is to show that the applicant possesses the heat treatment skills and control to produce zones with different properties within a single blade.)
  - 1. The bending of the blade is the final test.
  - 2. Safety gear should be worn.
  - 3. At the discretion of the applicant or the Master Smith, the edge may be dulled prior to bending.
  - 4. The Master Smith will mark a line across the width of the blade approximately three (3) inches from the tip of the blade.
  - 5. The blade will then be inserted into a vise, tip first, such that the blade is placed into the vise up to the mark on the blade.
  - 6. If the vise jaws are rough, smooth metal or similar inserts may be located on each side of the clamped portion of the blade to protect the blade, when bending the test knife.
  - 7. The blade shall be bent by force applied to the handle.
  - 8. A leverage device, such as a pipe which surrounds the handle to contain it, may be used as long as it does not pose a safety risk. The use of such a device is at the sole risk of the applicant and at the discretion of the supervising Master Smith.

- 9. The applicant will then bend the blade ninety (90) degrees.
- 10. Only those portions of the blade that have a hardened cutting edge are to be considered in the (90) degrees; heavy bending in an un-heat treated ricasso is not applicable. If the hidden "stick" tang bends in the test, the applicant fails.
- 11. The supervising Master Smith will signal the applicant when the ninety (90) degree angle has been reached.
- 12. The blade is allowed to crack at the edge on bending but not beyond approximately one third (1/3rd) the width of the blade leaving two thirds (2/3rds) of the blade intact. However, if any part of the blade chips or any part of the blade or tang breaks off, the applicant fails. Because of the many variables in the size, geometry, and temper line of the blade, the Master Smith using his/her judgment, shall determine if the extent or location of the fracture line is acceptable.
- 13. <u>The decision of the Master Smith is final.</u>

### VI. PROCEDURES FOLLOWING PERFORMANCE TEST

A. Procedure if the applicant fails the Performance Test

- 1. The supervising Master Smith is responsible for notifying the ABS office of the pass or fail status of the performance test.
- 2. The Master Smith is encouraged to assist the applicant who has failed the performance test to gain the necessary skills or knowledge needed to satisfactorily meet the performance test criteria on his or her next testing.
- 3. If the applicant does not pass the performance test, he/she may not present knives for judging by an official ABS Panel until they pass the performance test.
- 4. The applicant is not permitted to retake the performance test until six (6) months have elapsed from the date of the failed performance test.
- 5. After six (6) months, the applicant may retest with the same Master Smith or any other Master Smith chosen by the applicant.
- B. Procedure if the Applicant satisfactorily passes the Performance test:
  - 1. The supervising Master Smith is responsible for notifying the ABS office of the pass or fail status of the performance test.
  - 2. The supervising Master Smith will sign and date the applicant's ABS Performance Test Certification Form and notify the ABS Office of the results. The applicant should retain possession of the original signed form for presentation at judging, while providing copies to the testing Master Smith or ABS office.
  - 3. No modification of any sort is to be made to the test blade following the completion of the test.

- 4. An applicant has three (3) years from the date of the performance test to present his or her test blade, Performance Test Certification Form, and five (5) completed knives to an official ABS Judging Panel. If the applicant does not complete both phases of the test within a three (3) year time period of the date on the Certification form, the applicant must reapply and complete the performance testing process again.
- C. Upon successful completion of the performance test, the Master Smith applicant has completed the first step in applying for a Master Bladesmith rating and is now eligible to submit five (5) knives to be judged by an official ABS judging panel to be assessed for standards in finished knives. Only upon successful completion of judging for fit and finish by an official ABS judging panel is an applicant eligible to receive an ABS Master Smith Rating.



#### History of Revisions to JS and MS Testing Rules

ABS Journeyman Performance Test, III. Test Knife Specifications, B., 2. In order to adhere to blade length requirements, integral knives forged from round bar stock are not to be used for performance test blades. ABS Master Smith Performance Test, III. Test Knife Specifications, B., 2. In order to adhere to blade length requirements, integral knives forged from round bar stock are not to be used for performance test blades. ABS Journeyman Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, G. No more than two (2) knives among the five (5) submitted may be of integral design forged from round bar stock. ABS Master Smith Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, G. No more than two (2) knives among the five (5) submitted may be of integral design forged from round bar stock. ABS Master Smith Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, G. No more than two (2) knives among the five (5) submitted may be of integral design forged from round bar stock. ABS Master Smith Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, G. No more than two (2) knives among the five (5) submitted may be of integral design forged from round bar stock. -ABS Board of Directors, Steve Dunn, Chairman, June, 1, 2023

ABS Journeyman Judging for Quality of Finished Knives, V. Procedures Following Judging of Finished Knives, A. Procedure if the applicant is failed by the judging panel. 2. "The Journeyman Smith applicant may present knives to the ABS Judging in an effort to achieve the rating of Journeyman Smith a total of three times before being ruled ineligible for further testing. Only three attempts may be made; however, the ABS Chairman may, at his discretion permit the applicant to make <u>one</u> additional attempt under one of two conditions: (1) if the applicant presents proof of graduation from an ABS Introduction to Bladesmithing course after the date of the third failure; or (2) if the applicant presents sufficient proof that he/she has sought out and received substantial additional training under the tutelage of a current ABS Master Smith since his/her third failure. This permission, if granted, will only guarantee the applicant an opportunity to undergo judging of his or her knives, provided that all other requirements are met. It is in no way a guarantee that this opportunity will result in the applicant achieving a passing grade from the judges. A fourth failure is final, and no further attempts will be allowed. - ABS Master Smith Judging for Quality of Finished Knives, III, Specifications of Knives to Be Judged, J. Folding Knives Rules - added. ABS Board of Directors, Steve Dunn, Chairman, November 4, 2019

**ABS Journeyman Judging for Quality of Finished Knives, I. Eligibility, E.** Update of the Performance Test Certification forms for both MS and JS, to a two-page form. A copy of the Performance Test Certification Form must be on file with the ABS office before you can be proven eligible to present knives for judging.

ABS Journeyman Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, C. Blades, or any component of a knife, made in any instructional class will not be eligible to be used for performance tests or presented to the ABS Judging Panel for fit and finish examination for the rating of Journeyman or Master Bladesmith. -ABS Board of Directors, Harvey Dean, Chairman, December 8, 2015

**ABS Journeyman Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, D.** A minimum of two (2) knives among the five (5) submitted must have at least 6-inch (15.24 cm) blades. ABS Journeyman Judging for Quality of Finished Knives, III. Specifications of Knives to Be Judged, F. All of the knives submitted must have guards or bolsters. -ABS Board of Directors, August 28, 2012

ABS Master Smith Judging for Quality of Finished Knives, III, Specifications of Knives to Be Judged, M. Specifications for the Master Dagger, 1. Blade Specifications, b.: "...with an intentional pattern, random pattern is not acceptable." - ABS Board of Directors, June 2009.

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