

AWWA Meter Challenge Rules & Regulations

INTRODUCTION

1. The Competition is a measure of an individual's skill at assembling a meter quickly, totally, and accurately. All parts will be assembled in a proper manner and the re-assembled meter shall be tested by the judges for the ability to meter water and for water leakage from the meter. Please view the equipment and materials section in order to see set-up modifications for the 2022-2023 competition season.
2. This is a test of skill for individuals. To facilitate a large number of competitors, groups of four (4) to six (6) persons may be placed together in a single round. The START will be simultaneous for all competitors in that round, but each competitor will be timed separately by an Official to record his/her raw time in assembling the meter.
3. Each individual competitor will be required to completely assemble a water meter commonly utilized by water utilities for residential customers. The event is timed with multiple competitors assembling the meters simultaneously.
4. Each competitor will be furnished with a bucket, or other suitable container containing the completely disassembled meter. In addition, the contents of the bucket will contain a random number of miscellaneous extra parts, related or unrelated, metallic or non-metallic. This will ensure that the competitor must be thoroughly familiar with all parts of the meter he/she is assembling. All competitors shall receive exactly the same number and type of extraneous parts for their turn.
5. A time period of no more than five (5) minutes shall be allowed for each competitor to complete his/her turn. TWO TURNS shall be allowed for each competitor with the faster of the two times being used for their Official Time.
6. Each individual competitor shall be ready to compete and at his/her assigned station ten (10) minutes prior to their assigned time. Competitors absent from their stations at their scheduled time shall be assigned a new starting time or forfeit their turns at the decision of the Head Official.
7. The AWWA Meter Challenge Competition will last for one day of the conference. The contest location will be announced to all competitors entered in the competition each year before the beginning of the Annual Conference.

DISCLAIMER

8. AWWA specifically does not endorse products manufactured by sponsors and takes no position concerning the adequacy of such products or their compliance with any AWWA Standard.
9. Each competitor will be required to complete the proper waiver and registration documentation prior to competing in any event. **Verification of eligibility will be required at the time of registration.**
10. This competition is officiated by competent officials who are striving for fairness in their judgment for the events so that all competitors are judged as equally as possible. Fair and equal treatment for each competitor is the goal of this competition. There is no intention to provide anyone with an advantage. This competition is for the fun and enjoyment of the participants and spectators.
11. In order to be eligible, Sections must verify that each person is authorized to compete. Details regarding eligibility are noted in the next section.
12. AWWA Meter Challenge competitors who have participated as a competitor or coach are eligible to join the AWWA Meter Challenge Subcommittee. Current competitors and coaches are ineligible to serve on the AWWA Meter Challenge Subcommittee. This is to eliminate any perceived conflicts of interest.

ELIGIBILITY & MEMBERSHIP

13. The AWWA Meter Challenge Competition is an individual competition. Each qualified competitor is solely responsible for his/her performance.
14. AWWA Meter Challenge is an individual competition. While a competitor may have a coach, the coach will not be permitted in the AWWA Meter Challenge competition booth.
15. Only competitors may register for this competition. Coaches are not permitted to register for this competition at ACE as this is an individual event.
16. Each AWWA Section, including Multi-State/Provincial Sections, may enter up to two (2) representatives to the AWWA ACE Preliminary Meter Challenge Competition. The Section with the returning champion is permitted to send one (1) additional competitor (up to a total of three (3)). The ACE Local Host Section is permitted to send one additional competitor (up to a total of three (3)).

17. Each AWWA Meter Challenge competitor must be a current AWWA member from the time of registration through the ACE event. This membership may be an individual membership, or the competitor can be a regular employee of an AWWA Utility Member or Service Provider Member. Each Section is responsible for verifying the membership status of each competitor before entering them into the competition.
18. Only AWWA Section competitors that have qualified by competing in a Section AWWA Meter Challenge competition are allowed to enter the AWWA Meter Challenge Competition. If there are not enough competitors for a Section to hold a AWWA Meter Challenge competition at the Section level, a competitor may enter the AWWA Meter Challenge Competition with approval from the Section that they are representing.

REGISTRATION

19. To enter, follow the instructions on the AWWA Meter Challenge web page. **No registration is available onsite. To allow proper determination of the number of rounds required, AWWA must be informed by the Sections before May 1 of any anticipated late team registrations each year.** Each competitor must attend a Mandatory Competitor's Meeting prior to the start of the competition. Among other things, the timing and order of competition will be determined at this meeting.
20. Each competitor will receive a complimentary **ACE Exhibits Only Registration**. Each competitor is allowed one (1) complimentary **Spouse/Guest Registration** granting access to the Exhibit Hall during official Exhibit Hall hours.
21. Each competitor and coach must register themselves and sign their own waiver. Competitors are allowed to provide a nickname for themselves if desired.
22. Each competitor must make their own travel and lodging arrangements. AWWA will not make travel or lodging arrangements for any team. AWWA does not reimburse travel expenses (airfare, lodging, food) for any team. Please check with your Section on travel reimbursements.

HOW YOU WIN

23. Prior to the pre-designated start time, each competitor will assume a starting posture of their choice. The Head Official will count down to "GO" to initiate the AWWA Meter Challenge event. EACH COMPETITOR ASSEMBLES HIS/HER WATER METER AND THEN RAISES HIS/HER HAND TO SIGNIFY HE/SHE IS FINISHED WITH THEIR TURN. All other competitors in that round must continue their turns to complete the assembly of the meter to have a qualifying time of record.
24. The OFFICIAL TIME for the competitors' turns will be the raw time to assemble the meter plus any penalty seconds the Judges deem necessary after testing the meter.
25. Three (3) Official Timers will time each contestant during each heat, and the middle time of the three (3) will be the official raw time.
26. The winner will be determined by the best OFFICIAL TIME as determined by a "head to head" heat following two (2) preliminary rounds and one (1) semi-final round. The fastest four OFFICIAL TIMES from the first two preliminary rounds will be eligible to compete in the semi-finals. The two fastest OFFICIAL TIMES from the semi-final round will be eligible to compete for the championship. The fastest OFFICIAL TIME in the championship round will determine the AWWA Meter Challenge champion.

WHAT WINNING TEAM RECEIVES

27. The AWWA Meter Challenge champion is automatically eligible for the next year's AWWA Meter Challenge Competition as a special entry and is not counted as the Section entry.
28. The Championship Competitor will:
 - i. Be presented with a team trophy to keep at the close of the competition.
 - ii. May be featured in AWWA publications and will be listed in the AWWA Meter Challenge Hall of Fame on the AWWA website.
 - iii. Be reimbursed for expenses outlined by the official AWWA Returning Champion Guidelines, to return for the next AWWA Meter Challenge Competition at ACE the following year. (In general, expense reimbursement covers transportation costs to and from the convention site, hotel, and meals).
29. The Second, Third, and Fourth-place competitors will:
 - i. Be presented with a trophy to keep at the close of the AWWA Meter Challenge Competition.
 - ii. May be featured in AWWA publications.

COMPETITION

30. There is no such thing as a faulty meter. All meters were received in good working order prior to the AWWA Meter Challenge competition. THE METER MUST REGISTER WHEN TESTED OR A PENALTY WILL BE INCURRED as described in Penalties 45.

31. All meters utilized in the AWWA Meter Challenge competition are new or nearly new and in perfect working condition prior to disassembly.
 - i. Any tools, equipment, and other supplies provided for this competition that are broken will be considered to be broken by neglect of the individual and will not be replaced during their turn.
32. The location and the size of the space for the AWWA Meter Challenge competition will be determined at the discretion of AWWA and dependent on the layout of the facility. The work area for the AWWA Meter Challenge Competition shall be large enough to accommodate all competitors and judges and their equipment. Equal space must be provided for each individual. Every effort must be made to provide equal work opportunities for all competitors. A minimum of 10' clear areas in all directions around the tables shall be provided to allow the officials to roam freely in officiating with competitors. This clear area will also help to provide a safety area between the spectators and the competitors to protect from any tools or materials that may accidentally slip from someone's grasp.

In the case of multiple competitors competing at the same time, all work shall be conducted on a suitable size table to provide each of the competitors adequate room to move about freely to assemble their meters without crowding. It is preferred, but not required, to have some type of partition between competitors to secure their individual work.

33. Meters will be totally disassembled with the exception of the sealed magnetic drive assemblies and the registers. All the meters used by every competitor will be identical.
34. No competitor will be allowed to examine the contents of the bucket prior to the start of the contest. A meter fully assembled may be examined by each competitor if he/she chooses. Each bucket shall always contain the total parts required for the complete assembly of the meter.
35. The competitor shall be positioned immediately in front of the bucket of parts on the table at the instruction of the head official just prior to the start of the event. All necessary tools will be pre-positioned on the table alongside the bucket prior to the start. No meter parts may be handled by the competitors prior to the start of the event, but they will be allowed to position the tools where they want. Both hands must be empty and not touching any tool, bucket or competition table just prior to the start of the event.

EXTRA METER PARTS - The total contents of extra parts shall be exactly the same for each individual but shall consist of a random number of miscellaneous extra parts. These parts may be related or unrelated to the meter utilized in the competition and may be metallic or non-metallic. The intent is to require the competitor to thoroughly know the total parts required to reassemble the meter utilized in this competition.

EQUIPMENT & MATERIALS

36. All equipment is to be provided by a predetermined in-kind sponsor or AWWA. For the 2023 competition, the register should be assembled by contest administrators and left outside of the bucket along with the housing and bottom plate.
37. Meters shall be of the type complying with AWWA C700, C-710, and C-708, "Cold-Water Meters – Multi-jet Type, Bronze Main Case." The size shall be 5/ 8" x 3/ 4". Each year the meter manufacturer and model may vary and will be announced in adequate time prior to the competition.
38. Tools provided include:
 - i. 1 - 1/2" Box End Wrench
 - ii. 1 - Flat-Head Screwdriver - 4" x 3/16"
 - iii. 1 - Special Tool (IF REQUIRED BY CERTAIN METERS)

JUDGING

39. The officiating and supervision of each event shall be the responsibility of the head official who shall have extensive experience in water meter maintenance and total familiarity with the type and manufacturer of the meters to be used in the competition.
40. The number of competitors for each round shall be limited to the space available for the competitors to perform adequately or to the number of officials available for each round.
41. The officials shall be responsible for timing the events with the head official being the one to announce the START and STOP of the event. Each competitor's time as recorded by the official, plus any penalties accrued, shall be used to determine the official time for each contestant. The head official shall be in charge of the competition and after consulting with the other officials of any infraction of the rules shall make the ruling as required by the circumstances for any penalties to be assessed.
42. The head official shall see that all tools, materials, and competitors are in the required positions prior to starting the event. He/She shall also ensure the work area is free from any obstructions or spectators.

43. The officials shall watch for safety violations during the actual events and assess appropriate penalty times as required. During the time of the event not taken up by the actual competition, the officials shall see that all preparations for the event are accomplished in a safe manne.
44. No timing official will be assigned to a contestant who works for the same organization.

SAFETY & CONDUCT

45. Standard water utility safety practices will be observed at all times during the competition. Any flagrant violations will be penalized by the addition of time to the competitor's raw time as described in Procedural Violations.
46. Unsportsmanlike behavior will not be tolerated and could result in individuals or teams being disqualified from the competition. Judges, competitors, and/or volunteers may not use, possess, or be under the influence of alcohol and/or illegal substances whilst performing duties related to the competition. Violations of this will be determined at the discretion AWWA Staff and the AWWA Meter Challenge Subcommittee Chair.
47. Competitors will not be allowed to participate if they are wearing articles of clothing or using equipment plainly displaying offensive language, slogans, or graphics.
48. Safety equipment will be required to be provided by each competitor. Competitors without proper personal protective equipment as described below will not be allowed to compete until they have obtained the proper personal equipment in a reasonable amount of time during the competition. The safety equipment required of each competitor shall be:
- i. Foot Protection shall be required to be worn by both team members (men and women) and shall conform to the **ASTM F243-17 - Standard Specification for Performance Requirements for Protective (Safety) Toe Cap Footwear** (incorporates ANSI Z41.1 by reference). Sneakers and dress shoes that meet this standard are also allowed.
49. Children under the age of 16 entering the Exhibit Hall during show hours need to be accompanied by a parent or guardian at all times. No one under the age of 16 is allowed in the Exhibit Hall area during move-in, move-out, or non-show hours. A parent or guardian assumes all risks and responsibility for the safety of his or her child. Anyone 12 years or older will require a badge to enter the Exhibit Hall.
50. All elements of the competition must remain within the confines of the designated area, and at a noise level not offensive to nearby exhibitors. Speakers and other sound devices should be positioned so as to direct sound into the competition space rather than into the aisle. Sound and noise may not exceed 90 decibels, management of volume levels will be the responsibility of AWWA staff. The announcer must terminate any form of attention-getting device or presentation when crowds jam aisles or infringe upon other exhibitors' areas.

PENALTIES

51. Various penalties will be assessed by the head official for any infraction of the rules as described herein or for any flagrant violation of normal safety practices.
52. The penalties will be in the form of a predetermined number of seconds added to the total time of the team's event time which will then be the OFFICIAL TIME of that event.
53. In the event of any disagreement with a penalty decision, the head official's decision is final.
54. There will be NO INSTANT REPLAY allowed for reversing any decision after the head official has made a final determination of any infraction in these rules.
55. Penalties shall be:
- i. Safety violation such as throwing of tools, PPE penalty, etc. (+10 seconds each)
 - ii. Procedural violation by any competitor. This is a general penalty for actions of the competitor that may not specifically be covered in these rules but are of sufficient gravity to the Judges as to warrant a penalty. (+10 second penalty)
 - iii. Leaking connection, barely oozing water and just discernable to the judges (+4 seconds each)
 - iv. Slow, obviously dripping connection (+6 seconds each)
 - v. Squirting, continuous leaking connection (+8 seconds each)
 - vi. Meter not properly put together and apart too loose (other than the bottom plate bolts described under Penalties h.) or falls off (+10 seconds each)
 - vii. Meter fails to register flow through the meter when tested (+10 seconds)
 - viii. Bottom plate bolts can be loosened without a tool (+10 seconds each)
 - ix. Violation of touching the bucket early (+10 second penalty)
 - x. Violation of touching anything on the competition table AFTER hands have gone up. (+10 second penalty)

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