Bennett Mechanical Comprehension Test® II
Frequently Asked Questions

The Bennett Mechanical Comprehension® Test II (BMCT–II) launched in September 2014, with new norms added in June 2018. This document provides answers to the most frequently asked questions about its features and administration.

About BMCT–II Features

**What are the most important features in the BMCT–II?**
- BMCT–II contains 55 items that are randomly generated from a bank of 300 items.
- Reducing the number of items from 68 to 55 shortened administration time by 5 minutes, compared to BMCT-I*.
- BMCT–II includes color artwork with more contemporary items.
- BMCT–II is suitable for supervised or unsupervised testing scenarios. The development of a bank of items ensures that no two applicants receive the exact same set of questions, protecting the integrity and difficulty level of the test.
- BMCT–II is now available in US English, French, French Canadian, Dutch, Castilian Spanish, and US Spanish.

**What norms are available for BMCT–II?**
- Engineers (2018)
- Energy and Utilities (2018)
- General Labor (2018)
- Industrial/Technical Sales (2018)
- Installation/Maintenance/Repair (2018)
- Machine Operators/Machinists (2018)
- Manufacturing and Production (2018)
- Mechanics (2018)
- Skilled Trades (2018)
- Vocational/Technical Students (2018)
- Engineers (2014)
- General Labor (2014)
- Industrial/Technical Sales (2014)
- Installation/Maintenance/Repair (2014)
- Machine Operators/Machinists (2014)
- Mechanics (2014)
- Skilled Trades (2014)
- Vocational/Technical Students (2014)
- A custom norm group for your company can be developed by TalentLens. Contact us for details.

**Can clients use their own BMCT–I norms for the new BMCT–II?**
Due to the different way of calculating scores, the BMCT–I raw scores do not equate to the BMCT–II raw scores.

**What process did Pearson use to create the BMCT–II norms?**
The original normative data were collected from 2012 through 2014 via online administration; in 2018 norms were updated using data collected from 2014 through 2018. The norm groups are based on a diverse and balanced distribution of the industries and occupations in which the BMCT is most frequently used.

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* BMCT–I collectively refers to previous forms of the Bennett Mechanical Comprehension Test including Form S, Form T, and Form S and T (Randomized)
FAQs: Bennett Mechanical Comprehension Test® (BMCT–II)

Score Interpretation

How do you ensure that the randomly generated tests presented to candidates are equivalent in terms of test difficulty and item content?
Each item is coded by difficulty on a finely incremented scale and assigned a difficulty level from ‘easy’ to ‘high’. Tests are generated with equivalent numbers of items in each difficulty category. Consistency in content is also achieved by coding items in terms of the content assessed (e.g., Electricity, Heat, Hydraulics) and specifying a set amount of each item type per test. The tests may differ slightly in difficulty overall, but this is taken into account by the online scoring system.

What scores are available on candidate profile reports?
Number Correct, T-score, STANINE score, and STEN score are all reported in the Additional Technical Information section of the candidate’s profile report. Item-banked tests produce a theta score that takes into account the difficulty level of each item, therefore number of correct responses (raw score) should not be used to make hiring decisions alone. Instead, use the percentile rank or a standardized score because these scores take into account the item-difficulty differences of the administrations. Candidate theta scores, also called ability scores, are available in the online account status/score report dashboard.

Why aren’t raw scores presented in the profile reports?
The raw score for BMCT–I was the total number of correct responses. As examinees completing the BMCT–II are presented with varying sets of items that differ slightly in difficulty, little can be inferred from traditional raw scores. The scoring system takes into account the exact difficulty level of the items each person has completed to calculate an estimate of ability—a theta score, which is converted to a percentile for interpretation purposes.

Does the BMCT–II revision affect the Occupational Solutions assessments that include mechanical test items?
No. The mechanical items delivered in the Industrial/Technical Sales, Maintenance, and Production Employee Occupational Solutions are not impacted by the revision.

How should I transition from using the original Bennett norms to the BMCT–II norms?
If you are already making hiring or promotion decisions using a norm group in the original Bennett product, continue using the original Bennett until there is an appropriate time to make the transition to the BMCT–II product. An appropriate time would be after you have made a hiring decision for a specific position and will be testing a new group of applicants for another position.

What if I have already determined cut scores based on the original Bennett scales?
You may continue to use the BMCT–I until you collect sufficient data with the BMCT–II to establish new cut scores. Do not use cut scores that you created for the original Bennett with the BMCT–II.

What research has been conducted with the new BMCT–II?
We have carried out construct validity, criterion validity, and parallel form reliability/equivalence studies between BMCT–I and BMCT–II which are described in the new User’s Manual.

What can be done if there is concern that an applicant has cheated on the unsupervised BMCT–II?
If you suspect that a candidate cheated on the assessment, you may retest the candidate in a supervised setting. The decision to retest a candidate is up to the customer.
BMCT–II Administration

Can I transfer assessment inventory from the BMCT–I to the BMCT–II?
BMCT–I test sessions that are unassigned or expired may be transferred to the BMCT–II. Please contact Customer Support at 888.298.6227 for more information.

What happened to BMCT–I assessments already completed, when the BMCT–II was released?
All BMCT–I assessments completed after September 2014 are still scored with the BMCT–I norms. Reports for these assessments will always reflect the percentile based on the original Bennett norm group. BMCT–I scores cannot be transferred to the BMCT–II to generate the new BMCT–II report. Bennett reports will be retained in your online account in accordance with local data protection laws.

Can a candidate’s BMCT–II results be re-scored using a different norm group?
Administrators are encouraged to select the most appropriate norm group when assigning a test to a candidate. Add-on score reports are available in your catalog to re-score the candidate in a different norm group.

Is the BMCT–I still available online?
Effective January 2017, BMCT–I is no longer available for purchase in the Pearson catalog.

Is a paper form of BMCT–II available?
A paper form is currently available for the BMCT–II for US English and US Spanish.

Can the BMCT–II be completed on a mobile phone?
We recommend that the BMCT–II be completed on a desktop or laptop computer with a dependable internet connection.

Can BMCT–II be linked from the Pearson test platform for administration via an API/ATS?
Yes, contact Customer Support at 888.298.6227 for more information.

2018 BMCT–II Norms Update

Why does Pearson update norms?
We update norms about every 5 years to support data quality and adhere to industry-wide and internal Pearson standards. Norms are most useful when they accurately reflect the population they represent and when they allow for closer analysis of various occupations or industries. The Standards for Educational and Psychological Testing recommend renorming an assessment with “sufficient frequency to permit continued accurate and appropriate score interpretation” (p. 104, AERA, APA, NCME, 2014).

How did BMCT–II change after the norm updates?
The items, format, and administration remained the same. Reporting was updated such that original norms (e.g. Skilled Trades) are labeled as Skilled Trades (2014) on reports for candidates testing after June 25, 2018. Candidate reports generated prior to the norms update continue to say Skilled Trades. Scoring was also updated, with candidate percentile scores reflecting the new, larger sample. The calculation of the candidate’s ability (theta) score remains the same.

When should I begin using 2018 norms?
If you are already making hiring decisions for a group of applicants, continue using the 2014 norms until there is an appropriate time to make the transition. For example, transition when you have already made a hiring decision for a specific position, and will be testing a new group of applicants for another open position. You may also wish to continue using 2014 norms if you have a mix of digital and paper testing or are using other language versions.
2018 Norms Update (Continued)

**Can I compare candidates who have scores based on the previous norms to those who have scores based on the new norms?**
Yes. For fair and accurate comparison, refer to a candidate's ability score in your administrator dashboard. Because ability scores are not impacted by norms, this will allow you to see how a candidate tested using 2018 norms compares to previous candidates tested with 2014 norms.

**Can earlier test results be converted to 2018 scoring?**
Yes. A look-up table based on the candidate's ability score and norm used is available to convert scores based on 2014 norms to 2018 scoring.

**What if I have already determined an appropriate cut-score based on 2014 norms?**
You may wish to continue using 2014 norms, or Pearson can provide the corresponding cut-score based on 2018 scoring.

**What if I have already collected local norms?**
Local norms are not impacted by Pearson norm updates, you may continue using the norms you developed.

**How will the norms update impact ATS integration?**
The 2018 Norms update will not impact your API. Customers who only integrate one norm, will continue using the 2014 norm unless they request to have maintenance performed on their API to change to 2018 scoring.

**How will the norms update impact my custom URL?**
Administrators should reset their norm group selection following the norms update. Custom URLs built after the 2018 norms were released (June) will not be impacted. For assistance setting or modifying a custom URL, contact Customer Service.

**What will happen to my assigned BMCT–II assessments when the new norms are available?**
Assigned, but not activated, assessments will be reclaimed into your inventory. If those candidates are still in the hiring process, administrators may reassign a new assessment to the candidate or student to complete. In-progress tests that have not been completed will be scored using the 2014 norm originally selected.