

ITESTHUB · ABILITY TEST REPORT

# Mechanical Comprehension Test

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A report for

**Sam Sample**

# Sam Sample

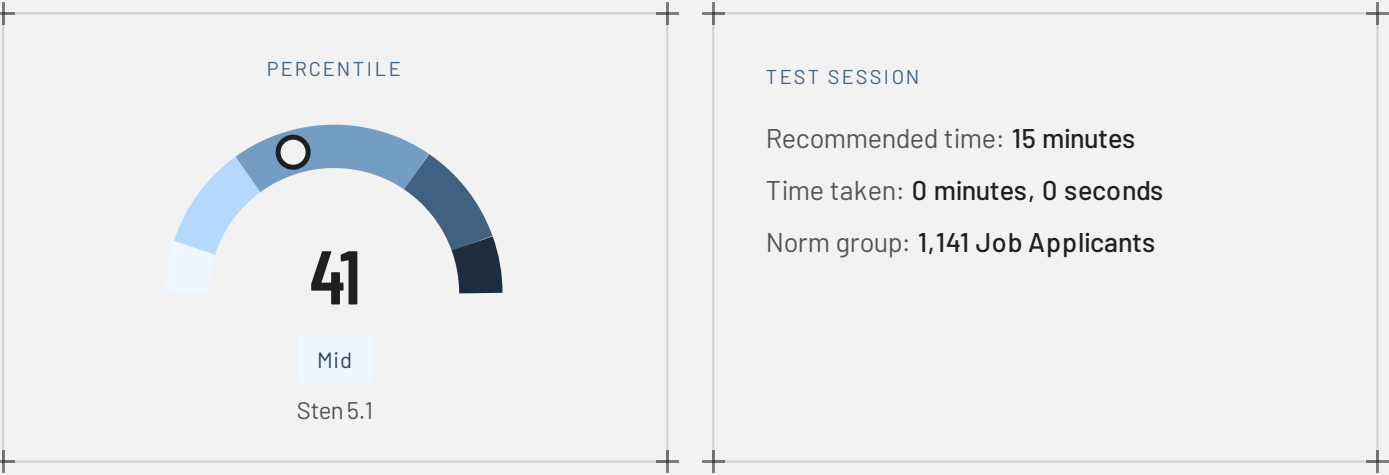
Completed 30/09/2026 · Norm group: 1,141 Job Applicants · Report valid 18-24 months

This report is confidential and is intended solely for the person responsible for assessing Sam Sample, who completed the Mechanical Comprehension Test on 30/09/2026.

## Interpreting scores

Scores on Mechanical Comprehension Test are calculated by comparing an individual's score with a large group of people (norm group) who have also completed the same test. These are expressed as 'percentiles' – use the key below to benchmark Sam's result.

| Very Low | Low       | Mid       | High      | Very High  |
|----------|-----------|-----------|-----------|------------|
| 1-10%ile | 11-30%ile | 31-69%ile | 70-89%ile | 90-100%ile |



This mechanical comprehension test assesses a candidate's ability to understand and apply basic mechanical and physical principles – forces, movement and volume – to practical arrangements shown in diagrams. These skills will be apparent when:

- **Forces and Mechanical Advantage:** Understanding forces and mechanical advantage – judging what a lever, a pulley or a spring arrangement will do before loading it, in workshop, plant and installation work.
- **Movement and Electrical Systems:** Understanding movement and electrical systems – predicting what connected parts will do, in maintenance, assembly and fault-finding work on machinery and circuits.
- **Volume and Physical Relationships:** Understanding volume and physical relationships – judging quantities, levels and capacities correctly, in process, plant and logistics work.

## Areas to probe at interview

The test gives one overall result, shown below as a broad position rather than a score. **There is no pass mark** — the overall percentile is the measure of ability. The three aspects listed under it are ways to explore that one result at interview; they are not separately measured, so each carries Sam's overall position. Use them to decide which skills to probe in more depth, and decide on the evidence gathered there whether to progress Sam. This page states the skills to explore; it does not prescribe exercises or questions — the interview should not repeat the test.

| Result         | Position                                                   |
|----------------|------------------------------------------------------------|
| Overall result | <div> <div>Low</div> <div>Mid</div> <div>High</div> </div> |

**How to use this.** Each area lists two skills for each position. **Low** — probe these in depth: the test says the skill needs checking. **Mid** — explore them where the role leans on the area: the basics held, so ask how Sam checks their own work. **High** — confirm them: the test was taken unsupervised. The column for Sam's own position in each area is marked. The positions are coarse by design; do not read a profile into small differences between them. Where an area carries too few items on a given form to be placed, the table says so and the area should simply be explored on its merits.

### Area 1 — Forces and Mechanical Advantage

*What it measures:* how weight, position and arrangement affect the force needed to balance, compress or lift — scales, levers, springs and pulleys.

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>If Low — probe</b> <ul style="list-style-type: none"> <li>reasoning about balance from weight AND distance, not weight alone</li> <li>seeing how a pulley or spring arrangement changes the force needed</li> </ul> | <b>If Mid — explore</b> ◀ Sam <ul style="list-style-type: none"> <li>whether they reason it through or reach for a remembered rule of thumb</li> <li>how they check a judgement about a load before trusting it</li> </ul> | <b>If High — confirm</b> <ul style="list-style-type: none"> <li>applying the same reasoning to real equipment, where the arrangement is less tidy</li> <li>explaining why a mechanism behaves as it does to someone who will use it</li> </ul> |
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### Area 2 — Movement and Electrical Systems

*What it measures:* predicting the speed and direction of connected wheels and cogs, and what opening or closing a switch does to a circuit.

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>If Low — probe</b> <ul style="list-style-type: none"> <li>tracing direction through a chain of connected wheels or cogs one link at a time</li> <li>following a circuit to see which switch controls which part of it</li> </ul> | <b>If Mid — explore</b> ◀ Sam <ul style="list-style-type: none"> <li>whether they trace a system through or judge it at a glance</li> <li>how they handle a longer chain than they can hold in their head</li> </ul> | <b>If High — confirm</b> <ul style="list-style-type: none"> <li>applying that tracing to a real drive train or wiring diagram</li> <li>spotting when a system as drawn cannot work</li> </ul> |
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### Area 3 — Volume and Physical Relationships

*What it measures:* applying basic physical principles — for instance how the same volume of liquid sits in containers of different shapes.

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| <b>If Low — probe</b> <ul style="list-style-type: none"> <li>keeping hold of the fact that moving a liquid does not change how much of it there is</li> <li>reasoning from a container's shape to the level the same volume reaches</li> </ul> | <b>If Mid — explore</b> ◀ Sam <ul style="list-style-type: none"> <li>whether they estimate by eye or reason from the dimensions</li> <li>how they check an estimate of quantity</li> </ul> | <b>If High — confirm</b> <ul style="list-style-type: none"> <li>applying the same reasoning to tanks, vessels and loads at work</li> <li>spotting a quantity that cannot be right</li> </ul> |
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Rank candidates on the overall percentile; decide on the interview evidence.