PEOPLE CENTRAL
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Tasman Sea | XXyy Ltd
07 Dec 2017

EXPERT

STANDARD REPORT

TECHNICAL TEST BATTERY

ABILITY
TTB2

GUIDE TO USING THIS REPORT

INTRODUCTION

The Technical Test Battery (TTB2) measures the core skills that are required for selecting and assessing staff for engineering apprenticeships, craft apprenticeships or technical training. It comprises three separate tests, each designed to assess a different area of technical ability. These areas are the ability to reason with mechanical concepts, the ability to manipulate three dimensional spatial relationships and the ability to quickly and accurately find a path through a complex two dimensional maze.

Research has amply demonstrated that these technical abilities are not accounted for by 'general intelligence' but are specific, measurable, abilities in their own right. What is also true, though, is that general reasoning abilities should also be taken into account when considering technical ability. Verbal, numerical and abstract reasoning skills are highly important in most technical occupations and should therefore be assessed alongside technical abilities. Thus it is recommended that a test of general reasoning ability should be administered along with the Technical Test Battery.

The Aptitude Tests assess the candidate's ability to think logically using words, numbers and abstract concepts. They assess the ability to both understand and develop logical arguments and solve complex logical problems.

REFERENCE GROUP (NORMS) USED

The following norms were used to generate this report:

Test	Norm Used	Sample Size
Mechanical Reasoning (MRT2)	NZ Respondents	848
Spatial Reasoning (SRT2)	NZ Respondents	293
Visual Acuity (VAC)	Apprentices	93

DISCLAIMER

This is a strictly confidential assessment report on Tasman which is to be used under the guidance of a trained professional. The information contained in this report should only be disclosed on a 'need to know basis' with the prior understanding of Tasman.

The results must be interpreted in the light of corroborating evidence gained from feedback and in the context of the role in question taking into account available data such as performance appraisals, actual experience, personality preferences, motivation, interests, values and skills. As such the authors and distributors cannot accept responsibility for decisions made based on the information contained in this report and cannot be held directly or indirectly liable for the consequences of those decisions.

RESULTS

MECHANICAL REASONING

The Mechanical Reasoning Test (MRT2) measures a broad ability to understand mechanical principles. Items have been selected to represent physical principles from a wide range of areas, including optics, electrics, fluids and mechanics. The Mechanical Reasoning Test has been developed to assess craft and technician apprentices who require a practical understanding of mechanical principles in action. The following comments are based on a comparison of Tasman Sea's performance on the Mechanical Reasoning Test with members of the reference group.

Tasman's score on the Mechanical Reasoning Test shows that he has performed at an average level when compared to the reference group. This indicates an understanding of mechanical principles which is fairly typical of the average member of this population. This should enable him to grasp new physical and mechanical concepts as quickly as most.

SPATIAL REASONING

The Spatial Reasoning Test (SRT2) measures the ability to manipulate, and reason about, shapes and spatial relationships. The SRT2 assesses how well a person can visualise solid objects from looking at their 2-dimensional plans. The Spatial Reasoning Test, therefore, provides an indication of a person's ability to visualise the shape and surfaces of a finished object before it is constructed. Spatial reasoning ability is an important factor in a number of technical occupations, e.g. mechanical engineering, design, architecture etc. The following comments are based on a comparison of Tasman Sea's performance on the Spatial Reasoning Test with members of the reference group.

Tasman's score on the Spatial Reasoning Test is exceptionally poor when compared to the reference group. This result may either be accounted for by random responding on the part of Tasman Sea or reflects a total lack of understanding of the most simple of spatial relationships. As a consequence, he is likely to have extreme difficulty in understanding basic spatial relationships in a work setting.

VISUAL ACUITY

The Visual Acuity Test (VAC) measures the aptitude for performing tasks which require a great deal of visual precision. The Visual Acuity Test requires the person being tested to trace a path through a number of highly complex mazes in a short period of time. Many of the new technology industries require that workers should be able to work quickly and accurately on tasks which need a high degree of visual precision. Visual acuity is likely to be an important factor in a number of technical occupations, e.g. electrical engineering, mechanical and machine shop apprentices, electrical fault diagnosis, engineering drafting etc. The following comments are based on a comparison of Tasman Sea's performance on the Visual Acuity Test with members of the reference group.

Tasman's score on the Visual Acuity Test shows that his performance is within the higher end of the average range the reference group. This indicates a relatively good level of ability for tasks requiring visual precision.

PROFILE SUMMARY

TECHNICAL REASONING PROFILE

Scale	Description	Raw	Attempted	1 2 3 4 5 6 7 8 9	%ile
MRT2	Mechanical Reasoning	23	45	5	57
SRT2	Spatial Reasoning	6	30	1	3
VAC	Visual Acuity	7	7	6	71

Norms Used:
Mechanical Reasoning (MRT2) = 848 NZ Respondents
Spatial Reasoning (SRT2) = 293 NZ Respondents
Visual Acuity (VAC) = 93 Apprentices