Civil Construction Industry

Tunnel Worker

2015

Comparative Summary

The scope of different job tasks that may be undertaken within any occupation, either by work specialization or by evolving project stages - means that the physical demands required to perform job tasks can vary quite significantly.

The table and graph below provides a summary of Civil Contruction Industry occupations and the indicative ergonomic physical demands.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Occupation Ergonomics** | **Light** | **Moderate** | **Laboured** | **sum** |  |
| Road Construction Worker | 35.90% | 43.59% | 20.51% | 100% |  |
| Tunnel Worker | 33.33% | 51.28% | 15.39% | 100% |  |
| Foundation Worker | 35.90% | 48.72% | 15.38% | 100% |  |
| Road Marking Operator | 39.46% | 46.15% | 15.38% | 101% |  |
| Pavement Layer | 43.59% | 41.03% | 15.38% | 100% |  |
| Bridge Constructor | 43.59% | 41.03% | 15.38% | 100% |  |
| Plant Operator | 61.54% | 23.08% | 15.38% | 100% |  |
| Pipe Layer | 28.21% | 58.97% | 12.82% | 100% |  |
| Leading Hand | 38.46% | 48.72% | 12.82% | 100% |  |
| Directional Driller | 38.46% | 53.85% | 7.69% | 100% |  |
| Estimator | 89.74% | 5.13% | 5.13% | 100% |  |
| Supervisor | 66.67% | 33.33% | 0.00% | 100% |  |
| Project Manager | 71.79% | 28.21% | 0.00% | 100% |  |
| WHS Advisor | 84.62% | 15.38% | 0.00% | 100% |  |
| Civil Engineer | 87.18% | 12.82% | 0.00% | 100% |  |

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**Facilitating a Return to Work**

This document is a tool to assist General Practitioners’ in their examination of the functional ability of a worker and to assess possible restrictions after injury. It provides a summary of the occupational role and its physical demands.

**Physical Demands**

The physical demands required to perform job tasks can vary quite significantly and depend on the scope of the work, work specialization, worker skills and on the stage of the project. The following ergonomic assessment is indicative of a *usual* Worker’s physical demand requirements within this industry occupation.





**Range of tasks performed in the occupation**

Tunnel Workers carry out a variety of manual tasks. With experience they can operate a range of specialised machinery such as road header machines and tunnel boring machines.

|  |  |
| --- | --- |
| * Install site services such as air supply, ventilation, dust extraction and drainage
 | * Construct portals on civil construction projects
 |
| * Post operation clean up of tunnels for the removal of excess excavated material
 | * Installing rock anchors and fixing reinforcing mesh to the walls of the tunnel
 |
| * Excavate tunnels using specialised machinery such as road header machines and tunnel boring machines
 | * Reading and interpreting plans, and identifying rock structures types
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Tunnel Worker

**Alternative Titles:**

Tunnel Constructor, Tunnel Construction Artisan

**Education and Training:**

The formal qualification on completion of a traineeship/apprenticeship is Certificate III in Civil Construction (Tunnel Construction). This is a nationally recognised qualification.

**Overview of Occupation:**

With our increasingly urbanized environment and technological advances we are seeing increased use of tunnels for underground services and traffic corridors. As the name suggests, tunnelling involves excavating underground and leaving a stable void to use for services such as rail, road, communications, water, sewerage, power and gas.

**Employers Assessment**

It is recommended that this document be provided to an employee’s Medical Practitioner in the event of a workplace incident that causes harm. It has been designed to provide information about the ergonomic requirements for employees in their normal role, to support informed medical decisions, and to encourage safe and timely return to work after injury. Employers are encouraged to complete their own assessment using the table below. This provides information about the physical requirements of the specific employee’s work tasks. *Please complete by placing a tick in the cell that best represents the physical demands for the injured worker.*



|  |  |  |
| --- | --- | --- |
| Completed by (Manager) |  | Sign |
| Date of assessment |  |
| Business / Employers name |  |
| Employee name |  |