

Job Class Profile: Prosthetic/Orthotic Technician IV**Pay Level: CG-29 Point Band: 622-675**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	4	5	6	3	3	4	1	5	
Points	233	67	32	29	90	65	83	21	54	674

JOB SUMMARY

The Prosthetic/Orthotic Technician IV is responsible for the fabrication and repair of customized prosthetic (artificial limbs) and orthotic devices (braces) for individual patients, customization of wheelchairs and providing technical support to other technicians as required.

Key and Periodic Activities

- Laminates new prosthetic sockets, ensures plaster cast is smooth and wrinkle free, lays and prepares all lay-up materials(stockings, etc. for reinforcement), finishes all device edges once lamination is complete, fabricates cosmetic cover-ups for prosthetic legs to be anatomically matched with client's existing leg.
- Prepares and fabricates all orthotic bracing using a variety of materials.
- Ensures plastic prosthetic sockets fit correctly.
- Repairs existing braces and other devices.
- Consults with clinicians and other technicians regarding fabrication.
- Performs a variety of other related fabrication work.
- Supports inventory control process.

SKILL**Knowledge****General and Specific Knowledge:**

- Fabrication of artificial limbs and range of bracing devices
- Preparing casts and molds to bench alignment

Formal Education and/or Certification(s):

- Minimum: High School and a 2-3 Year Specialized Post-Secondary Diploma in Fabrication of Devices and a Professional Designation in RTPO (Registered Technician Prosthetic and Orthotics).

Years of Experience:

- Minimum: Up to 3 years

Competencies:

- The use of machinery such as band saws, drill presses, and handheld rotary tools.
- Strong artistic design skills
- Identifying materials and components for devices
- Coordinate a range of related work or project activities

Interpersonal Skills

- A range of interpersonal skills are used to perform activities such as listen to and ask questions, gain the cooperation of others, make formal presentations and instruct/teach/train users how to use devices, and deal with upset or angry people when devices do not fit properly, or being empathetic to patients that are highly emotional, sensitive or angry after having lost a limb and/or are suffering from an accident or illness. Skills are most frequently used to gain cooperation of team members and other employees to accomplish tasks and ensure quality as many tasks require more than one technician to complete.
- Communications occur with employees within the immediate work area and outside the organization including other technicians, customer/clients/general public/patients; supervisors/managers and with suppliers/contractors and students/trainees.
- The most significant contact is with other technicians, the manager/supervisor, and patients to ensure proper fit of prosthetics and to communicate ideas and brainstorm on upcoming projects.

EFFORT

Physical Effort

- Required to exert physical effort which can result in fatigue requiring periods of rest.
- Occasionally lifts materials such as bags of plaster weighing between 25 and 50 lbs, regularly works with plaster casts which can be quite heavy if it is for a body portion above the knee. Many of the items are awkwardly shaped making lifting and moving difficult.
- Physical effort includes constantly standing using hand tools requiring accurate control, steadiness and movement to fabricate devices, mold and shape objects including foam covers (2-3 hrs per).
- Regularly uses gross and fine motor skills to lift and assemble components and plaster casts.

Concentration

- **Visual concentration** includes using machinery such as a band saw, ensuring proper measurements and proper alignment of all devices (i.e. contouring metal so that it fits properly) and properly installing very small myoelectric devices for prosthetic arms.
- **Auditory concentration** includes listening to multiple stakeholders while working in a noisy environment.
- **Other sensory concentration such as touch** is required to ensure surfaces are smooth so client comfort is achieved.
- **Repetition requiring alertness** occurs when sewing with an industrial sewing machine or when grinding foot orthoses. Knives are frequently used which requires concentration to avoid injury. Works with students or volunteers and they are using fabrication machinery therefore attention is critical to ensure their safety.
- Required to work under **deadlines** to have devices ready for clients, and to deal with walk in

clients who require emergency repairs while they wait.

- **Exact result and precision** and **eye/hand coordination** are required when fabricating devices, working with various devices to fit the patient properly, aiding them in walking correctly by taking exact patient measurements, inspecting fabrications to ensure quality, and ensuring pigmentation of skin and device are exact matches for cosmetically appealing results.

Complexity

- Tasks are generally quite different but allow for use of similar skills and knowledge. While all tasks relate to the fabrication and repair of prosthesis and orthoses, each device has different requirements and therefore must be constantly aware of these differences and any new techniques available.
- Typically, problems include deciding the appropriate design solution for fabrication and how to manage time effectively.
- There are various manuals and guidelines to assist and help from other technicians and co-workers.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are generally prescribed or controlled. Reports to a Prosthetist/Orthotist.
- Independently has the ability to order inventory materials that are in short supply and are required to complete ongoing projects but would require approval to order materials or tools that are not normal inventory items.
- Generally work unsupervised and exercise discretion and judgement in performing most of the daily tasks with advice and guidance available if required. Team work is critical as work is performed to the expectation levels of the Prosthetist/Orthotist and the client.

Impact

- Generally has impact within immediate work area, department, and on customers/clients/general public/patients. Additionally, work activities may impact equipment, finances (i.e. clients are billed for devices fabricated), material resources, health and safety and corporate image.
- Work can have a positive or negative impact depending on whether the fabricated devices meet the client needs.
- Errors are generally detected by the client during fittings and are resolved within a week of identification.

Development and Leadership of Others

- Not responsible for the supervision of staff.
- May provide advice/guidance, direction and some orientation to new technicians. Also provides opinions about materials to be used and different approaches to completing tasks to other technicians and clinicians.

WORKING CONDITIONS

Environmental Working Conditions

- Required to use safety precautions and equipment such as wearing a respirator, eye protection, hearing protection and covering skin when working with irritants such as fibreglass.
- There is a moderate likelihood of receiving minor cuts, bruises and abrasions however there is a lesser likelihood of any illness or injury beyond this level of severity.
- Work is performed in an open workshop environment with regular exposure to fumes (i.e. glue, glue thinner, resin, carbon and fibreglass), unusual distracting noise (i.e. equipment and hand held tools), lack of privacy, hazardous chemicals, toxic or poisonous substances, sharp objects, and heavy machinery; and occasional exposure to limited ventilation, vibration, odours, wet/slippery surfaces and confined spaces.