



Australian Government

Department of Education, Employment and Workplace Relations

HLTDT508C Construct removable acrylic partial dentures

Release: 1

HLTDT508C Construct removable acrylic partial dentures

Modification History

Not Applicable

Unit Descriptor

Descriptor

This unit of competency describes the skills and knowledge required to construct removable acrylic partial dentures

All procedures are carried out in accordance with occupational health and safety policies and procedures, current infection control guidelines, Australian and New Zealand Standards, State/Territory legislative requirements and organisation policy

Application of the Unit

Application

This unit applies to work in dental technology

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Pre-requisite units

This unit must be assessed after successful achievement of pre-requisites:

- HLTDT301C Construct models
- HLTDT302C Construct custom impression trays
- HLTDT303C Construct registration rims
- HLTDT304C Articulate models and transfer records
- HLTIN301C Comply with infection control policies and procedures

Employability Skills Information

Employability Skills

This unit contains Employability Skills

Elements and Performance Criteria Pre-Content

Elements define the essential outcomes of a unit of competency.

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. Terms in *italics* are elaborated in the Range Statement.

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

1. Design acrylic removable partial denture

- 1.1 Confirm the survey of the model carried out by the operator
- 1.2 Confirm design and transfer to master model
- 1.3 Block-out undesirable undercuts
- 1.4 Scribe food lines
- 1.5 Duplicate master cast to create a working model

ELEMENT	PERFORMANCE CRITERIA
2. Select and prepare materials	2.1 Select materials according to laboratory prescription 2.2 Establish shape and dimension of <i>component parts</i> from design
3. Arrange artificial teeth	3.1 Select teeth and position in wax to establish aesthetics and function 3.2 Contour wax so that dentures are suitable for try-in 3.3 Decontaminate according to infection control guidelines and place in a suitable container for dispatch
4. Construct retainer units	4.1 Construct components as required 4.2 Join components as required 4.3 Secure teeth and components in wax 4.4 Contour facial and lingual aspects 4.5 Secure appliance for processing
5. Select and prepare materials and processing technique	5.1 Identify the appropriate polymer system for case 5.2 Identify the appropriate investment technique 5.3 Identify the appropriate processing cycle 5.4 <i>Select polymeric material</i> to construct the prosthesis 5.5 Prepare system components in accordance with manufacturer's instructions 5.6 Allow materials to reach application stage

ELEMENT**PERFORMANCE CRITERIA****6. Process denture or appliance**

- 6.1 Apply appropriate investment techniques
- 6.2 Apply material to mould
- 6.3 Process the polymeric material for the correct length of time at the correct temperature
- 6.4 Devest model and remove any processing irregularities and sharp edges before fitting onto master casts
- 6.5 Confirm accuracy of retainer units

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level required for this unit.

Essential knowledge:

The candidate must be able to demonstrate essential knowledge required to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes knowledge of:

- Applied oral anatomy:
 - dentition - arrangement of the teeth, naming and coding of teeth
 - structures of the oral cavity - hard and soft palate, lateral and posterior borders of the oral cavity, tongue and floor of the mouth
 - teeth - form and function
- Advantages and disadvantages of partial dentures
- Fundamental knowledge of dental polymers including:
 - acrylic and modified acrylic prosthetic teeth
 - acrylic plastics as soft liners
 - acrylic plastics for denture bases including composition and properties
 - acrylic-metal combinations
 - acrylics for construction of custom trays
 - modified acrylic denture base plastics including manipulation and processing
 - the polymerisation process including cross-linked polymers, copolymers, modified polymers and vinyl plastics
- Infection control guidelines for the decontamination of completed laboratory work
- Principles of partial denture design
- Surveying techniques
- Stages in the design of partial dentures:
 - classifying, supporting and outlining the saddles
 - connecting the various components together
 - providing additional components where necessary to resist rotation
 - providing reciprocation and bracing
 - providing retention

REQUIRED SKILLS AND KNOWLEDGE

- reviewing the design for hygiene, support and retention

Essential skills:

It is critical that the candidate demonstrate the ability to

- Consistently comply with current infection control guidelines, Australian Standards and legislative requirements as they relate to the dental technician's specific job role
- Consistently comply with occupational health and safety policies and procedures as they relate to the dental technician's specific job role
- Consistently produce acrylic partial dentures suitable for insertion in the mouth
- Consistently comply with relevant legislative requirements

In addition, the candidate must be able to effectively do the task outlined in elements and performance criteria of this unit, manage the task and manage contingencies in the context of the identified work role

This includes the ability to:

- Consistently follow infection control guidelines and safe work practices during the set-up and waxing of partial dentures
- Consistently follow sequenced written instructions and manufacturer specifications for the preparation of materials
- Consistently interpret and follow the laboratory prescription
- Select procedures for partial denture construction
- Use appropriate practices to ensure efficient use of power and other resources
- Use literacy skills to read and follow directions, policies and procedures including:
 - laboratory policies and procedures
 - material safety data sheets

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

EVIDENCE GUIDE

Critical aspects for assessment and evidence required to demonstrate this competency unit:

- The individual being assessed must provide evidence of specified essential knowledge as well as skills
- Assessment should replicate workplace conditions as far as possible
- Consistency of performance should be demonstrated over the required range of workplace situations

Context of and specific resources for assessment:

- Assessment should replicate workplace conditions as far as possible
- Where, for reasons of safety, access to equipment and resources and space, assessment takes place away from the workplace, simulations should be used to represent workplace conditions as closely as possible

Method of assessment

- It is necessary to assess evidence of required knowledge. This may be provided by:
 - verbal questioning at the time of demonstration of required
 - traditional or online (computer-based) assessment
 - written assignments/projects
- Case study and scenario as a basis for discussion of issues and strategies to contribute to best practice
- Staff and/or client feedback
- Supporting statement of supervisor
- Authenticated evidence of relevant work experience and/or formal/informal learning
- Role play/simulation

EVIDENCE GUIDE

- Access and equity considerations:*
- All workers in the health industry should be aware of access and equity issues in relation to their own area of work
 - All workers should develop their ability to work in a culturally diverse environment
 - In recognition of particular health issues facing Aboriginal and Torres Strait Islander communities, workers should be aware of cultural, historical and current issues impacting on health of Aboriginal and Torres Strait Islander people
 - Assessors and trainers must take into account relevant access and equity issues, in particular relating to factors impacting on health of Aboriginal and/or Torres Strait Islander clients and communities

Related units: This unit may be assessed with other units which make up a job role

Range Statement

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

- Component parts may include:*
- Connectors
 - Direct retainers
 - Occlusal rests and similar components
 - Saddles

Unit Sector(s)

Not Applicable