

# CHAPTER 1

## DENTAL TECHNICIAN



### Who is a dental technician?

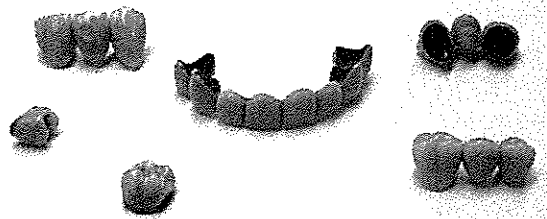
#### 1. Before you read the text, talk about these questions:

1. What does a dental technician do?
2. Why are dental technicians important?

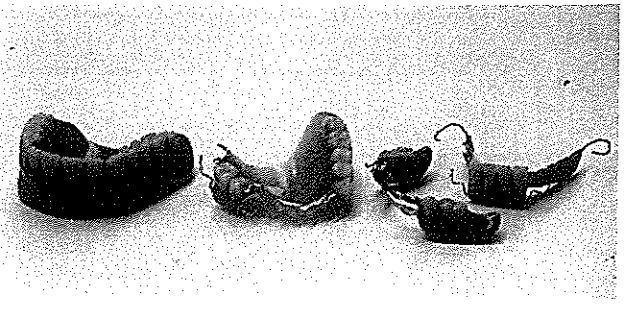


#### 2. Read the text. CD 1.1

A dental technician, also known as a dental technologist, is responsible for designing, constructing and repairing a variety of dental devices. As a dental technician you will be responsible for helping to improve teeth and for replacing lost teeth. You will improve teeth for aesthetic reasons, and work to the prescription of a dentist to make bridges, crowns, dentures, braces and other orthodontic devices. The dentist communicates with the dental technician with the prescriptions, drawings and measurements taken from the patient. The most important aspect of this work is a dental impression, into which the technician pours a gypsum dental stone mixture to create a replica of the patient's anatomy, known as a dental cast. A technician can then use this cast for the construction of custom appliances.



Picture 1 Fixed prosthodontics



Picture 2 Complete and partial prosthetics

**You are likely to specialise in one of the following areas:**

- crown and bridge work that can be cemented into place, using materials such as porcelain, gold and metal alloys
- orthodontics – devices such as braces to straighten teeth, using metal or plastic
- prosthodontics – dentures and implants made from chrome, acrylic or plastic

**Responsibilities as a dental technician. You will need to:**

- undertake all aspects of prosthetic work including making bites and special trays, casting, mouth guards, and retainers
- construct partial or full dentures (metal and non-metal) to replace the partial or total loss of teeth
- create accurate models from doctors' impressions
- fabricate porcelain veneers for crowns, prostheses, implant restorations, and crowns using ceramo-metal techniques
- construct models of the mouth and teeth from impressions of the patient's mouth taken by the dentist
- make diagnostic wax-ups, Smile Design cases, dental composite work and pressable/e.max restorations
- restore natural teeth by fabricating crowns and bridges and applying them to complex implant units and implant-borne restorations
- correct dental irregularities by manufacturing fixed or removable appliances, such as dentures and casings to go over teeth
- replace missing facial and body tissues due to injury, disease or developmental abnormality by fabricating maxillofacial prostheses
- use traditional methods and CAD/CAM for designing dental devices
- maintain dental laboratory records and prepare reports on laboratory activities
- update your dental laboratory technician knowledge and skills by participating in educational opportunities, reading professional publications, maintaining personal networks and participating in professional organizations

## **Skills you will need to have:**

- manual dexterity
- a strong understanding of morphology
- attention to detail
- design skills and knowledge
- the ability to analyse quality or performance
- the ability to work well with others
- thinking and reasoning skills
- written and verbal communication skills
- the ability to work well under the pressure of time constraints
- familiarity with all aspects of prosthetics and the manufacturing of thermoforming appliances
- experience in crown and bridge metalwork
- CAD/CAM knowledge of implants systems.

The need for dental technicians is expected to grow faster than the average health occupation and, once qualified, there are plenty of opportunities to progress in this career.

There are likely to be more opportunities available with larger laboratories and you may need to change employers in order to further your career. There is also the possibility to work abroad.

With experience, there are opportunities to become a senior or chief dental technician with responsibility for quality control or management within a larger laboratory.

You could also move into a teaching role as a dental technician instructor once you have additional teaching qualifications. With significant experience, you could even set up your own laboratory.