

DENTAL TECHNOLOGY



WHAT IS A DENTAL TECHNOLOGIST?

A dental technologist (or dental technician) is a member of the dental oral healthcare team who, upon prescription from a dental clinician, construct custom-made restorative and dental appliances such as dentures, crowns, bridges and dental braces for individual patients.

EACH PATIENT IS UNIQUE

No two pieces are the same, therefore much of the work is carefully done by hand to fine-tune each piece to the exact specification to make sure the device is comfortable and effective for the patient prior to the final fitting with the dentist.



UNSUNG HEROES

Their work requires a high level of manual dexterity, attention to detail and an application of applied aesthetic values.

FOUR MAJOR DISCIPLINES

There are four major disciplines within dental technology:

- Fixed prosthesis including crowns, bridges and implants;
- Removable prosthesis, including dentures and removable partial dentures;
- Orthodontics, including orthodontic appliances and mouthguards;
- Maxillofacial prosthesis, including ocular prosthesis and craniofacial prosthesis (generally carried out in the Hospital provision)

THE WORK



Dental technicians use different tools, equipment and materials to make, modify or repair:

- Various types of dentures
- Crowns and implants to replace individual teeth
- Bridges to anchor a false tooth between natural ones
- Various other types of appliance, such as braces to straighten teeth
- Maxillofacial appliances and prostheses, for patients who have lost part of their face or jaw through
- Disease or accident, or for children born with defects, such as a cleft palate. This is specialised
- Hospital work with limited entry opportunities.

TOOLS, EQUIPMENT AND MATERIALS

Dental technicians work with plastic, porcelain, metals (including gold and stainless steel), wax and plaster. They use hand and power tools and have skills that include modelling, sculpting in fine detail, polishing, plastic-forming, casting, wire-bending and ceramic work. Computer-aided design and computer-aided manufacturing are also increasingly used in commercial dental laboratories. As each of us is different, each appliance is custom-made, to ensure a good fit.

THE DIGITAL EVOLUTION

Dental technicians today continue the tradition of skilled manual artistry but sometimes with digital tools. Digital dentistry encompasses computer-aided design and manufacturing (CAD/CAM), intraoral scanners, 3D printing, digital imaging, augmented and virtual reality, and guided implant workflows. All of which are transforming how restorations, prostheses, and appliances are designed and fabricated.

SKILLS

Dental Technicians need:

- to be able to do fine, manual work - most jobs are on a very small scale and must be accurately finished
- to be good at concentrating
- good eyesight - normal colour vision is important for some aspects of the work - for example, making crowns and bridges, as subtle colour matching (called shading) is part of the job
- some design flair, and an ability to sculpt and copy shapes
- the ability to apply technology and health sciences to complex and varied tasks.

PROSPECTS

With additional qualifications and experience, dental technicians have the opportunity to advance to roles such as clinical dental technician, orthodontic therapist, or healthcare scientist specialising in reconstructive science. They can also pursue management positions, and with sufficient experience, establishing your own dental laboratory could be a viable option.

CLINICAL DENTAL TECHNICIANS

- Clinical dental technicians are dental technicians who have undertaken specific clinical training to enable them to design, create, construct, modify and fit removable dental appliances for patients. In this role, you would be able to provide dentures direct to patients with no natural teeth, or work with and to the prescription of a dentist to provide partial dentures for patients with some teeth. An important part of the role is to check on the patient's general dental welfare.
- Orthodontic therapists assist dentists in orthodontic treatment for example fitting braces, orthodontic headgear, facebows, tooth separators and bonded retainers and taking impressions.
- Healthcare scientists specialising in reconstructive science with training through the NHS Scientist Training Programme.

