

TRECCO

Cost-effective precision technology solutions for healthcare





BUSINESS OVERVIEW

Trecco Ltd create cost-effective patient-specific devices using innovative methods and state of the art technologies for complex oral, maxillofacial and neurological surgery to enhance healthcare services and improve patients' quality of life.



MARKET OPPORTUNITY

This sector has continued to grow and as technology has developed it has opened up exciting opportunities to help patients who have previously suffered without any hope of a cure. As a result of advances in technology and rising demand for innovative therapies in healthcare there will be a rise in complex surgical procedures. This is expected to boost the global medical device market to \$612 billion, with the **Cranio-maxillofacial devices market predicted to be worth \$2.6 billion by the end of 2025.**

Sport Related Injuries

One of the main causes of craniofacial fractures is sport-related injuries. In the USA 3.8 million athletes per year experience a sport-related concussion.

Technological Advancement

Such as robotic arm assisted CMF surgery and bio-absorbable implants.



Motor Vehicle Accidents

69% of maxillofacial surgeries are as a result of road traffic accidents.

Cranio Maxillo Facial Cancer

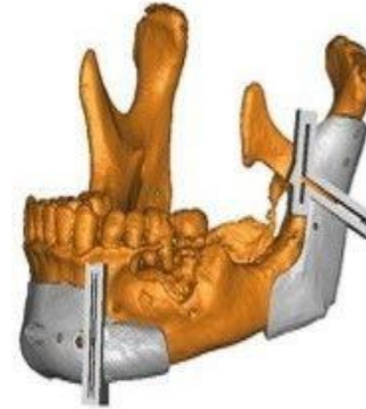
Figures from 2014 show that in the UK, 7680 patients were diagnosed with oral cancer with an average increase rate of 1.15% per year.

OUR PRODUCTS



Patient Specific Implants

Customised implants are made to perfectly match an individual's anatomy. Many of our implants are prosthetics, intended to replace missing body parts or removing cancerous bone to be replaced with robust artificial solutions.



Patient Specific Surgical Guides

Surgical guides are 3D printed plastic models to assist surgeons in precise handling of surgical instruments at a certain angle and in a certain position during surgery when the precise cutting of bone is needed. Each guide is prepared during preoperative planning and based on guidelines from the surgeon.



BENEFITS

of Patient-Specific Implants and guides

TRECCO 



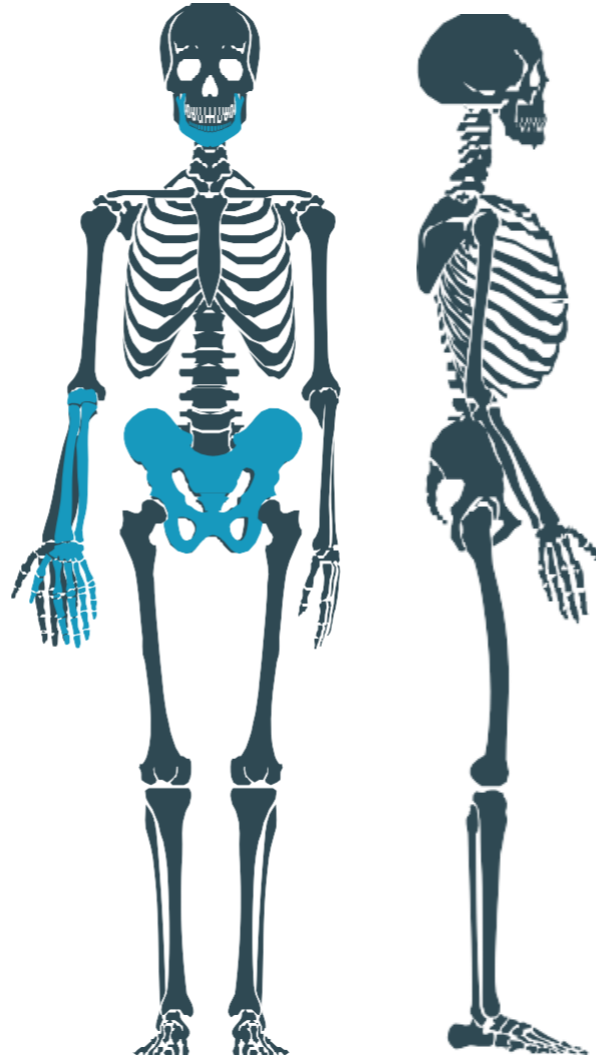
Improve Surgery Efficiency

Reduced bone grafting and improved bone reunion results in less post-surgery revision cost



Aesthetically Pleasing

Providing facial symmetry without destructive aesthetic results



Reduce Theatre Time

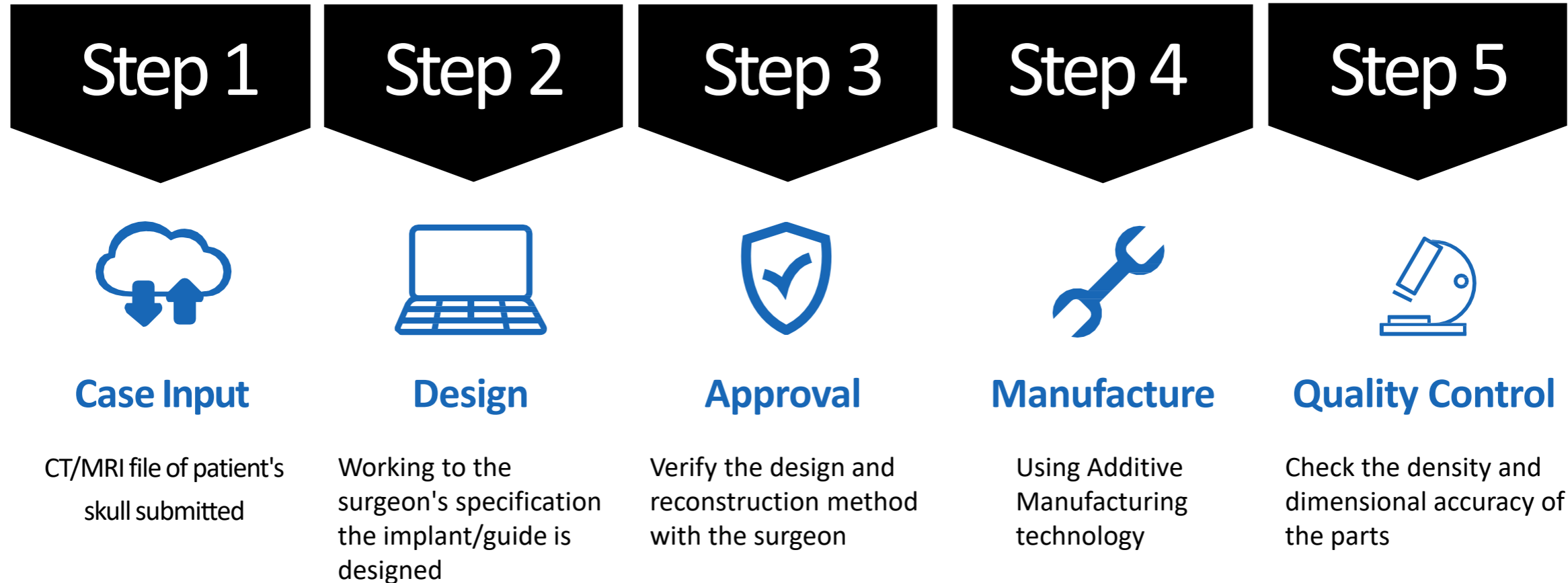
Virtual Surgical Planning is 20-25% quicker than pre-fabricated off the shelf implants



High Accuracy Fit

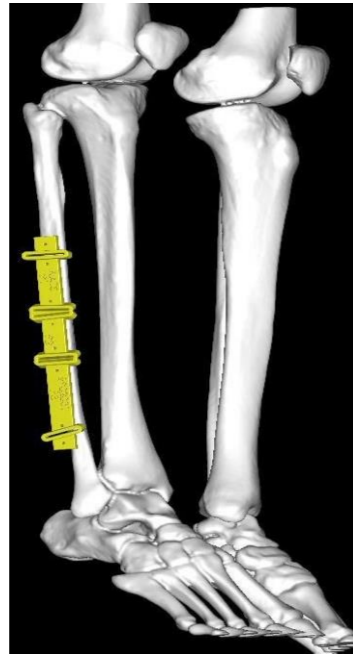
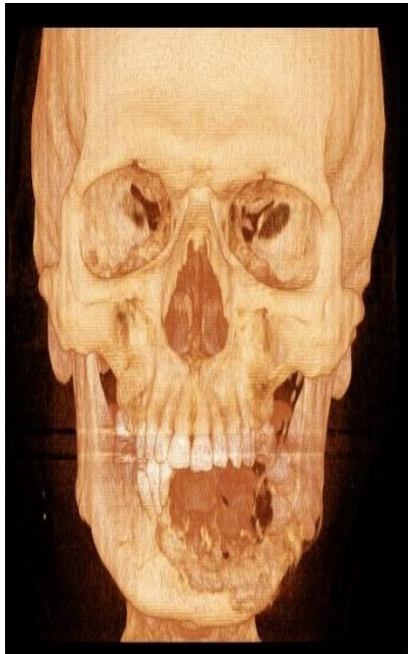
As the parts are anatomically designed specifically for each patient's skull they fit very accurately

5 – STEP PROCESS



SURGICAL GUIDE

A surgical guide has been designed and 3D printed to assist the surgeon to resection the jaw and cancerous tumour of a 40 years old patient, grafting the fibula bone and positioning in the jaw accurately.



Case Input

Design

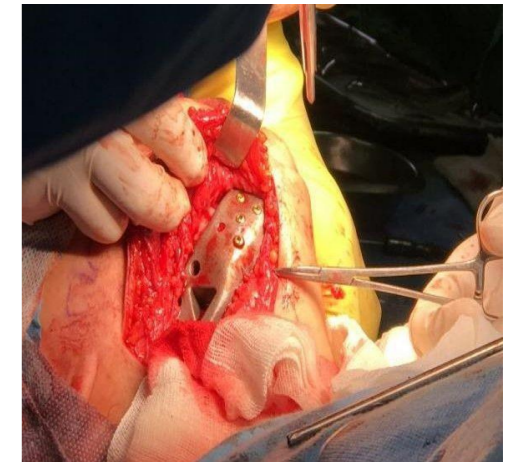
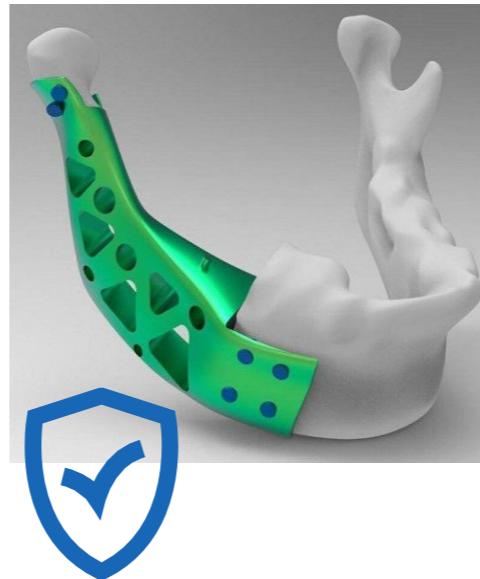
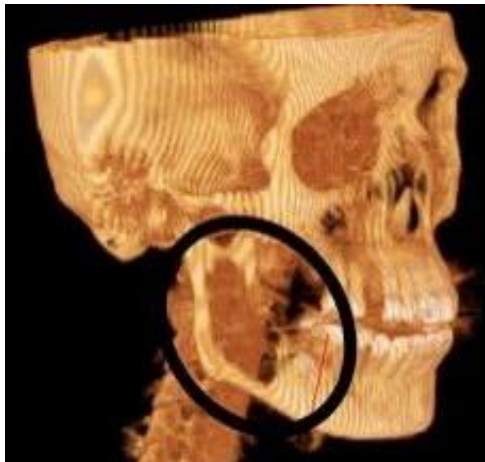
Approval

Manufacture

Result

IMPLANT

A tumour on the mandible bone of a 23 year old female has been resected, but the reconstruction surgery never took place. The implant was designed and manufactured in Titanium on a EOS290 DMLS machine.



Case Input

Design

Approval

Manufacture

Result

TRECCO TEAM



Hossein Sheykh

Managing Director

10 years experience in Additive Manufacturing and Material Science
MSc Advanced Engineering Materials from University of Liverpool



Dr. Sahand Kargar

Product Design Manager

6 years experience in Biomedical Engineering and Maxillofacial implants
PhD Biomechanics from Urumia University Iran



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THANK YOU

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