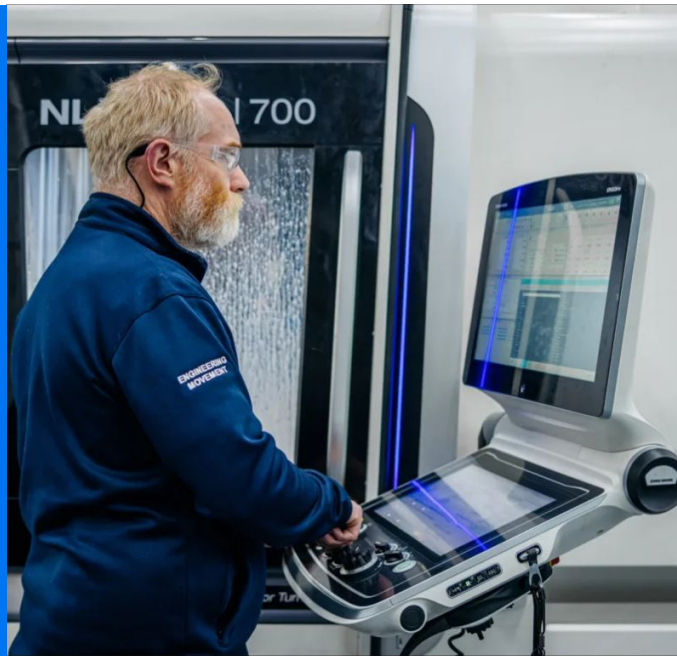
Implanting Innovation

Manufacturing technology for orthopaedic OEMs.

Croom Medical combines precision machining, metal additive manufacturing, automation and materials expertise to support implant programmes from development through qualification and repeat production.



An integrated manufacturing route.

Precision machining

CNC milling, Swiss turning and grinding, supported by tooling, fixtures and automation expertise.

Metal additive manufacturing

Laser powder bed fusion, build and support strategies, and process development for porous lattice structures.

Surface finishing

Robotic and manual polishing, blasting, deburring and laser marking, selected for the component and surface requirements.

Engineering & industrialisation

Manufacturing development, prototyping, process transfer and qualification support, backed by an on-site materials laboratory.

Process selection and qualification requirements are agreed for each programme, including applicable thermal and finishing steps.

Across orthopaedic device families

Knee	Hip	Spine	Trauma & extremities
Femoral and tibial components	Stems, cups and femoral heads	Interbody cages and fixation screws	Plates and joint components

PRODUCTION	PRECISION MACHINING	DEVELOPMENT
Titanium and cobalt-chromium	Stainless steel	Tantalum and titanium-tantalum

From development to repeat production.

1

Development

Review the design, material and manufacturing route.

2

Industrialisation

Develop tooling, process steps and inspection methods.

3

Qualification

Build the agreed qualification evidence for the manufacturing route.

4

Repeat production

Manufacture to customer-approved processes, inspection and release requirements.

Evidence through the process.

Incoming, in-process and final inspection are supported by dimensional metrology, CMM, visual inspection and surface roughness measurement. The materials laboratory supports tensile, compression and fatigue testing.

ISO 13485:2016 certified manufacturing

Certificate scope: The Manufacture of Precision Medical Device Components.

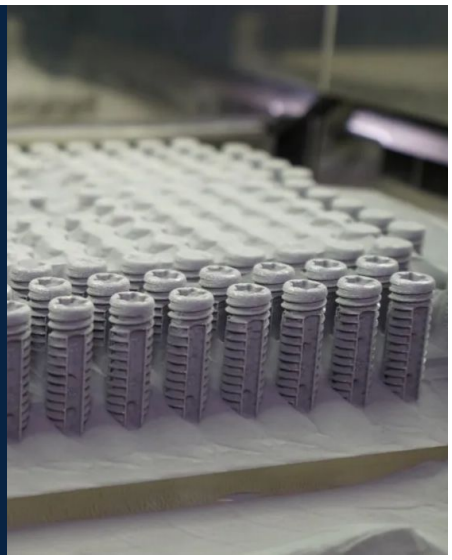
View certificate and scope

CASE STUDY / SI FIXATION SCREW

Complex features. A route into production.

For a spine OEM, Croom addressed heat build-up in fine screw features, iterated removable supports and adapted an EBM lattice for laser powder bed fusion. Validation covered mixed screw configurations on a single build plate. Material testing and manufacturing validation supported the customer's submission work, and the programme progressed from development into production.

Read the public case study



Let's discuss your next programme.

Start with the device family, material, drawings, development stage and expected volumes. We will review the manufacturing route and next steps with your team.

enquiries@croommedical.com

+353 61 397 744

Croom, Co. Limerick, Ireland, V35 YD39

croommedical.com