



# METALHEART MEDICAL



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# Vision and Mission



## Vision

To bridge the gap between cost and availability within the advanced manufacturing and medical implant sector, to further enhance the medical market by providing cost effective medical consumables manufactured to the highest medical standards ensuring benefit to both the patient and practitioner.

To ensure the highest quality of healthcare consumables is made available to all.

## Mission

To lead innovation and technology within the advanced manufacturing and medical sector across Arica and the Middle East by effective partnership and localized industrialization.



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# About Us



Metal Heart Medical is a medical additive engineering and 3D printing company based in Johannesburg, South Africa.

We specialize in high technology manufacturing methods in the medical, aeronautical, aerospace, oil and gas and defense industries.

Metal Heart holds **ISO 13485** (Medical Manufacturing Quality Management Systems) which enables us to manufacture all components under strict quality processes as well as medical certification and various health industry body approvals (SAPHRA, FDA & CE).

Metal Heart is the only commercial Additive Manufacturing company within South Africa to achieve this certification.

Our facility offers a world unique solution through a vertically integrated design and manufacturing offering, being a one-stop-shop to clients within the medical, aeronautical, automotive and Arms industry, be it bespoke or alternative.



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# Additive Manufacturing (3D Printing)



Metal Heart uses Additive Manufacturing (AM) methods in the form of Selective Laser Melting to manufacture complex metal components for Medical and Dental, Aviation, Aerospace and Defence, Tooling, Automotive, Research and Development Industries

Metal Heart not only serves as a Rapid Prototyping service provider but uses AM methods to mass produce complex metal parts that, using conventional CNC methods, are difficult or impossible to manufacture.

Materials available:

**Titanium (Ti6Al4V - Grade 23), Aluminium (AlSi10Mg), Tool Steel (1.2709), Stainless Steel 316, Titanium (Ti6Al4V Grade5) and Inconel 718.**



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# Medical Additive Manufacturing– 3D Printing



Custom implants to match patient anatomy

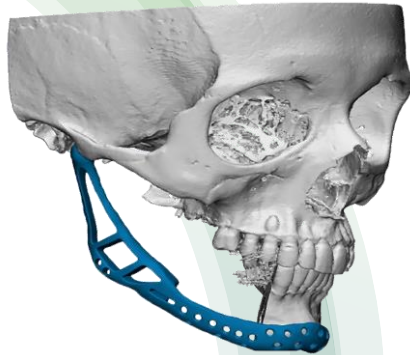
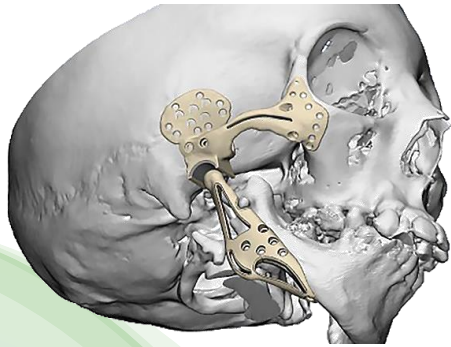
Better post-operation quality of life

Faster recovery

Faster surgery – Lower theatre cost

Lower risk in surgery to patient and surgeon

Overall lower lifecycle costs



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# Aerospace and Defence– 3D Printing



Complex manufacturing using super-alloys



Optimised design inputs

Advanced materials manufacturing

Lighter components

Lower volume production volumes

Faster design iterations



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# Medical Consumables



Lower Margin, High volume, Precise parts improving costs and output



Optimised Material Usage

Sterile Packaging ( where required)

Clean Manufacturing Principles

Low Contamination Risk



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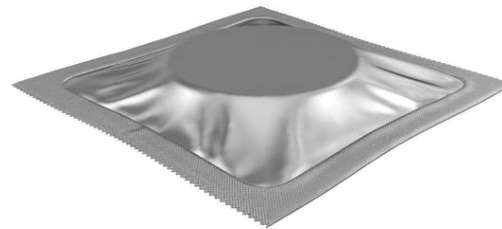
# Medical Grade Dipping



High Quality Surgical and General Medical Gloves, and other products



**PRO+**<sup>TM</sup>



High Internal Technology Integration

Clean Manufacturing Principles

Sterile Options

Full range ( L/M/S, Long L/M/S)

Condoms and Rubber Dams

Suitable for use in Food Industry



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# Medical Textiles



Lower Margin, High Volume products suitable for food and Medical Industry



Female Friendly Products

Full Size Range – Over coats

Optional Thickness's

Highly disposable.



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# Contact Us



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## Metal Heart Kingdom of Saudi Arabia



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Special Economic Zone



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