PRECIOUS M 080.
Direct Metal Laser Sintering (DMLS) system.

Whatever's in your mind, make it real.
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A system for the additive manufacturing of precious metal products for the production of prototype parts and end products, DMLS for precious metals is a groundbreaking technology from Cooksongold and EOS that’s designed for the jewellery and watchmaking industries, providing the quickest-ever route from product concept to market launch.

DMLS: the key to e-manufacturing.
Innovative companies from many industry sectors throughout Europe, North America and Asia have already adopted this technology to achieve fast, flexible and cost-effective production. This groundbreaking technology is now available to the watch and jewellery-making industries.

PRECIOUS M 080.
The PRECIOUS M 080 produces top-quality, ready to finish metal parts direct from three-dimensional CAD data. Designs can be realised in only a few hours without the investment of tooling. The DMLS process builds the parts layer by layer, melting fine metal powder with a laser to create extremely complex geometries such as freeform surfaces, hollow sections and articulating parts.

It is equipped with a 100-watt fibre laser, which provides exceptional beam quality and power stability. This guarantees optimum and consistent processing conditions in order to produce the highest quality parts.

The PRECIOUS M 080 system is designed to facilitate powder handling and the removal of manufactured components.

It is designed with a powder management process developed for the jewellery and watchmaking industries, ensuring full accountability of the valuable powders and providing quick metal changeover through its cartridge-based system.

The system possesses a small laser spot size with excellent detail resolution, allowing the creation of even the finest structures.

It facilitates the processing of an increasing range of precious metals in addition to the standard non-precious metal alloys such as titanium.

The process software contains many intelligent exposure strategies and features to enable the optimisation and adaptation of the build process for various material types and applications.

The PRECIOUS M 080 has a range of precious metal powder alloys with optimised parameter sets.

An end-to-end solution.
Machine sales. Powder sales.
Maintenance and repair. Training.
Bureau service. Finance options.
Alloy development. Powder metallurgy.

Technical data
Building volume Ø80 mm x 90 mm
Laser type Yb-fibre laser, 100 W
Precision optics F-theta-lens, high-speed scanner
Scan speed up to 7.0 m/s (23 ft./sec)
Focus diameter Less than 30 µm
Power supply 200 - 240v socket or fixed connection
Power consumption maximum 2.5 kW
External gas supply 5 bar operating pressure recommended

Dimensions (B x D x H)
(800 mm x 950 mm x 2250 mm)
Recommended installation space min. 1 m x 3 m x 2.5 m
Weight 580 kg

Data preparation
Software EOS RP Tools, EOSPRINT
CAD interface STL
Network Fast Ethernet

Making the impossible possible.
Call: +44 (0)121 233 8192 for more information now or visit: www.cooksongold-emanufacturing.com

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