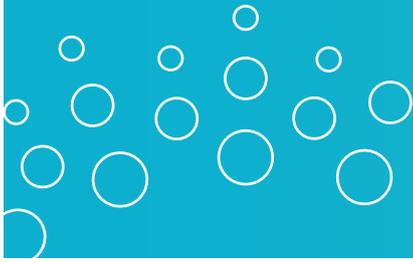




Plasma Additive Layer Manufacture Smoothing

Environmentally Friendly
Surface Finishing





Surface Finishing 3D Printed and Machined Metal Parts

Additive manufacturing offers great design freedom to produce geometrically complex components with little material waste and that are impossible to make any other way.

Despite the progress made in 3D printing metal parts, surface roughness can constrict their use in many industries such as aerospace and medical devices, where the surface finish of components is highly critical.

Palms (Plasma Additive Layer Manufacture Smoothing) has been developed by Wallwork's Cambridge research and development centre and their Manchester machine build division.

Based on an electrochemical plasma process that is environmentally friendly compared with many traditional finishing methods, PALMS smooths and polishes ALM surfaces and down holes with minimal edge rounding.

It works on any method of metal component manufacture but is especially ideal for smoothing the macro-finish ($10\text{-}50\mu\text{m}$) of AM parts quickly and cost effectively, producing a micro-finish smooth surface to less than $0.1\mu\text{m}$, often in less than 20 minutes.

Metals Polished

- Cobalt chrome
- Titanium alloy
- Titanium
- Stainless steel
- (Aluminium, brass, copper & others)



Compatible with:

- Cast
- Machined
- ALM / 3D-printed
- Masking
- Improved work environment

Advantages over electro-polishing

- 5 times faster
- Geometry maintained
- Edges maintained
- No toxic electrolyte
- More cost-effective

Advantages over manual-polishing

- 50 times faster
- Savings on labour
- Avoids long, dirty, tedious task
- Massive cost savings

Typical industries

- Aerospace
- Motorsport
- Automotive
- Medical devices
- Dental parts

● Before **PALMS**



● After **PALMS**



Wallwork has chosen Fintek, the UK's foremost experts in meeting the real-world surface finishing needs of engineers, to exclusively market the Palms process. Fintek are providing a full subcontract service and also machine sales.

Technicians will devise the perfect process using Palms to enable you to achieve your commercial goals.

For sample part processing and more call +44 (0) 1706 825 819.



Fintek
Halter Inn Works
Holcombe Brook
Bury
Lancashire
BL0 9SA

Tel +44 (0) 1706 825 819
Email info@fintek.co.uk

www.fintek.co.uk


Palms
Advanced Precision Finishing