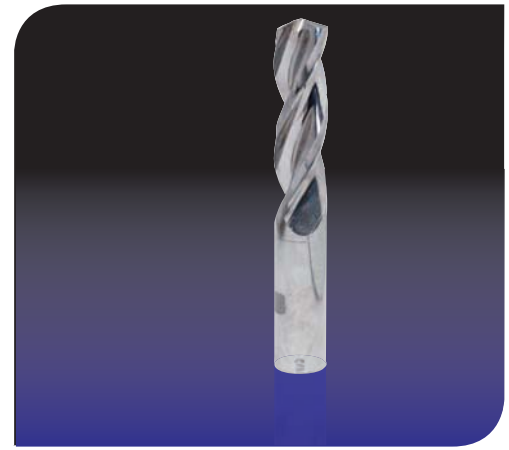


The tool and die industry

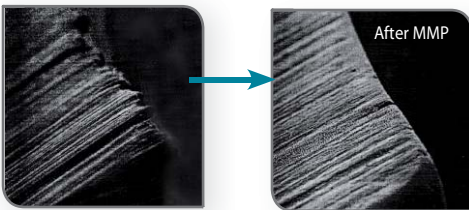


> Guaranteeing selective surface finishing

The Micro Machining Process possesses a unique capacity to select surface roughness, creating surface finishes that are particularly suitable for stamping and cutting tools, dies, and injection moulds.

Because an optimal surface finish increases the resistance of cutting edges, MMP can also significantly lengthen the lifespan of hand tools, cutting tools, and dies:

Tool	Lifespan increased by up to
Steel tooling, stamping punch	250%
Fine blanking die	400%
Blanking punch	600%
Carbide die	700%



500X enlargement of cutting edge:
micro-burrs are removed, increasing edge strength



> Materials treated

- Steels
- Alloys
- Carbides
- Ceramics
- PVD and CVD deposits

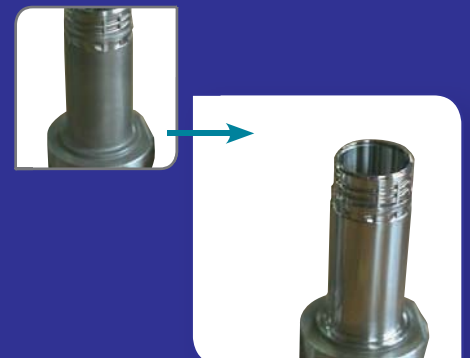
> Applications

- Cutting tools
- Calibration dies, punches, drawing tools
- Plastic injection moulds

Cutting tools, dies, and punches



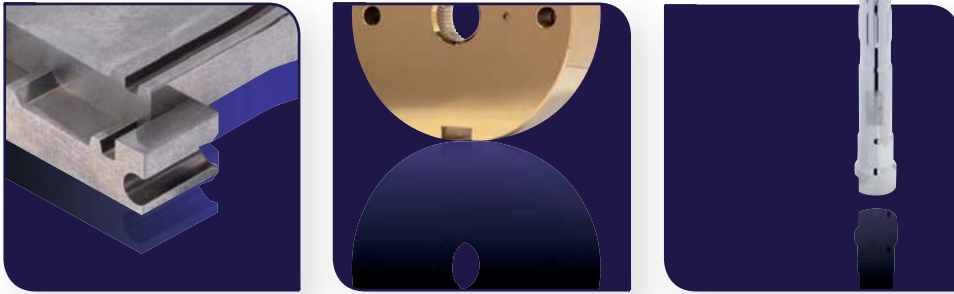
Injection moulds



Fulton Court, Wofford Way, New Greenham Park, NEWBURY, Berkshire, RG19 6HS, UK

M: 07766 717770 | E: jon@firstsurface.co.uk | www.firstsurface.co.uk

> Benefits of MMP for cutting tools, dies, and punches



- Increases resistance to corrosion and wear, lengthening tool lifespan
- Preserves lubricating film and reduces friction
- Ensures controlled sharpness of cutting edges
- Increases machining speeds, reduces machine stress, and improves clearing of scrap
- Improves adherence of thin coatings such as PVD
- Reduces seizing and sticking after PVD treatment

> Benefits of MMP for injection moulds



- Improves removal from moulds
- Reduces injection cycles by more than 15%
- Reduces clogging
- Eliminates blocking of vents
- Reduces friction
- Increases resistance to wear
- Improves adherence of thin coatings

Added value

- Quick turnaround times
- Surface finishes can be reproduced identically to industrial standards on multiple items or batches
- Process ensures traceability to industrial standards and uses certified quality procedures