POLYPROPYLENE SMOOTHING FOR ADDITIVELY MANUFACTURED COMPONENTS

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ABOUT AMT

Additive Manufacturing Technologies (AMT) is an automated post-processing technology development and manufacturing company

Several years of technology development for Polypropylene smoothing

Processed over 50,000 Polypropylene components to date

AMT systems include automated post-processing cells including surface smoothing, de-powdering, vision and handling

Vision is to create technology and systems that deliver Industry 4.0 compliant industrialised 3D Printing

POLYPROPYLENE SMOOTHING

Game changing technology

Versatile polymer used for a variety of applications: automotive, aerospace, medical, and consumer industries.

Excellent chemical resistance, mechanical properties, cost and availability industry.

New window of opportunities for Additive Manufacturing industry.

ISSUES WITH CURRENT **POLYPROPYLENE SMOOTHING METHODS**

Mechanical abrasion techniques not suitable for many applications:

- May damage small features and/or structural integrity of the entire part
- Create plastic micro-fibers making parts unsuitable for respiratory aplications
- Do not seal the surface
- Discharge water waste

AMT'S POLYPROPYLENE **SMOOTHING**

VAPOUR SMOOTHING TECHNOLOGY TO SMOOTH AND SEAL THE SURFACES OF POLYPROPYLENE PARTS

GREEN, NON-HAZARDOUS CHEMISTRY

WIDE VARIETY OF POLYPROPYLENE GRADES

NO WASTE

ACCURATE AND REPEATABLE FINISH

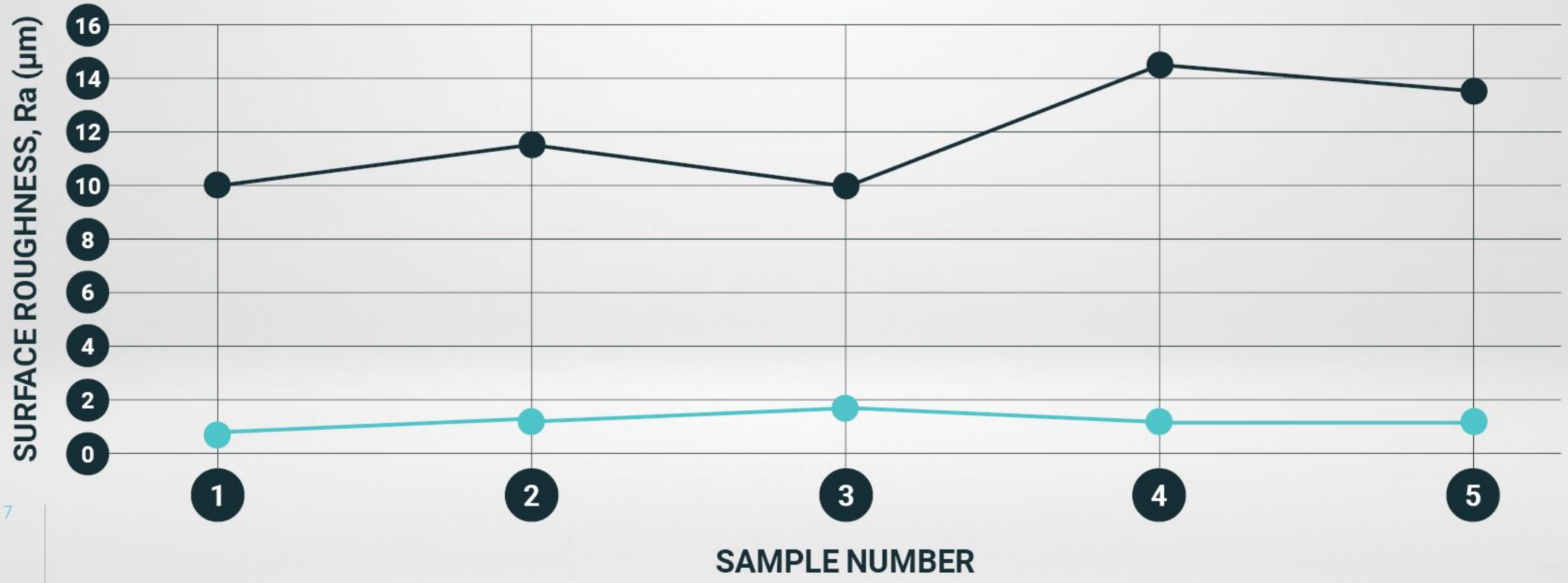
EXAMPLE **APPLICATIONS OF PP**

Ricoh PP S5500P

UNPROCESSED

PROCESSED

SURFACE ROUGHNESS **IMPROVEMENT**



CONCLUSIONS

- New Polypropylene smoothing technology for Additive Manufacturing
- Green non-hazardous chemistry
- Enable sustainable and automated production

THANK YOU

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