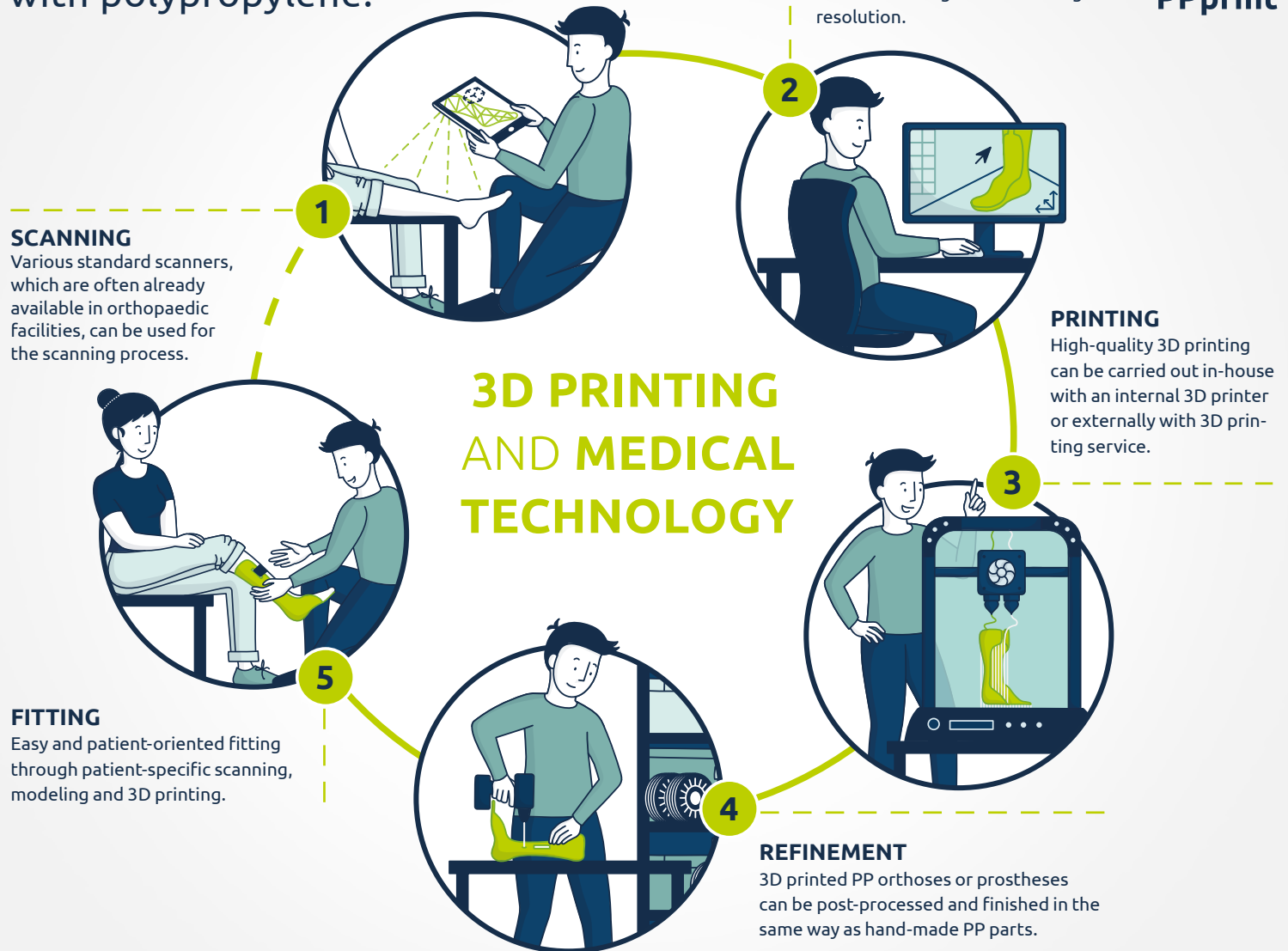


Enabling to close the loop of 3D printing orthoses and prostheses with polypropylene.



How can we help you to **make your next step in extrusion-based 3D printing?**

PPprint GmbH

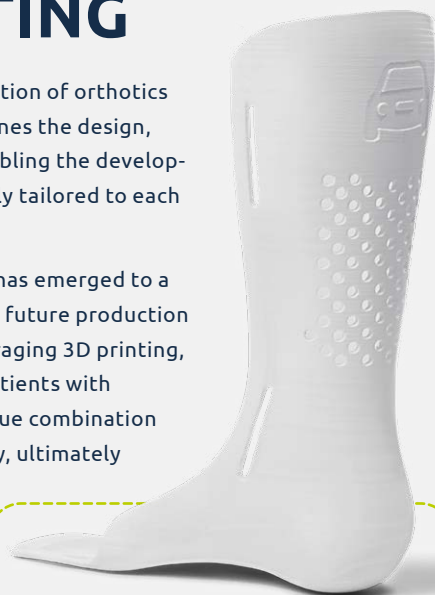
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MEDICAL TECHNOLOGY AND 3D PRINTING

3D printing has revolutionized the fabrication of orthotics and prosthetics. This technology streamlines the design, manufacturing, and fitting processes, enabling the development of cutting-edge products individually tailored to each patient's special needs.





In particular extrusion based 3D printing has emerged to a reliable and cost efficient solution for the future production of orthoses and prostheses (O&P). By leveraging 3D printing, medical professionals can now provide patients with prostheses and orthoses that offer a unique combination of comfort, functionality, and adaptability, ultimately enhancing quality of life.



Application examples

- Knee-ankle foot orthosis (KAFO)
- Dynamic ankle foot orthosis (DAFO)
- Ankle foot orthosis (AFO)
- Arm prosthetics
- TT & TF prosthetics
- Thorako-lumbo-sakral orthosis (TLSO)
- Wrist hand finger orthosis (WHFO)
- many more applications possible

Advantages of extrusion-based 3D printing

-  faster creation of products
-  50% less material usage
-  low initial investment required
-  reduced cost per part



**YOUR PARTNER FOR
EXTRUSION-BASED 3D PRINTING
FOR ORTHOSES AND PROSTHESES.**

With its unique product portfolio PPprint provides a distinctive product range for 3D printing of orthoses and prostheses made of polypropylene (PP). With a proven track record in material innovations and extensive experience in integrating 3D printing into medical device applications, we are your trusted partner. Our global network of partners allows us to support customized solutions tailored to your specific requirements in your region.

The advantages of polypropylene for orthoses and prostheses

Break resistant

3D printed parts made of polypropylene are robust and break resistant.

Flexible

3D-printed O&P parts can be bent to a certain degree without breaking.

Light weight

The low-density of PP enables lightweight parts with comfort and functionality.

Skin friendly

PPprint materials are certified for skin contact.

Semi-transparent

P-filament 721 nature is translucent enabling to identify pressure points during medical treatment.

Thermally deformable

At moderate temperatures, PP parts can be deformed to make the final adjustments to the patient's needs.

Chemical resistant

The chemical resistance of PP ensures that O&P parts are not affected by contact with sweat or other liquids. 3D-printed O&P products can be cleaned in the dishwasher or with alcohols and can be sterilized.

Homogeneously colorable

The homogeneous colorability of PP allows us to offer a wide range of colors allowing the production of individual products.

Immediately 3D printable / no water uptake

As a non-hygroscopic material PP is immediately ready for use in 3D printing without prior drying. This feature makes storage easier compared to other 3D printing materials.

Printing complex shapes

PPprint's complete package consisting of PP materials, printing base and support material makes it possible to manufacture more complex products for the specific needs of the patient.

Recyclable

PP can be recycled easily and efficiently using well-established technologies.