

### How it works ...

Additive Manufacturing refers to a process by which digital 3D design data is used to generate a component in layers by depositing material. The term „3D printing“ is used as a synonym for additive Manufacturing. The strengths of additive manufacturing lies in those areas, where the conventional manufacturing reaches its limitations. The technology is of interest, where a new approach to design and manufacturing is required so as to come up with new solutions. Therefore it enables a design-driven manufacturing process – where design determines production and not the other way around. Furthermore AM allows for highly complex structures which can still be extremely light and stable.



① Construction volume is 250x250x300 mm

For the material, we focus in the aluminum alloy AlSi10Mg, which have good casting properties and is used typically for components with thin walls and complex geometry for example applications in motorsports or aerospace.

### Shorten R&D Times

The fast track to prototypes or serial products – with additive manufacturing you can get with no detour along the way from the first design idea to the finished prototype. And because the production is based directly on the digital 3D data, you can very quickly optimize your components in an iterative process and bring them to production maturity.

«speed up your innovation - directly from idea to prototypes and serial products without detours but with industrial 3D printing»

### Lightweight construction & functional integration

Additive Manufacturing enables the construction and manufacture of highly stable lightweight structures that cannot be produced using conventional production processes. AM allows you the greatest possible freedom and enables extremely complex 3D structures that often feature undercuts or hollow spaces – geometries, which can only be produced with limited success using conventional technologies like milling, turning or casting. Even bionic structures are easily possible – AM makes design-driven production a reality! With optimizations on the topology, both strength and rigidity can be rapidly changed and maximized at any time.

### Your advantages with PWB

- Topology optimization of your parts
- Functional integration to save costs
- Inhouse postprocessing

PWB is always the best solution, because we bring both worlds together, as we have both skills – the conventional, chip removing, as well as the additive.

### Functional Integration

Fewer assembly components, less logistical effort and a greater flexibility: Additive Manufacturing makes it possible to integrate functions in parts – also during serial production.

