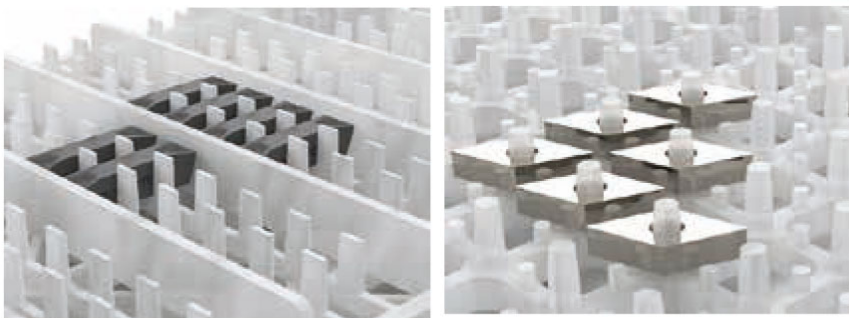


Customer and Product-Specific Work Piece Carriers

3D Printed Carrier Systems Perfectly Adapted to Your Needs

Increased process efficiency through optimal design of the work piece carriers for the respective application

Series production from batch size 1



Advantages of the Plastic Work Piece Carriers

- Tool-less production
- Production of accurate and repeatable carriers
- Design for optimal process efficiency and product quality (e.g. grid-shape pallets for edge hone in the wet blasting process for optimal blasting, washing and drying process)
- Integration of anti-rotation devices for optimal processing of products
- Stable and durable carriers (up to 10 times longer service life in blasting applications compared to injection-molded pallets)
- Short production time

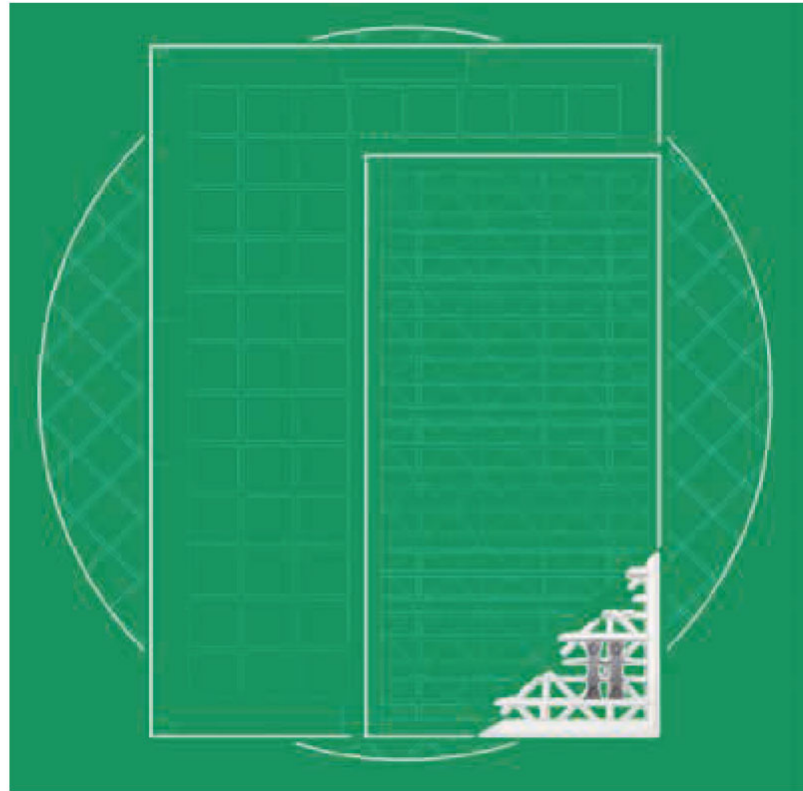
Additional ROBOWORKER services

- Design of customer and product-specific work piece carriers, also with RFID chip to ensure traceability
- Data management
- Prototype printing
- Special finishing



Characteristics of Work Piece Carriers

- Production from plastic:
 - white, capable of transmitting light (standard)
 - as an option: colored, several colors
 - fine-feature surface resolution
 - impact resistant
 - good isotropic properties
 - chemical compatibility
 - complying with specifications acc. to USP class VI (pharmaceutical approval for polymeric materials)
- Flexible shapes
 - contour: round, square, rectangular
 - inner structure: compartments, bars, pins, holes, grooves, etc.
 - available with anti-rotation device
 - sizes: standard up to 385 x 323 mm
 - larger sizes upon request
- 3D data is required for production.
If these are not available, ROBOWORKER offers a design service.
- Prototype production for release for series production
- Special finishing upon request



Technical Data

Mechanical Tolerances of a typical work piece carrier

Reference size min. (LxWxH)	380x280x30mm
Shape	rectangular
Evenness of carrier	0.4mm
Warpage	0.4mm
Dimensional tolerance	+/- 0.5mm

General tolerances for material and process

For dimensions <100mm	+/- 0.3mm
For dimensions >100 mm	+/- 0.3%

Thermal Properties

Heat resistance temperature at

0.455 MPa	153°C
1.82 MPa	58°C

Thermal expansion coefficient at 1 m length

-20-70°C	91ppm/K
95-185°C	201ppm/K

