



ColorJet Printing (CJP)

With ColorJet printing, a mineral compound powder material is solidified through the local printing of liquid binders in layers. Colour information is hereby taken directly from the CAD data and colour binders (CMYK) are mixed in the same way as in 2D inkjet printing then introduced in one operational step. From presentation of easy mixed colours all the way to textures - CJP enables full colour models close to reality.

Advantages

Colour makes the difference

- One of the fastest printing methods
 - Short delivery times
 - Inexpensive models
- Full colour models
 - No manual colouring
 - Perfect presentation and communication



Monochrome multimeter

multi-coloured multimeter

Options



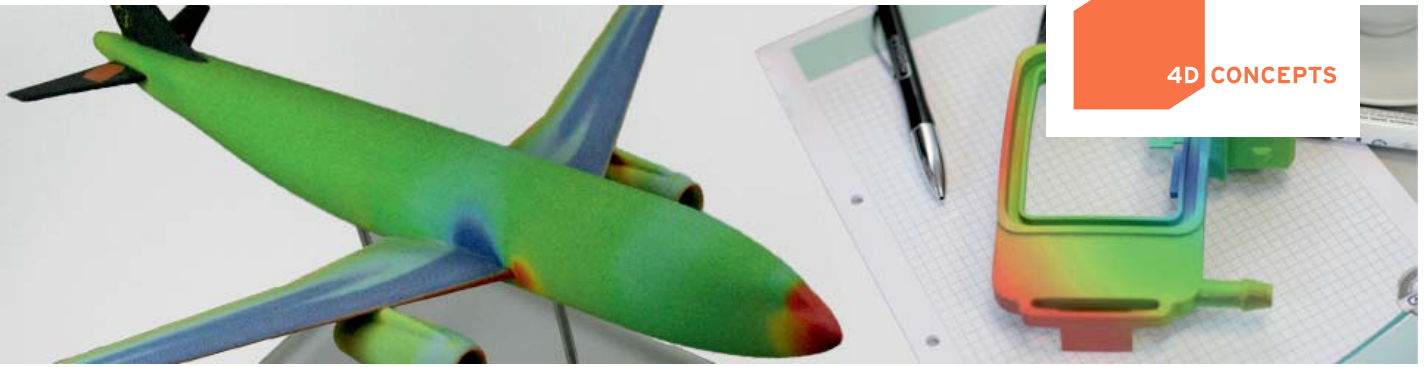
Maximum component size: 381 x 254 x 203 mm

Minimum wall thicknesses: 0.8 mm (geometry-dependent)

Minimum detail display: of 0.1 mm through colour differentiation

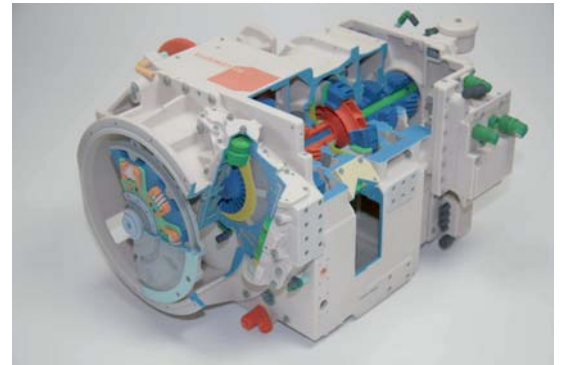
Colour range: in the CMYK colour palette (not colourfast, e.g. RAL or Pantone)

Data and colour transfer via VRML format directly from CAD or 3D scanners



Application example presentation/communication

CJP is perfectly suited for the presentation of complex assemblies and systems. Especially for cutaway models, even complex, internal values of a product can be presented perfectly through colour differentiation - presentation 4.0, as it were. From trade fair model to display model for field service, from facility planning to operation planning - CJP provides efficient options not only for technical requirements, but especially also for marketing and sales.



Application example figure printing



CJP is the technology behind special application figure printing and is used by providers all over the world because of the fast production speed, low operating costs and the realistic illustration. Data from the 3D scanners are transferred directly via the standard interfaces VRML or OBJ. This creates realistic snapshots close in the shortest of time, for eternity.

Application example parts fitting and assembly inspection

The mineral material of the CJP components with its rigid but rather brittle properties is also good enough for many technical requirements. During the early design phase, the simple CJP process is good enough for shape finding, version testing, but also for parts fitting and assembly inspections. The motto here is that if CJP meets the requirements, it is in many cases the fastest and most cost-effective version compared to printing methods. CJP models can naturally also be processed with grinding, drilling, tapping, painting and the like and there are no limits to model-making here.

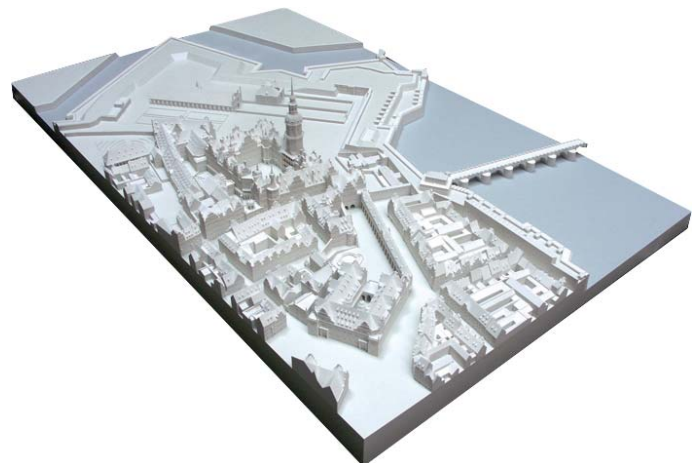


CJP gear case with threaded inserts for parts fitting and assembly inspections



Application example historical models / urban planning / topology models

Whether a topology model is needed during the planning phase for a new wind farm, an urban planning model for infrastructure and traffic route planning or a historical model for an exhibition - 3D full colour printing can demonstrate its strengths with such applications as compared to other procedures. Whether a realistic colour display of the actual condition or a colour differentiation to emphasise specific areas - colour plays a crucial role here as well. If it is merely about the focus on the geometry, the primary white colour of the material provides a durable and non-darkening option with suitable post-treatment. Some of our earlier projects have been in the exhibition for more than ten years now.



Historical model Dresden, milled base plate, features CJP monochrome with UV-stable finishing, put together from approx. 30 segments

Application example infrastructure planning

Models also offer advantages for the communication with all partners involved in a project with complex architecture and infrastructure. Advantages for architecture are also provided by the mineral material of the CJP procedure because the effect - haptics, appearance and weight - are preferred over classic synthetics by many architects and planners. With larger models - which are then printed in several segments and put together - the printing speed and the rather reasonable operating supplies costs naturally have several positive effects as compared to other printing methods.



Planning model logistics centre made with 4 segments