

MATERIX

Materix is an automated nesting system for "man made" materials that realizes and controls a scalable workflow in a single tool, accompanying the operator along the entire workflow (from order to production), automating it through a rich and simple human interface.

Materix also gives the possibility to customize parametric objects, manage materials and "inventories" (Stock management) and offers the possibility of integration with third-party ERP and MES through an open interface.

MARKET TARGET: INDUSTRY

CUSTOMER NEED

Cutting Machine Manufacturer
that want to add to their product portfolio a simple but very efficient design & nesting software suite for composite materials.

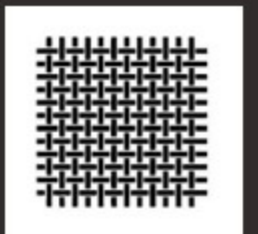
CUSTOMER NEED

End-users, i.e. manufacturers of parts and products made with composite materials that need a simple but very efficient design & nesting software suite for composite



OPPORTUNITY

Stand-alone application, to cope with the needs of small and not highly automated production plants providing prototyping, small scale and large scale productions. It provides comprehensive material optimization features and basic but meaningful features for management and tracking of material and remnants, customization of parametric objects and cost analysis for quotation, including material cost, machine and people time.



INDUSTRY & COMPOSITES
AUTOMOTIVE
FURNITURE & INTERIORS
FABRIC, FASHION & APPAREL

FEATURES

ADDITIONAL

"Article" mng
management of complex items composed by various types of materials (tarpaulins, bags, sofas ...)

Stock mng and remnants
management of information on irregular forms, including remnants

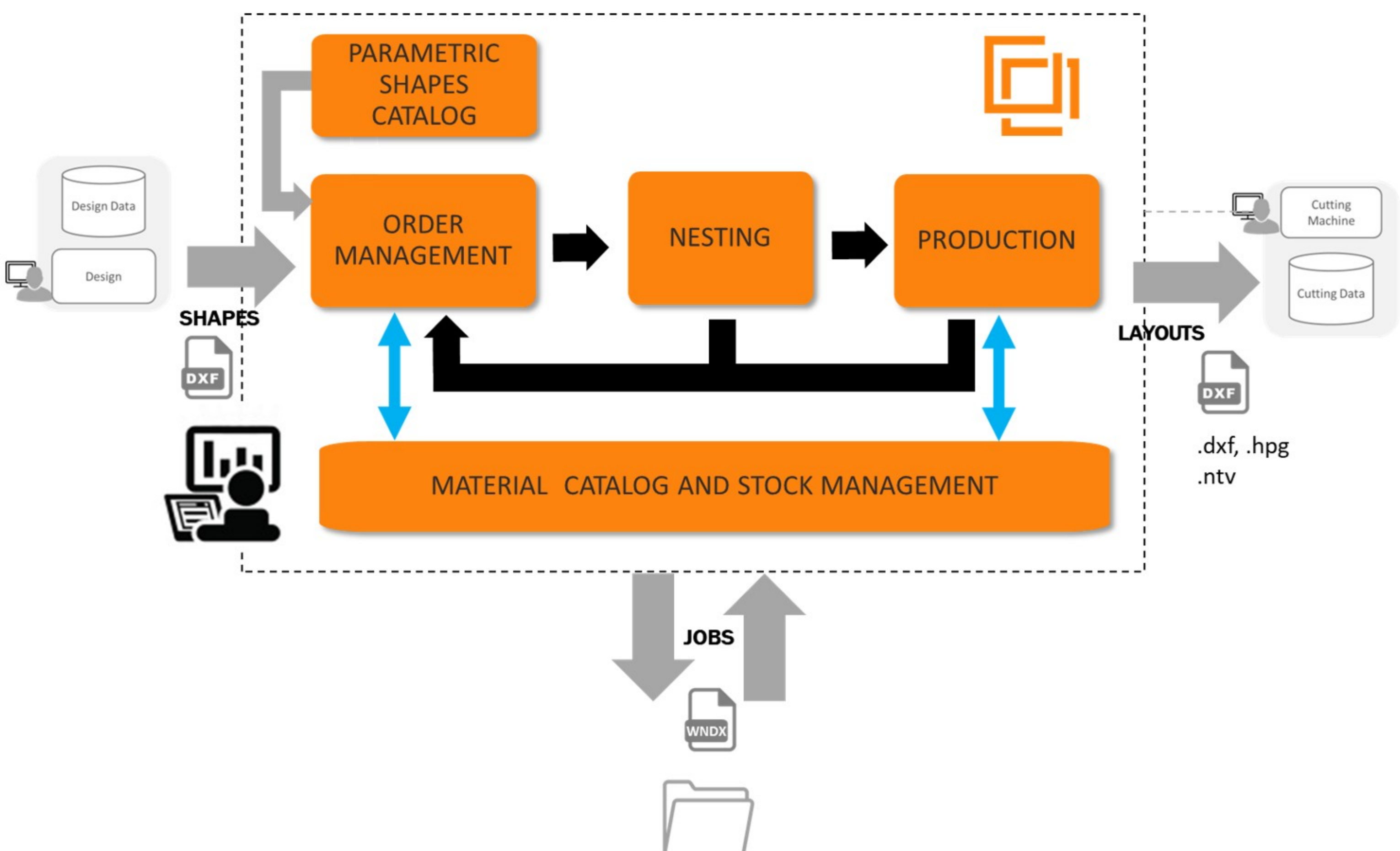
Parametric shapes mng

BASE

- Order management
- Nesting: pieces of a single type of material (as unlimited) with all the formats currently available
- Output management (save) with all the formats currently available
- Reports generation
- Filler management

WORKFLOW

FROM DESIGN TO CUT IN LESS THAN ONE MINUTE



PARAMETRIC SHAPES CATALOG

- Creation of shapes to add to the order starting from parametric objects
- Possibility to use catalogs of parametric objects in the cloud

MATERIAL AND STOCK MANAGEMENT

- Creation of new types of material and assignment of material characteristics (size, rotation, ...)
- Creation of the warehouse of material types, including the remains, on user's needs basis
- Possibility to select and/or to reserve material for nesting

ORDER MANAGEMENT

- **Loading** jobs and orders
- Possibility to interface ERP by XML
- **Automatic import** of shapes from any design tools (DXF, NTV format)
- Assignment of the **type of material** to the shapes
- Assignment of **quantities** and **rotation classes** to the shapes

PRODUCTION

- Saving layout with the possibility to create files for the cutting machine. Export formats: DXF, NTV, HPGL...
- Upgrade of the stock of materials based on layouts
- Ability to split the nesting layouts according to the "working table length"(output with as many files as there are cutting tables)

NESTING

- High efficiency automatic nesting with different possible options (gap, border, swing, class of rotation and time)
- Possibility to modify shapes and positions (translation, rotations, alignment...)
- Multiple nesting material support
- Part in part nesting: The nesting can place shapes on the material inside the holes of other shapes
- Ability to nest on remnants of any shape, optimizing stock
- Multiple sheet management
- Preparation of layouts