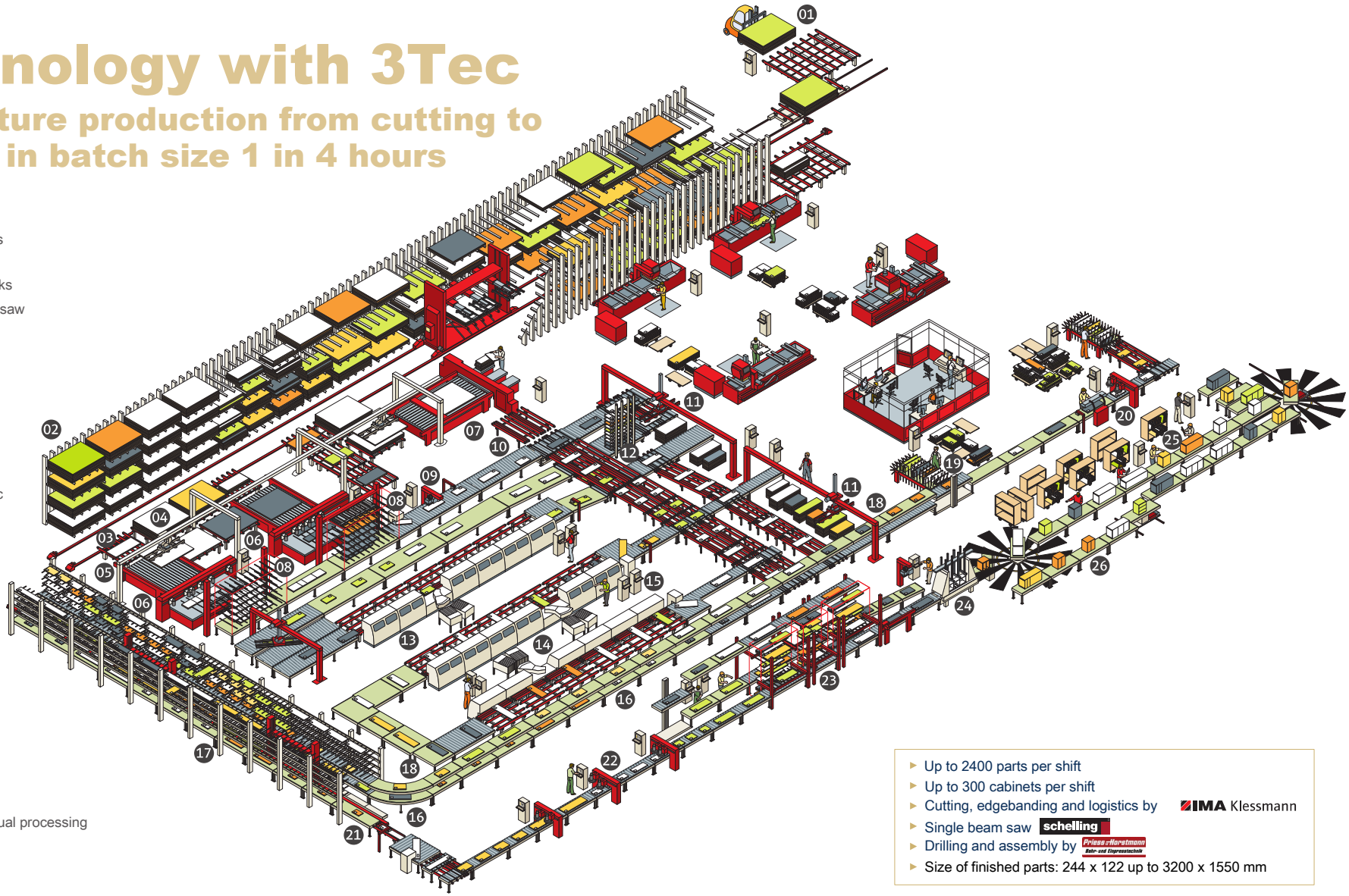
MES technology with 3Tec

Laboratory furniture production from cutting to finished cabinet in batch size 1 in 4 hours

01 Preparatopn of stacks
02 Rack storage for single boards and stacks
03 Return of reusable boards
04 Preparatopn area for commissioned stacks
05 Infeed for cutting center and single beam saw
06 Cutting center
07 Single beam saw
08 Buffer after cutting
09 Turning station and label printer
10 Outfeed for reusable boards
11 Infeed/outfeed unit
12 Buffer for first edgebander loop
13 Edgebander loop 1 for melamine-phenolic resin, large and special parts
14 Edgebander loop 2 for cabinet parts
15 Edgebander preview, glue preview and edgebander material administration
16 Return conveyor to sort buffer
17 Dual transport sort buffer
18 Conveyor outfeed for fronts and commissioned parts
19 Hedgehog buffer for commissioned parts and pre-planned quality control
20 Automatic drilling machine for fronts
21 Conveyor outfeed for cabinet parts
22 Row of 3 drilling machines
23 Intermediate buffer before and after manual processing
24 Cabinet press
25 Assembly lines
26 Conveyor to shipping



- Up to 2400 parts per shift
- Up to 300 cabinets per shift
- Cutting, edgebanding and logistics by IMA Klessmann
- Single beam saw schelling
- Drilling and assembly by Priess+Hartmann
- Size of finished parts: 244 x 122 up to 3200 x 1550 mm

Automation | Information | Transparency

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3Tec

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Laboratory furniture production from cutting to finished cabinet in batch size 1 in 4 hours

- **Automatic high-bay rack storage for raw and reusable boards**
- **2 cutting centers and 1 single beam saw for raw board processing**
- **Labelling of component parts**
- **Pre-sorting and intermediate buffering after cutting**
- **Edgebanding on 2 separate edgebanders**
- **Buffering and sorting after edgebanding**
- **Automatic drilling machine for fronts**
- **Automatic drilling and assembly line**

Production data import and preparation

- All data relevant to production is imported from the ERP system
- Production data stored in MS-SQL database
- Cutting plan optimization with capacity utilisation overview for optimal planning
- Creation of cutting plans for cutting centers
- Data preparation for edgebanding
- Automatic generation of component and part processing data
- Office workstations for planned re-work and drilling/assembly programs
- Edgebander preview and edge material administration
- Handling of re-productions and quick shots

Control system

Warehouse management and control of automatic rack storage system

Material flow control

- Tracking of individual parts
- Buffer management
- Connections to production machines
- Edgebander flow control
- Labelling
- Monitoring via barcode scanning
- Sorting

System-wide display elements

- Operator guidance
- Diagnostics and error recovery

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