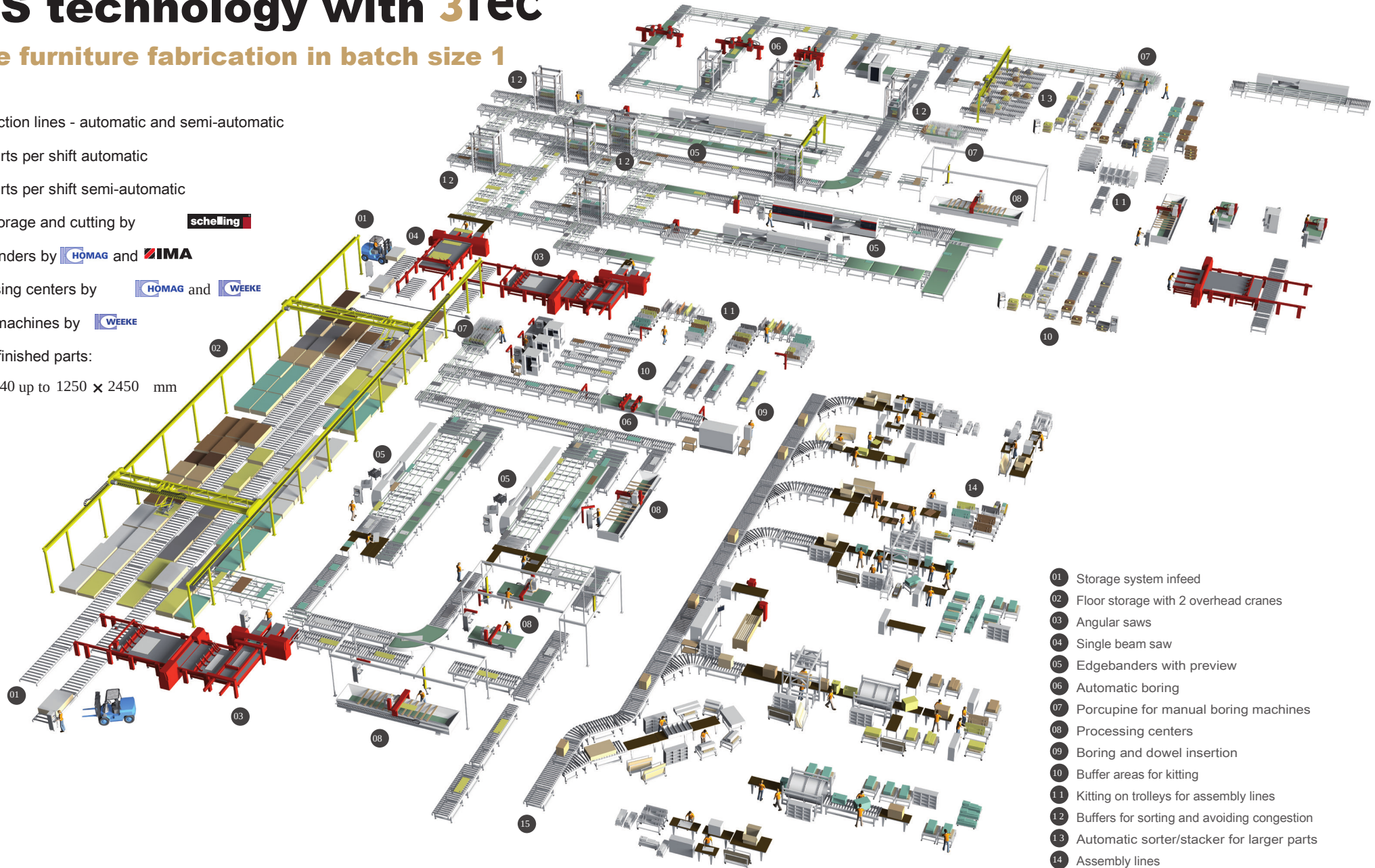# MES technology with 3TEC

Office furniture fabrication in batch size 1

▶ 2 production lines - automatic and semi-automatic

▶ 3000 parts per shift automatic

▶ 2000 parts per shift semi-automatic

▶ Floor storage and cutting by **schelling**

▶ Edgebanders by **HOMAG** and **IMA**

▶ Processing centers by **HOMAG** and **WEEKE**

▶ Boring machines by **WEEKE**

▶ Size of finished parts:

120 ✕ 240 up to 1250 ✕ 2450 mm

01 Storage system infeed

02 Floor storage with 2 overhead cranes

03 Angular saws

04 Single beam saw

05 Edgebanders with preview

06 Automatic boring

07 Porcupine for manual boring machines

08 Processing centers

09 Boring and dowel insertion

10 Buffer areas for kitting

11 Kitting on trolleys for assembly lines

12 Buffers for sorting and avoiding congestion

13 Automatic sorter/stacker for larger parts

14 Assembly lines

15 Conveyor to shipping

MES technology with 3Tec

Office furniture fabrication, sorting and assembly in batch size 1

- Automatic floor storage for raw and reusable boards
- 2-D cutting of component parts with Schelling FH6 and 2 AH6
- Labels applied to parts automatically
- Buffer for boring
- Automatic edgebanding with 2 single-sided edgebanders three 4-pass edgebanders and one 2-pass
- Automatic boring and dowel insertion
- Sorting for assembly lines

Production data import and preparation

- All data relevant to production is imported from the ERP system
- Production data stored in MS-SQL database
- Planning of production jobs
- Communication with the cutting plan optimizer
- Data preparation for storage system, cutting, edgebanding, boring and assembly
- Edgebander preview and edge material administration
- Handling of reproductions and quick shots

Control system

Inventory management and control of automatic floor storage system

Material flow control

- Tracking of individual parts
- Connections to production machines
- Sorting
- Logistics

Production status display for all production steps

System-wide display elements

- Operator guidance
- Diagnostics and error recovery