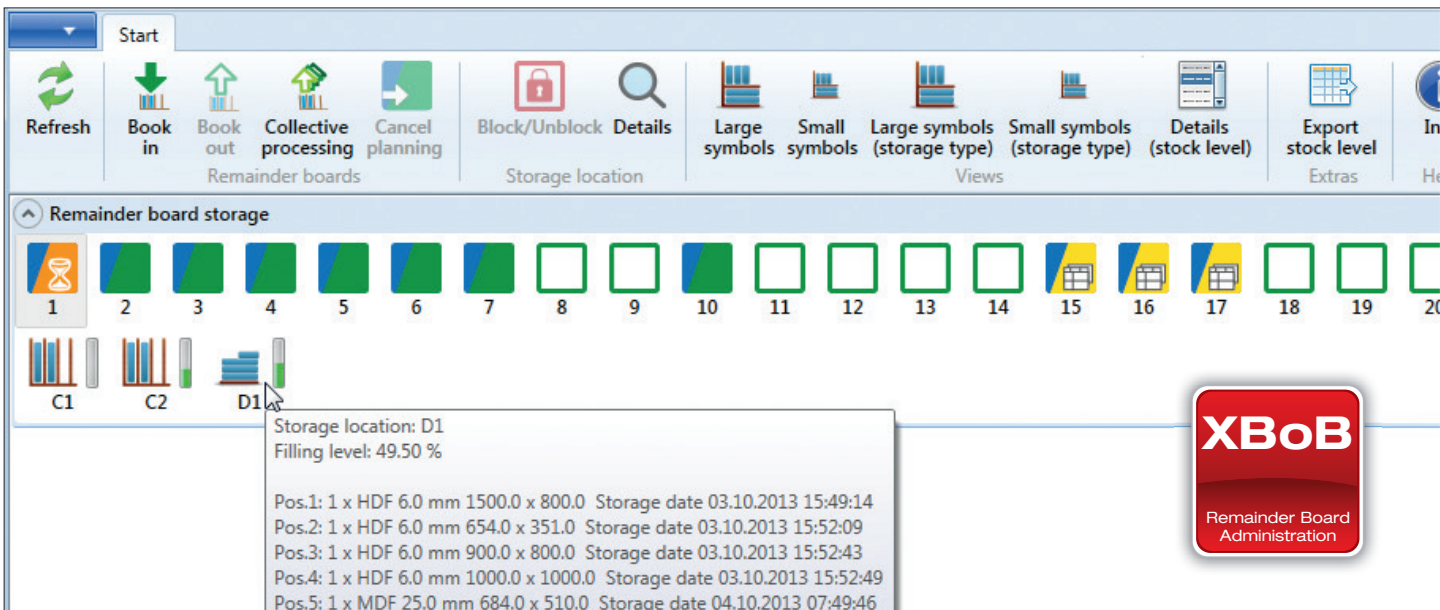


Schelling XBoB

# Storing and managing remainders



The screenshot displays the XBoB software interface. At the top, there is a toolbar with various icons for actions like Refresh, Book in, Book out, Collective processing, Cancel planning, Block/Unblock, and Details. Below the toolbar is a section titled 'Remainder board storage' which contains a grid of 20 numbered storage locations (1-20). Each location has a small icon representing its status. A tooltip is visible over location D1, providing the following information:

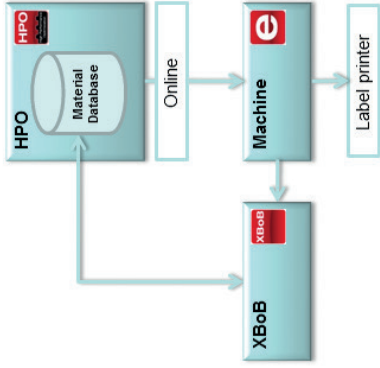
- Storage location: D1
- Filling level: 49.50 %
- Pos.1: 1 x HDF 6.0 mm 1500.0 x 800.0 Storage date 03.10.2013 15:49:14
- Pos.2: 1 x HDF 6.0 mm 654.0 x 351.0 Storage date 03.10.2013 15:52:09
- Pos.3: 1 x HDF 6.0 mm 900.0 x 800.0 Storage date 03.10.2013 15:52:43
- Pos.4: 1 x HDF 6.0 mm 1000.0 x 1000.0 Storage date 03.10.2013 15:52:49
- Pos.5: 1 x MDF 25.0 mm 684.0 x 510.0 Storage date 04.10.2013 07:49:46

In the bottom right corner, there is a red square logo with the text 'XBoB' and 'Remainder Board Administration' below it.

# Program description

**XBoB** (eXtended Board Booking) is the management program for a remainder board's storage facility. It works together with HPO cutting pattern optimisation and the machine's control system to book remainder boards in and out automatically. The corresponding status of a remainder board is displayed in XBoB.

## Overview of program structure



Remainder boards are assigned to storage locations by XBoB and are automatically included in the next cutting pattern optimisation session. During this optimisation process, HPO reserves all available remainder boards which prevents a remainder board being scheduled for processing more than once.

During online transmission of the cutting pattern to the machine, the status of the remainder board used in XBoB is set to 'planned'.

All remainder boards are issued with a label bearing a unique storage position, and are then sorted manually into the remainder board stock.

Whenever the HPO schedules a remainder board for a cutting pattern, its storage position is reported and the remainder board is directed to the saw manually. Once the remainder board has been cut to size it is booked out of the system automatically.

If a remainder board is not used for cutting but instead for some other purpose, a remainder board can also be booked in or out manually.

The application can depict any conceivable form of remainder board stock because the definitions can be specified by the user himself (e.g. range of numbers, storage location, board definition). XBoB shows the current inventory at all times. (Real-time application)

# Function overview

- Management of remainder boards
- Planning, optimisation and processing of a remainder board as a single board.
- Cancellation of planning or booking out of planned remainder boards.
- Automatic booking in of newly created remainder boards during production.
- Manual booking out of remainder boards that are to be used for other purposes than automatic cutting to size.
- Automatic booking out of remainder boards from the remainder board stock by the machine control unit.
- Exporting of the current stock status as a text file (e.g. \*.csv).
- Creation of a notification file with all data from the remainder board used.
- SQL-based database
- Network version
- Unicode version
- Stock can be configured into areas
- Several stock locations can be configured
- Priority control for the assignment of stock locations.
- Dynamic filling of a predefined area paying due attention to the max. fill level and labelling.
- Color coding of current status for usage.
- Spreadsheet view with Sort, Filter & Search functions.
- Display of order in which the remainder board is planned.
- Total orders / schedules can be booked out.
- Manual booking in, optionally into desired storage locations or automatic assignment.
- Taking account of pre-cut sides of a remainder board (less trim cut can be set on this side).
- Remainder boards are released again immediately if not used in the optimisation process.
- Detailed view of stock level

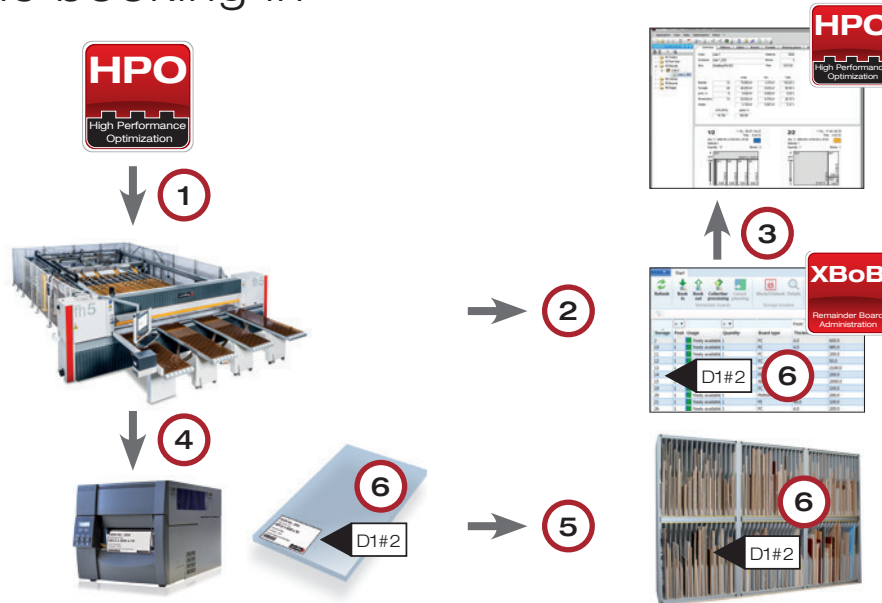
# Stock variants

The stock variants are used to reflect customer-specific criteria in respect of storage locations (e.g. type of storage, material, weight, etc.).

Designation	Description	Illustration
<b>Dynamic upright storage</b>	Remainder boards are stored upright and beside one another in stock.	
<b>Volume storage</b>	Remainder boards are stacked horizontally, and when required on top of one another and beside one another.	
<b>Area storage</b>	Remainder boards are stored horizontally.	

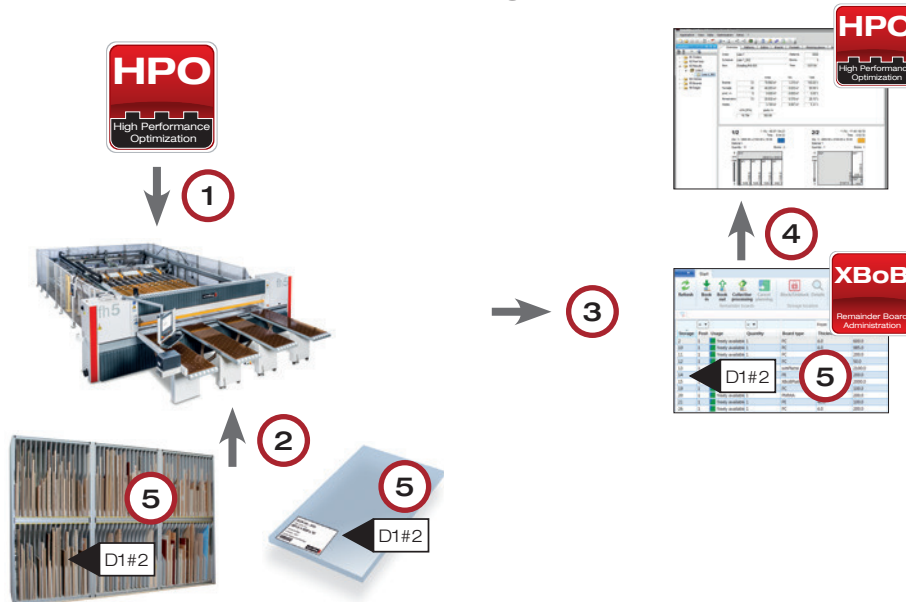
The screenshot shows the XBoB software interface. On the left, there's a table with columns for Storage location, Position, Usage, Quantity, Board type, and Status. The main area displays a detailed view of a storage location, including a diagram of the board layout and various configuration options like Board type, Board thickness, Dimension A (length) x B (width), and Trim cut in front. A 'Manual storage location selection' dialog is open, showing a grid of storage locations and a search filter. The interface is highly detailed and functional, typical of a professional CAD or CAM application.

# Automatic booking in



- 1 The HPO program performs the cutting pattern optimisation process.  
The control commands (NC data) are transmitted to the machine.
- 2 The remainder board is a by-product of the cutting process. A free storage location number is established and the remainder board is booked into the XBoB management program in real-time.
- 3 The data of the remainder board, including storage location number, are saved in the HPO board database.
- 4 The storage location number established is printed onto the label and the label is applied to the remainder board.
- 5 The remainder board is stored manually in the intended storage location.
- 6 Storage location number.

# Automatic or manual booking out



- 1 The HPO program performs the cutting pattern optimisation process. The control commands (NC data) are transmitted to the machine. The status of the storage location in XBoB is set to 'planned'. The storage location numbers for the used remainder boards can be printed out for commission purposes.
- 2 The remainder board is removed from storage manually and is directed to the machine.
- 3 Remainder boards get booked out of the HPO board database automatically whenever the cutting-to-size operation commences.  
 ➔ Alternatively, a remainder board can also be booked out manually.
- 4 The remainder board is booked out of the HPO board database.
- 5 Storage location number.