

In order to repair damaged wooden pallets (1a) as simply, efficiently and permanently as possible, a multi-step method is proposed. Thereby, in a first step, the connector members of the pallet element to be replaced are cut through by means of a band saw and then removed. In a subsequent step, both the partially disassembled pallet as well as the new pallet elements are transferred into an assembly station (18), where the new pallet elements are attached to the pallet (1f) from the top side thereof. Preferably, damaged bottom parts of the pallet, for example a bottom deck board member or a connecting block member, are removed as a module, i.e. in the form of a skid. Such a procedure facilitates the attachment of the spare module from the top side of the pallet. Before the replacement module is attached, preferably the position of the connector elements still present in a top deck board member is electronically scanned, such that the new connector members can be applied, by means of a suitable apparatus, in a position offset to the existing connector members. With the exception of cutting the connector members, all subsequent method steps are performed fully automated, i.e. without any human assistance.