



PDS VERSION 5.7

ENHANCEMENTS IN VERSION 5.7

The new structural analysis in the Pallet Design System™ V5.7© is the most advanced in its 34-year history. Below are some major advancements in V5.7:

- Improvements in the accuracy and reliability of block-class pallet structural analysis.
- Block dimensions are now drawn in order of width, length and height in the **Pallet Specification** and **Production Order**.
- User interface bug fixes and enhancements.

ADVANCES IN STRUCTURAL ANALYSIS MODELING

PDS V5.7 provides the most advanced structural analysis for wood pallets in the 34-year history of PDS. It represents the current state of the art in wooden pallet design and analysis. Part of our commitment to the industry is the continual improvement of the science and technology that goes into PDS. From time to time, it is necessary for the calculation results to change as this new technology is implemented.

PDS V5.7 includes several improvements to the lumber-deck block class modelling. These improvements provide increased calculation reliability and robustness for unusual and highly customized designs. Relative **Safe Load** predictions between various styles of bottom deck configurations are now better represented by the calculations. This allows the user to perform design selection and optimization of block pallets with a higher level of confidence.

Connection stiffness has a significant effect on pallet performance. PDS is unique in that it is the only pallet structural analysis software available that considers connection stiffness and strength in the design of wooden pallets. PDS V5.7 makes substantial improvements to block pallet connection stiffness modelling.

The most significantly affected pallet designs have uni-directional bases. When racked parallel to their bottom decks, they rely solely on the top deck stiffness and block connection stiffness to support the load. Racking them along their weak direction is not optimal but may be required in rare instances.



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In these cases, the enhanced PDS V5.7 predictions result in appreciable changes compared to previous versions. In general, the Safe Load prediction for uni-directional base pallets is much lower than before, but not in every case.

Overlap-base pallets also rely on connection stiffness to transfer loads through multiple layers of boards to the blocks, thus the safe load predictions of these pallets were also affected. Some of these designs tend to benefit from greater connection flexibility to reduce fastener loads and share loads between pallet structural members, resulting in higher predicted safe maximum loads.

PALLET DESIGN HELP

A comprehensive **PDS User's Guide** is built into the software program to help answer questions 24/7 regarding pallet design. It is readily available and accessible from the **Opening Window Start Dialog**, through the **Help** menu, and at the **bottom left of every window** within the design wizard. PDS Users can also search this valuable resource to learn more about pallet design from a variety of topics.

Stay updated on the Pallet Design System™ by opting-in to NWPCA email communications for “*PDS News*.” If you need additional support assistance, contact 703-519-6104 or visit www.PalletDesignSystem.com.