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# Second-hand Racking

Storage Equipment Manufacturers Association Ltd www.sema.org.uk



The purpose of this bulletin is to provide information on Second-hand Pallet Racking Systems.

With the increase in environmental awareness reusing pallet racking appears an attractive means of achieving a storage solution whilst conserving natural resources. Of course, the same safety matters that are relevant to new racking are also applicable to second-hand racking.

It's very easy to lose sight of the fact that pallet racking supports heavy loads. Loaded pallets stored in a warehouse often weight 1tonne or more – this is the same as a small car.

If a pallet falls from 10 metres, it will take a matter of seconds to hit the floor and will be travelling at around 30mph when it does.

Second-hand racking is racking which has been sold to a new user and/or moved from its original location and changed in configuration.

Racking does not have an indefinite life and deteriorates with usage and time. Deterioration will generally show in the form of corrosion and/or damage although damage due to overloading can be very difficult to detect.

Checking racking components for damage is reasonably straightforward and SEMA has a well-established protocol for this which is given in the SEMA Guide to the Conduct of racking and shelving inspections and the SEMA Code of practice for the use of static racking. Checking for corrosion requires a little more effort, particularly checking box type beams where corrosion might take place inside the profile with few, if any, clues on the outside of the beam. Damage due to overloading is problematic to check.

The main challenges with second-hand racking are its provenance and determining load data.

Overloading racking is dangerous whilst incorrect, or missing load notices, are one of the most common reasons that the Authorities issue Improvement notices on racking.

Provenance is the key and provides a detailed rack history. This should explain the rack installation including location, use, configuration, allowable loading, any periods of storage and inspection regime. There should also be a similar explanation for the components, including details of any periods of storage and repairs.

It is important to have the full history of the rack. In the racking industry components might have been value engineered to suit a particular application and whilst some suppliers might mark the product many do not and, without detailed records, this change to the standard design is not known. Similarly, the rack manufacturer might change the design over the years and, often, such changes are unlikely to be apparent from a simple visual inspection. It is also important that the racking is genuine original equipment manufacturer product, which may not be apparent from a simple visual inspection. Such

situations, of course, invalidate load tables for the standard product.

If the rack and component history is known then it may be possible to determine the capacity of the rack in a particular configuration using load tables or, if it can be guaranteed that the load notice on the rack genuinely gives the capacity of that particular rack, then the load notice might be used. However, if the history is not known then determining load capacity is risky.

The most reliable source of load data is the original equipment manufacturer (OEM). When racking is obtained second-hand from a supplier it is likely that any guarantees or warranties from the manufacturer or original supplier will be null and void. Unless load data is provided by the OEM the company supplying the second-hand rack is responsible for the accuracy of the load information and should be aware that such information is covered by laws dealing with product liability and, in particular, latent defects. The latent defects liability period can last for up to 12 years from the date of supply. The company supplying the second-hand rack should be aware that providing the load data constitutes a professional service and, therefore, they should have appropriate Professional Indemnity Insurance. Typically, insurers will require that the company exercise a reasonable level of skill and care and might also include requirements with respect to staff qualifications and company processes when providing professional advice.