

Applications

Turnbuckles are normally used for rigging or tensioning of wires, ropes, rods etc. Turnbuckles are designed for straight or in-line rigging, tensioning or lashing only.

Range

Van Beest offers a wide range of turnbuckles, i.e.:

Load rated Green Pin® turnbuckles; Open body rigging screws generally to DIN1480; Rigging screws with welding ends; Closed body rigging screws; Special turnbuckles for lashing (hamburgers).

Design

Green Pin® turnbuckles are manufactured to ASTM F1145-92, formerly U.S. Fed. Spec.FF-T-791, and have a safety factor of 5 to 1. The Green Pin® turnbuckles are drop forged.

Turnbuckles can be equipped with the following endfittings: eye/eye, hook/hook, hook/eye, jaw/jaw and jaw/eye. All parts are interchangeable, locking nuts are supplied with all sizes.

The forged jaw ends are fitted with bolts and nuts on sizes $^{3}/_{8}$ " up to and including $^{5}/_{8}$ ", sizes $^{3}/_{4}$ " up to and including 2 $^{3}/_{4}$ " are equipped with pins and cotters.

Rigging screws generally to DIN 1480 are available with welding ends and in hook/eye, eye/eye, hook/hook and jaw/jaw combinations.

Closed body rigging screws are available in jaw/jaw, jaw/eye and eye/eye combinations.

Finish

Load rated Green Pin® turnbuckles and closed body rigging screws are hot dipped galvanized. Rigging screws according to DIN 1480 are electro-galvanized whereas lashing turnbuckles are self coloured or can be painted upon request.

Certification

Upon request, Green Pin® turnbuckles can be supplied with a works certificate and a proof load test certificate.

Instructions for use

Turnbuckles must be used for straight or in-line pulling only.

Special attention should be paid to prevent overloading.

While tensioning, the forces on the turnbuckle must not be such that any deformation occurs. In case of deformation, the tension should be decreased immediately and deformed parts should be replaced. Should extreme circumstances or shock loading be applicable this must be taken into account when selecting the correct products to be used for the application.

Closed body rigging screws and commercial open body rigging screws are used for tensioning wires and ropes for minor loads (i.e. rope railings). The WLL values are only indicative, and these products are not suitable for bearing constructions.

For the rigging of wires, ropes, rods etc., Green Pin® turnbuckles and turnbuckles according to DIN 1480 with forged eyes or with welding ends are to be used.

The Working Load Limit (WLL) should be applied in a straight pull only and overloading is not permitted. Nor should side loads be applied, as the products have not been designed for this purpose.

It is required that the products are regularly inspected and that the inspection should take place in accordance with the safety standards given in the country of use. This is required because the products in use may be affected by wear, misuse, overloading etc. with a consequence of deformation and alteration of the steel structure.

Safe use of turnbuckles

Turnbuckles should be inspected before use to insure that:

- the threads of the body and the endfittings are of the same type;

- the body and endfittings are free from nicks, gouges and cracks.

- the threads of the body and the endfittings are undamaged;
- the body and endfittings are not distorted or unduly worn;

Furthermore, it must be ensured that the endfittings are correctly screwed into the body. Always use the locking

nuts supplied to prevent the turnbuckles from unscrewing.

Never replace an endfitting, other than the one designed for the purpose, as it may not be suitable for the loads imposed.

