



Ergonomics approved quality label

Matador EdCar



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1 Introduction

This report contains the assessment for a vhp ergonomics approved quality label for the Matador EdCar. During the assessment of the vhp ergonomics approved quality label, the functional and usage aspects of the product are assessed in terms of compliance with the guidelines for physical load from the Physical Load legislation and widely accepted ergonomic standards. General regulations regarding physical load, including pushing and pulling, also apply¹. The vhp occupational health and safety test is not a safety test.

2 Product: Matador EdCar

The Matador EdCar is specially designed and build for transporting loads of various sizes and formats. A total of 300 kg can be loaded on to the EdCar, spread over 250 kg on the lower platform and 50 kg on the upper platform. The EdCar has a handle height ranging from 100 to 115 cm. The tube diameter of the handle is 32 mm. The maximum width of the EdCar is 59 cm. In this way a Matador EdCar can easily pass through doorways from 60 cm onwards.

3 Features Matador EdCar

The Matador EdCar has the following ergonomic features:

- The handles can be used in a number of different ways. A favourable neutral hand position is possible due to the slightly curved tubes with a relatively large tube diameter of > 3 cm. Manoeuvring can also be done easily by placing one hand on top and one hand at the side of the bar.
- The EdCar has placed the handle at 25 cm distance from the back side of both platforms. This creates extra legroom for the user without the risk of bumping the shins or the risk of hindering the EdCar's movement. As a result, the user can keep his/her arms closer to the body when pushing or pulling.
- The EdCar has smooth-running plastic wheels with bearings, which ensures low rolling resistance and a minimum contact surface with the ground.
- The EdCar is not equipped with a brake system.

¹ Handboek Fysieke Belasting, redactie drs. K.J. Peereboom Eur.Erg. en drs. N.C.H. de Langen, zevende herziene editie, 2016 (Dutch Handbook for Physical Workload, 2016). Concerning pushing and pulling Mital standards are applied (1997).

¹ According to Dutch OSH law ([Arbobesluit 5.2](#)) employers are obliged to perform risk assessment on pushing and pulling at work ([risico-inventarisatie en -evaluatie](#)) including a plan to improve work situations if needed ([Plan van Aanpak](#)). This also includes the obligation to supply works instructions on pushing and pulling for workers (see: www.arboportaal.nl).

- The lower platform is easily accessible for placing loads of various sizes. Good accessibility makes it easier to manoeuvre difficult-to-handle loads.



4 Ergonomics approved quality label



The Matador EdCar has been awarded the vhp ergonomics approved quality label².

The Matador EdCar makes it possible to adopt a good working posture when pushing and pulling and ensures that variation in posture is possible. The position of the hands, in combination with the changeable height and position on the bar handle, contributes significantly to this.

Pushing and pulling the EdCar complies with the standards, even when pushing/pulling the maximum load of 300kg.

² It is advised to improve the EdCar by adding a foot brake on the two back wheels in order avoid the Ed Car to move during loading and unloading.

5 Appendix

Pushing force (kg) while setting an EdCar manually in motion on a low-poled carpet surface. The maximum force used is 12,5 KG (125 Newton) where a 30 kg maximum (300 Newton) is allowed.

