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# Maximum Allowable Load-bearing Capacity on Bumper Bars

## Overview

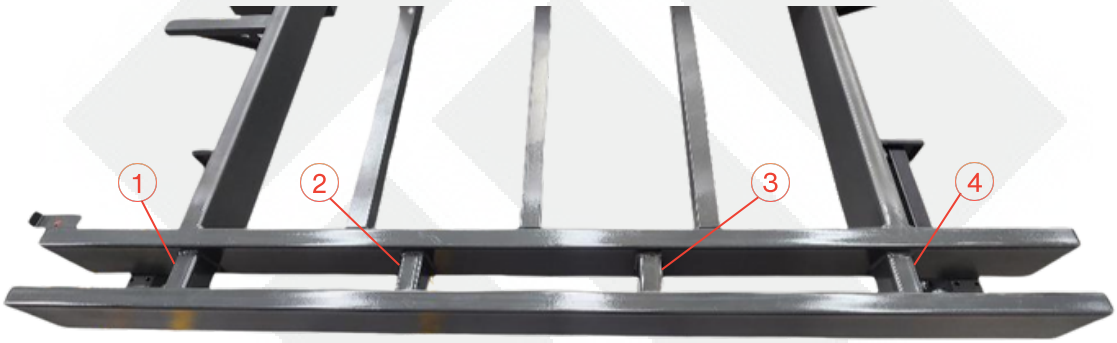
This document provides guidance on the maximum safe additional weight that may be applied to bumper bars, based on the bumper bar mounting method and the number of arms used, which may vary from chassis to chassis. The specified weights include, but are not limited to, spare wheels, jerry cans and holders, bike racks, and similar accessories. Exceeding these limits may result in structural failure, chassis damage, or increased safety and injury risks.

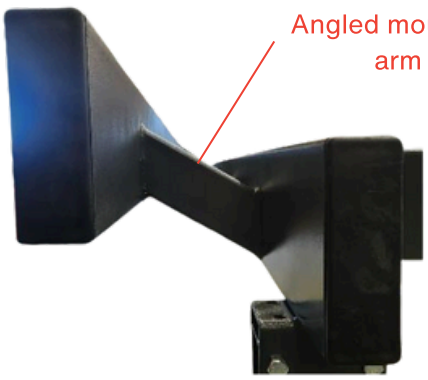
## Load Ratings

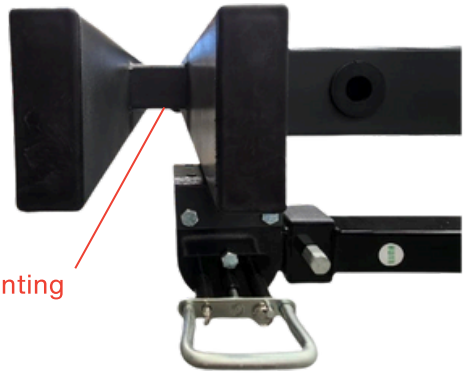
### Method 1: Bumper Bar Welded to Chassis

Bumper bars that are permanently welded to the chassis have a maximum load-bearing capacity of:
**75 kg per mounting arm.**

**Practical example:** If the bumper bar is connected to the chassis with 4 welded connections, the maximum load-bearing capacity for the bumper bar is: 75kg x 4 welded connections = 300kg total additional weight allowed.
This calculation is the same for the straight and angled mounting arms.



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## Method 2: Bumper bars attached with U–bolts and nuts

Bumper bars secured to the chassis using U-bolts and nuts have a reduced load-bearing capacity due to the nature of this fastening method. In such cases, the maximum allowable load-bearing capacity is as follows:
**50 kg per arm.**

Practical example: If the bumper bar is connected to the chassis with 4 connecting arms secured with U-bolts, the maximum load-bearing capacity for the bumper bar is:
50kg x 4 welded connections = 200kg additional weight allowed

## Compliance

- All installations and accessories mounted to the bumper bar must comply with the limits outlined in this document.
- Any modification to the chassis, bumper bar or bumper bar mounting points may invalidate these ratings.
- Always consider the weight you are about to add to the bumper bar and aim to have the weight evenly distributed across all connecting arms.