

FAQ – Cobot Lift Safety

Being at the forefront of technological development and innovation, Cobot Lift is pushing the boundaries of what is possible in the robotics world. This naturally raises many questions, particularly in the area of safety. Please get answers to your questions below.

What is Cobot Lift?

Collaborative robots also known as cobots are robots of the future. Humans can safely work alongside with collaborative robots in shared spaces often without fence.

As such, it is delivered with the Incorporation Declaration. The main reason of this is that Cobot Lift is characterized as only a platform, which add strengths to collaborative robot. On this platform, you are required to attach an end-effector. Unfortunately, we don't possess information about what should be lifted, how should it be lifted and what is the complete installed automation solution. Therefore, we can't conduct risk assessment. However, in order to assist other professionals in performing on-site risk assessments (leading to CE certification), we have developed certain guidelines on how to evaluate possible risks with Cobot Lift installations. This is by no means is complete, but we can help you with performing your job with CE certifying the solution.

Is safety the same with Cobot Lift?

Yes, when a Cobot meets resistance it's built to get stopped. This is called a safety stop. Utilizing latest innovative robotics technologies Cobot Lift will go into safety stop as easily as when only running with cobot. Sometimes Cobot Lift even add to this sensitivity as we are moving higher loads.

Is any fencing required?

Like with other Cobot Lift installations, it depends on the type of task, which is carried out. For example, if Cobot Lift's collaborative robots is working above 2 meters of height, a fence would be required to ensure worker's safety in case if a load drops down. Therefore, we always recommend to conduct a risk assessment of the whole installation.

Is Cobot Lift not overloaded when it lifts several times its designed payload?

No, a Cobot Lift tool combines the strength of a vacuum tube with the intelligence of cobot. We measured forces with joints of cobot when combined with Cobot Lift. Despite carrying several times a designed workload, Cobot Lift is not using a full lifting capacity it has been designed for. Majority of the weight carried out by a vacuum tube lift instead. This topic was one of the key investigation points done by Universal Robots prior to our UR+ certification.

Is Stationary or Mobile Cobot Lift delivered with CE certification?

Stationary and Mobile Cobot Lifts are designed to be incorporated into machinery or to be assembled with other machinery in order to constitute machinery covered by directive 2006/42/EC.

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What standards and directives is Cobot Lift in compliance with ?

Machinery Directive 2006/42 EC, Annex II B (Declaration of Incorporation)

Technical Standards

ISO 10218-2, Robot Systems and Integration

EN 12100: 2010, Safety of Machinery

EN 13135 + A1, Cranes, Safety, Design, Requirements for Equipment

EN 1012-2 + A1, Safety Requirements, Part 2: Vacuum Pumps

EN60204-1, Safety on Machinery, Electrical Equipment

Technical Specification

ISO/TS 15066:2016, Robots and Robotic Devices, Collaborative Robots