



# COAM

Quality Through Competence

N° 14 - 2022

## COAM SLIDE & VIDEO MAGAZINE



Engr. Marco Santel

## Editorial by the technical director of COAM Hub

Welcome to the usual appointment with our COAM Magazine, the diary on which we collect, write and share notes on the vertical handling and transport of things and people.

The modern world no longer moves only horizontally, walking or running with feet or wheels on the ground, but has found and continues to look for other ways of traveling.

Man has always dreamed of flying and ascending, not only to the sky, but also simply to the upper floors of a watchtower rather than an apartment building, a hospital and so on.

But he also always dreamed of carrying objects vertically without having to use human arms and muscles or the strength of animals to do so.

To ascend man has invented hot air balloons, planes, missiles, spaceships and who knows how many other means he will still invent, including teleportation.

The means used for vertical travel have always inspired and continue to inspire literature, cinema and, last but not least, the dreams of children who will surely be astronauts when they grow up.

Traveling to the sky or in any case ascending journeys represent a limit that humanity has just begun to overcome with means or vehicles that seem innovative to

us but day after day we discover instead to be almost primitive, so fast is the technological innovation of lifting and vertical travel means and I am not referring to the unique and fascinating journeys to the sky and beyond.

But there is a means for vertical travel that is usually not told in the great adventure stories but only, and rarely, in some television sitcoms or in some movie or novel scene, mainly about love.

I am talking about lifts and elevators, which are the most used means of travel and vertical transport on planet Earth and are now competing with the most widely used means of transport such as trains, buses and other means of horizontal transport.

On this planet we are many and more and more numerous, therefore the vertical transport of things and people, following the construction trend, will increasingly be a topic to be taken into consideration for those who design, manage and supervise the movement of people and goods.

We at COAM are "always on the spot", so to speak, and we continue to bring new ideas and technologies to the market, especially when it comes to hydraulic lifts and elevators, a subject for which we are renowned all over the world.

Engr. Marco Santel



## Special on external hydraulic lifts

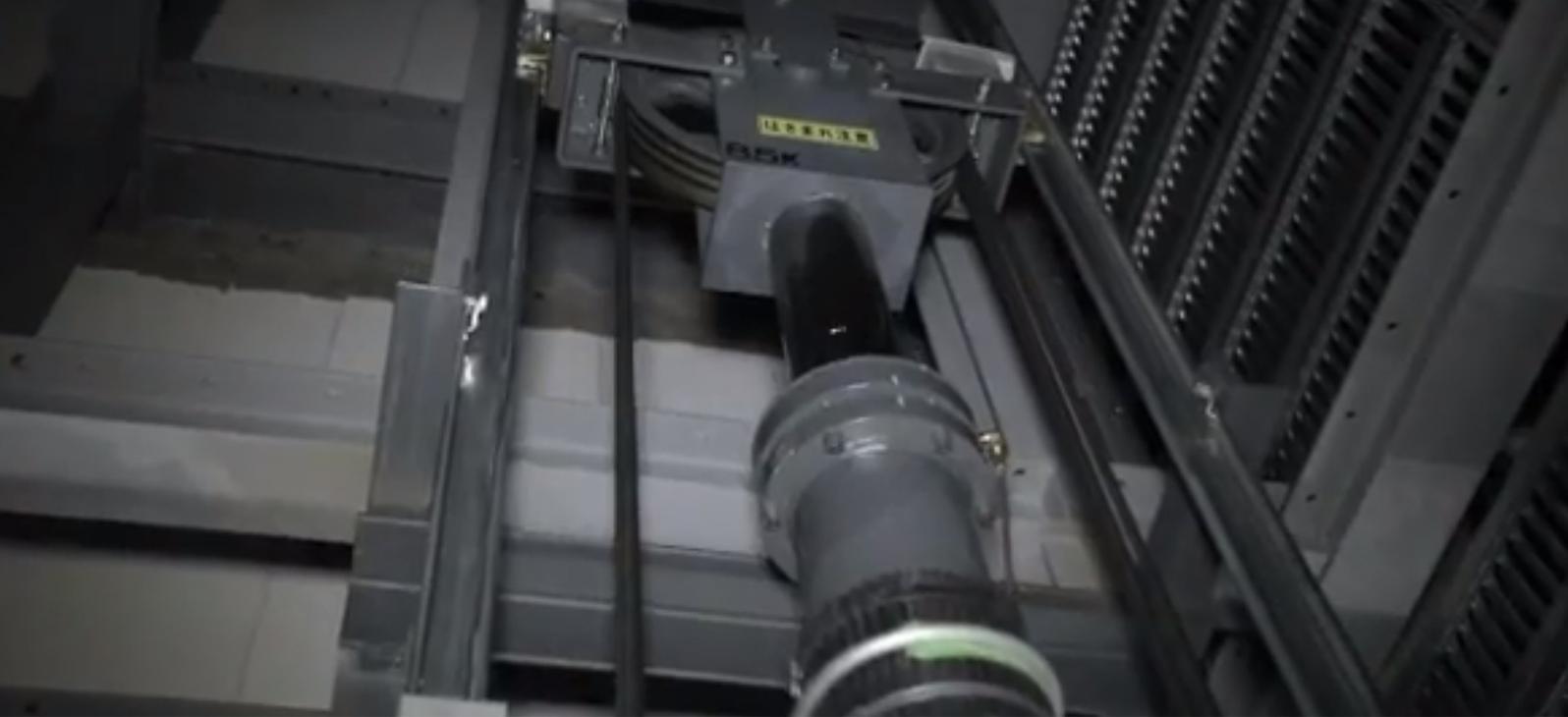
When ideas overcome aesthetic and logistical problems with increasingly innovative solutions.

The hydraulic lifts are seeing renewed interest in them thanks to the fact that the system does not require special structures and is perfectly integrated into buildings of any type and style.

In the video we are presenting, the company Vertis with an animation simulates the installation and use of a freight elevator outside an industrial / commercial building.

▼ Hydraulic Lift Working Animation





## The highways for vertical travel

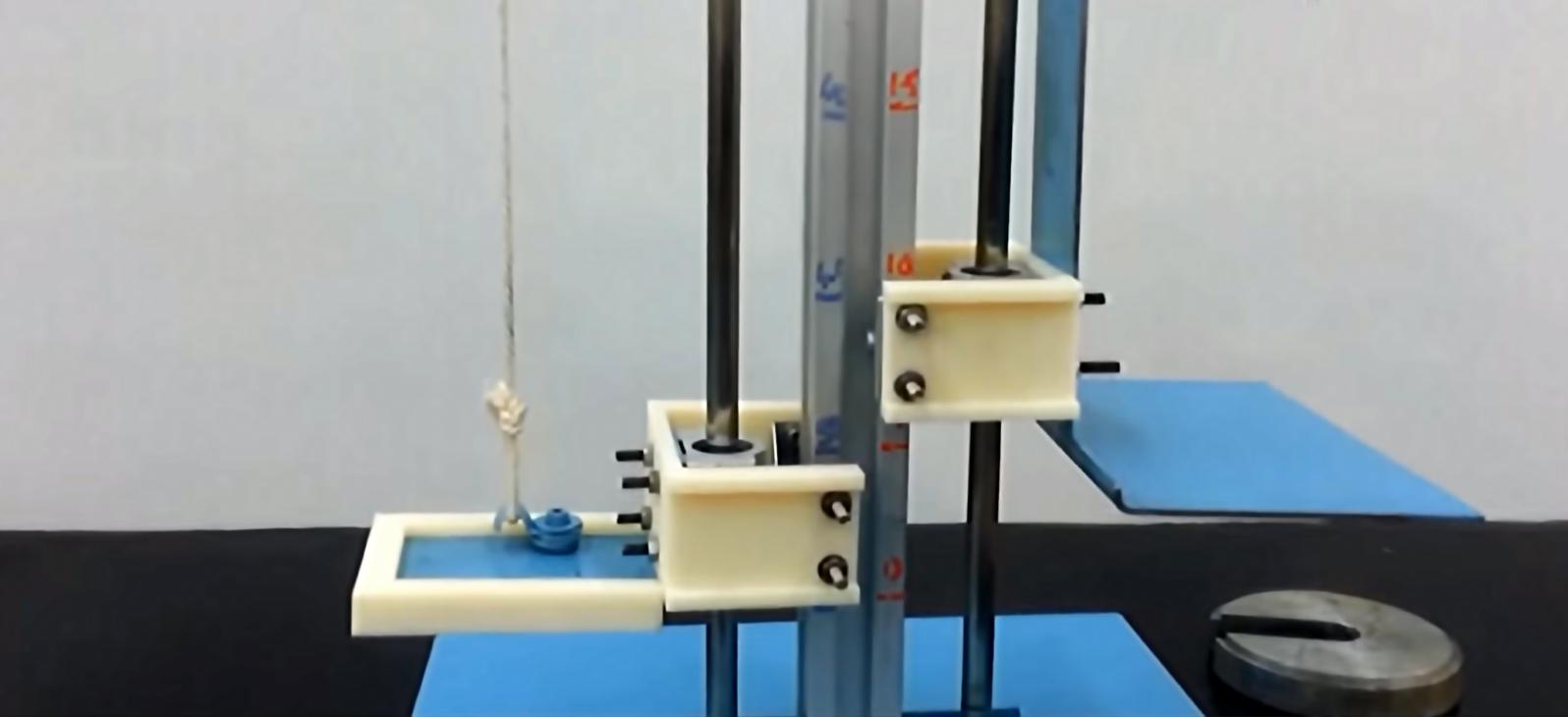
Lifts and freight elevators are the highways for billions of vertical journeys that take place on our planet every day.

You don't need to go into space or take off with an airplane to be a vertical traveler, you just need to use any service offered by a lift or use a freight elevator, the important thing is that this happens in maximum safety and comfort.

This video shows the basic structure of a hydraulic lift; in addition to safety, the simplicity of the system that this type of elevator can offer for the billions of vertical journeys occurring on Earth every day is amazing.

▼ Hydraulic elevator basic structure operating principle





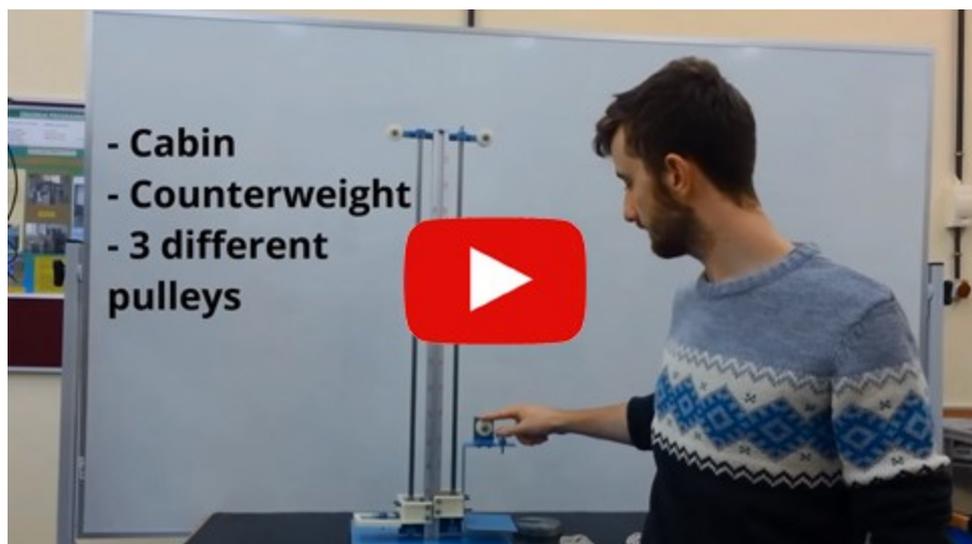
## How does an elevator work? Explanation of the pulley lifting system

The COAM company specializes in the production of components for hydraulic lifts, but at the same time is the head of a group of companies that deal with lifts in general, in particular the supply of products and technologies for the construction of electric and special lifts.

In fact, the components of the COAM are found on several of the lifts operating in the most prestigious or curious locations in the world, which is why our interest in the subject of lifts is at 360 degrees.

In this very interesting video, with the help of an elevator prototype we explain the difference between different pulley lifting systems and why real lifts use 1 turn (direct) pulley systems.

▼ How does an elevator work? Pulley system explained





**DELAWARE  
ELEVATOR  
MANUFACTURING**

## The importance of communication

Communication is always important, especially when a company that deals with lifts and freight elevators wants to explain to the public some procedures for both assembly and assistance, repair or replacement of components.

In this interesting animation created by the company Delaware Elevator, we see an example of the replacement of underground hydraulic jacks for elevators.

▼ Replacing and working with Underground Hydraulic Elevator Jacks





## The concept is good but safety must be safeguarded

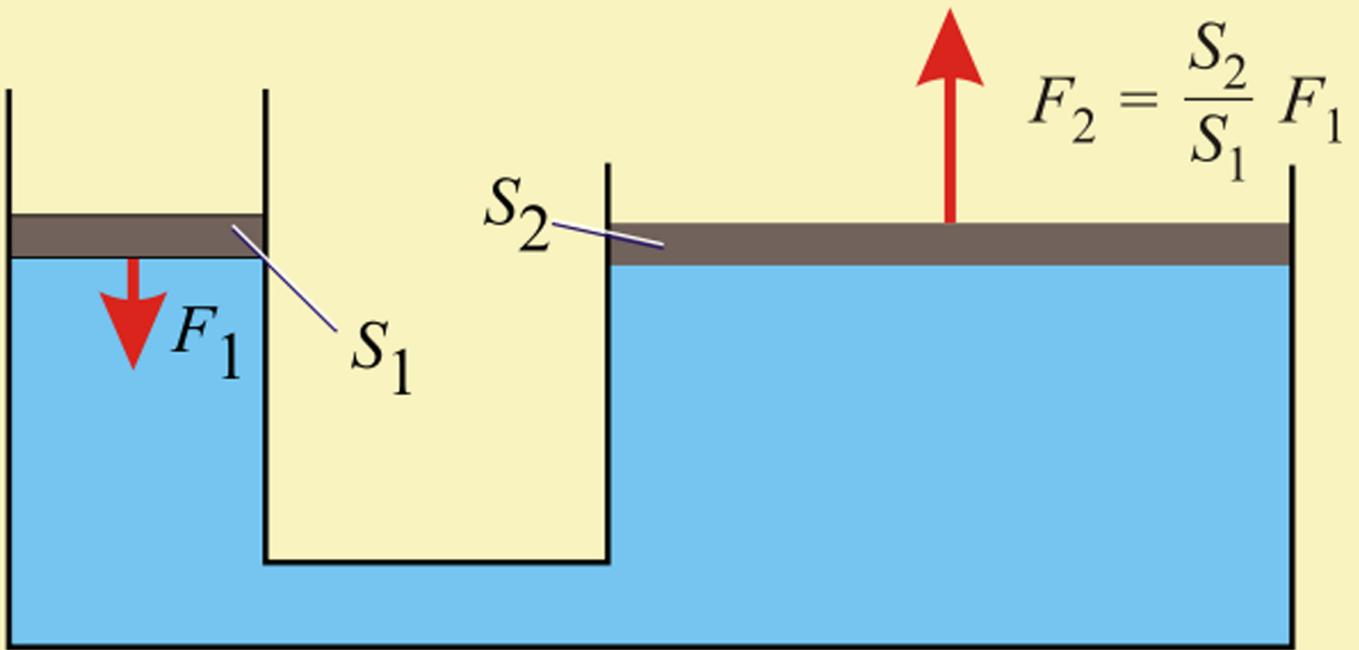
Hydraulic lifts with their simplicity have a very high degree of flexibility, they are suitable for installation in many architectural contexts.

In the video that we present below, we see a small and particular hydraulic lift installed outside a house, a very unique solution.

Obviously we must never lose sight of safety even in the choice of the installation context.

▼ Home hydraulic lift





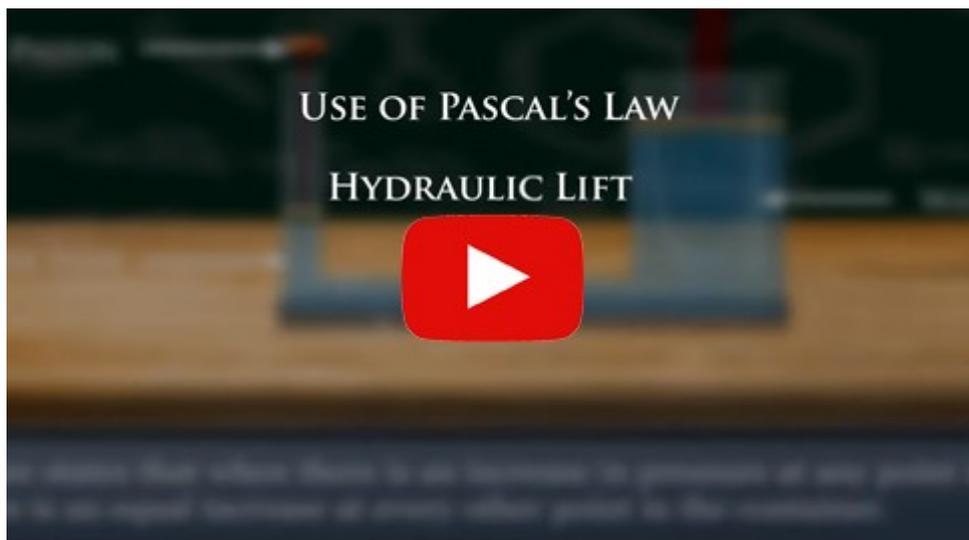
## Lifts and Pascal's Principle

Pascal's principle, or Pascal's law, states that in a fluid at rest in a closed container, a pressure change in one part is transmitted without loss to every portion of the fluid and to the walls of the container.

The main application of this law is the "hydraulic press" - a device composed of two cylinders of different sizes, therefore of different surfaces, connected to each other - which acts as a force amplifier, which is the basis of the hydraulic lift.

In this interesting video, edited by Science Projects whose Youtube channel has many subscribers, we see the practical use of this principle in a hydraulic lift.

▼ Use of Pascal's Principle- Hydraulic Lift





## A trip to one of the most famous buildings in the world

We are talking about the Empire State Building, a skyscraper built in an art deco style, located in the Midtown district of Manhattan, New York.

This skyscraper is one of the major symbols of the city, 443 meters high (including antenna), it was the tallest building in the world between 1931 and 1967.

Obviously we could not fail to focus our eyes on the OTIS ReGen elevators installed and with which through this video of The Elevator Explorer we will go up and see the Big Apple's panorama.

▼ Going Up - Empire State Building OTIS ReGen Elevators





## One of the most beautiful trips you can take in an elevator

The lift, in addition to being useful for getting to the desired floor, can be an educational show and a fun means of entertainment at the same time.

Look at this exciting vertical journey that on its way shows the evolution of the landscape in 500 years of history and then a truly fantastic journey, as if you were riding a drone. It is an example of using the time spent in the elevator in a fun and at the same time instructive way.

Enjoy the ride in this video posted by New York Insights - One World Observatory at World Trade Center - Elevator Ride.

▼ One World Observatory at World Trade Center - Elevator Ride





COAM House Organ dedicated to information about technologies, sustainability, solutions, design and events in the area of the vertical lifting of people and goods through the use of hydraulic elevators and car lifts. Review of videos, information and images from all over the world.

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**Notes:** In Coam Hub periodic webinars dedicated to vertical transport technologies are waiting for you. Participation is for operators in the sector in <https://www.coamhub.it> - the subscription is free.

Do you want us to talk about you? Tell us what you're doing, which technologies you use and which solutions you present in the elevator area and in the vertical lifting of people and goods.

Technicians, designers, entrepreneurs and company managers who wish to be contacted to illustrate solutions, products, projects and offers for the webinar or for communication campaigns towards B2B market can contact the editorial office. Interviews, articles and editorials are free and published at our discretion.

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