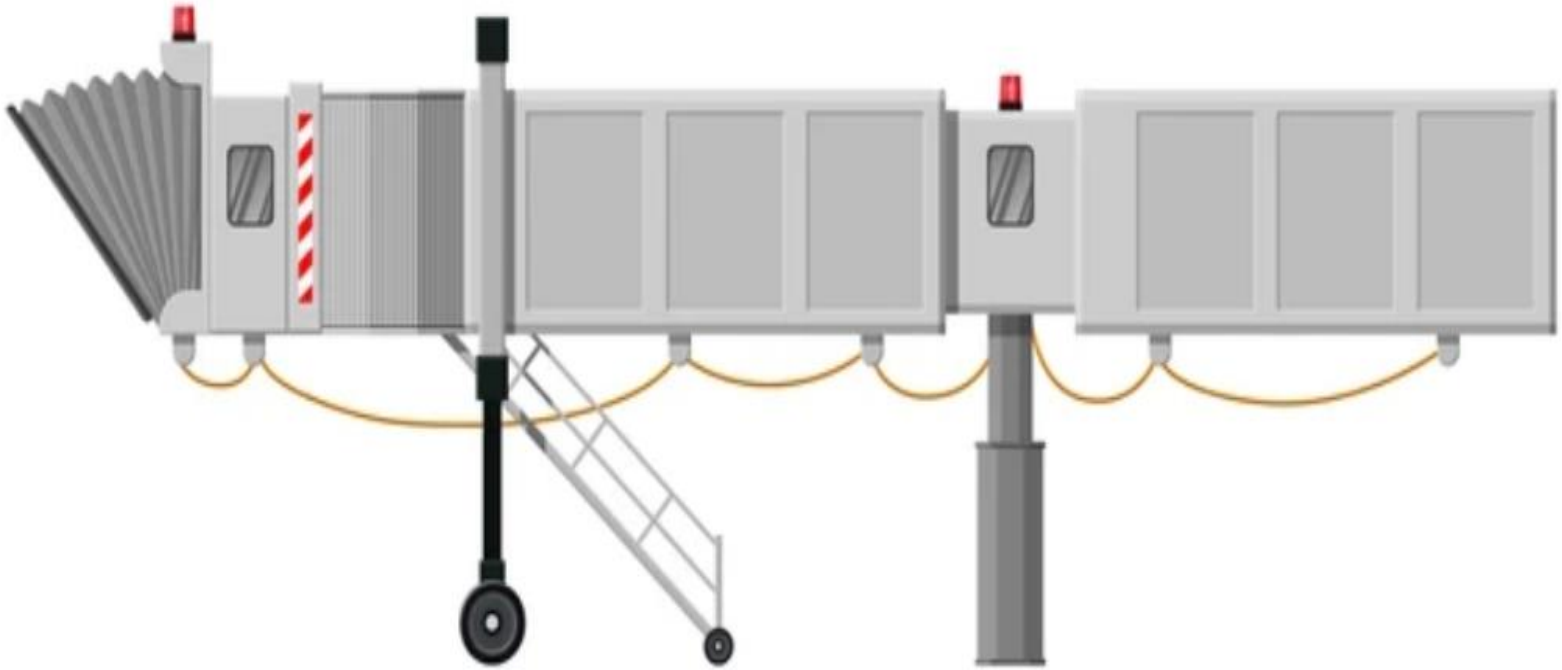
WELCOME

AEROBRIDGE MECHANISM



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INTRODUCTION

is an enclosed, movable connector which most commonly extends from an airport terminal gate to an airplane, and in some instances from a port to a boat or ship, allowing passengers to board and disembark without going outside and being exposed to harsh weather. Depending on building design, sill heights, fueling positions, and operational requirements, a aero bridge may be fixed or movable, swinging radially, andextending in length. The aerobridge was invented by Frank Der Yuen.

History

- United airlines tested prototype in 1954
- Air Dock (prototype)
- Operating model 1958
- Aero gangplank (woking model)
- Invented by frank der Yuen

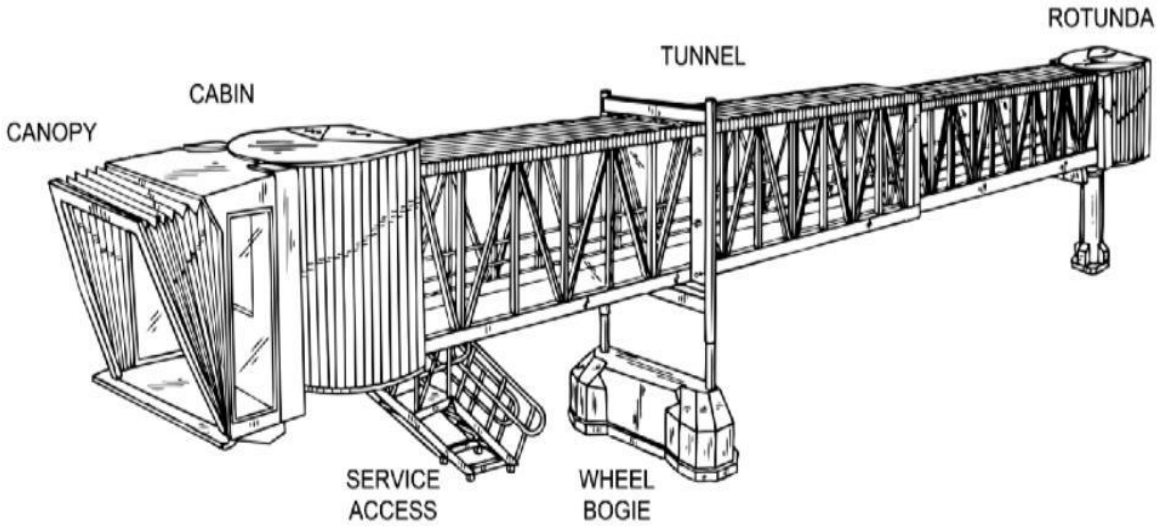
USE OF AERO BRIDGE

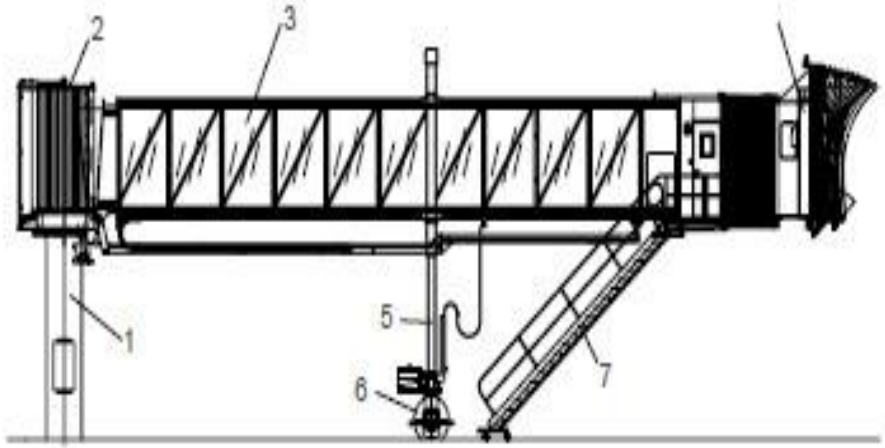
1. To Ensure the comfort of passengers
2. To Resist the harsh whether
3. To Ensure the Comfort of Differently Abled Passengers
4. To Attract large airline company's
5. Advertisement And Marketing

Parts of Aerobridge

- Canopy
- Cabin
- Elevation system
- Drive system or Bogie
- Telescopic tunnels
- Service access
- Rotunda

Structure of Aero bridge

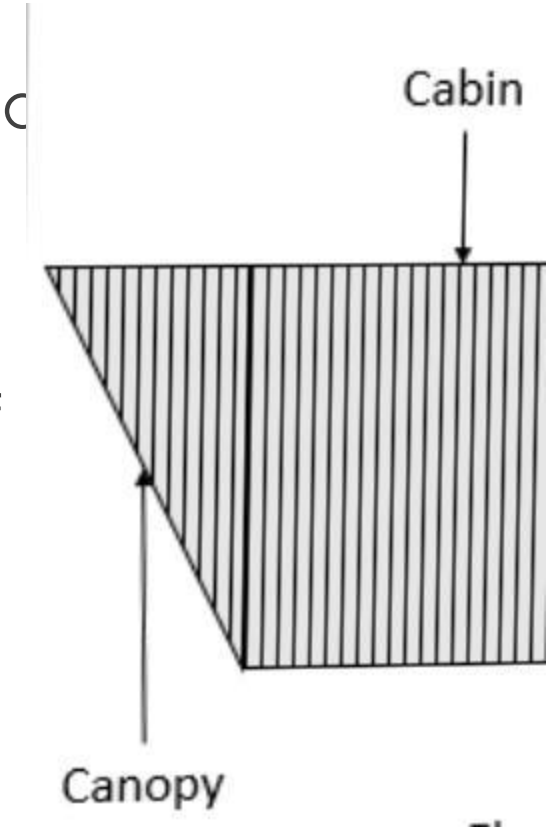




1. Support column
2. Rotunda
3. Tunnels
4. Cabin
5. Elevation system
6. Drive system
7. Service stairs

Canopy

- Fabric materic
- Fire proof
- Flexible
- Wether proof

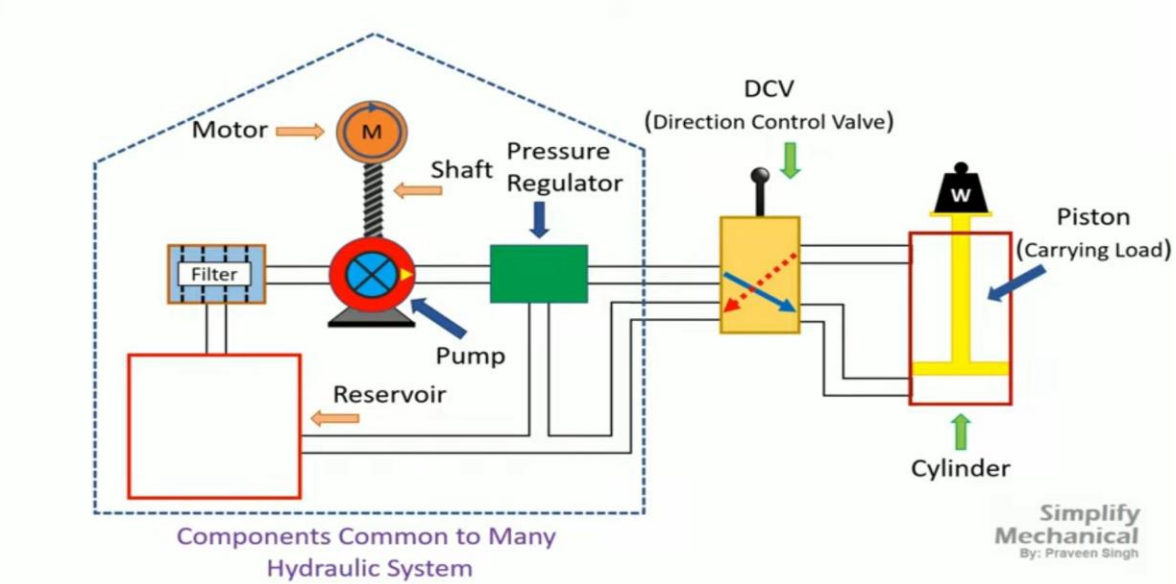


Cabin

- Jet bridge operator
- Control system
- Cabine safety door
- Cabin Traffic light
- Auto leveller
- Safety shoe

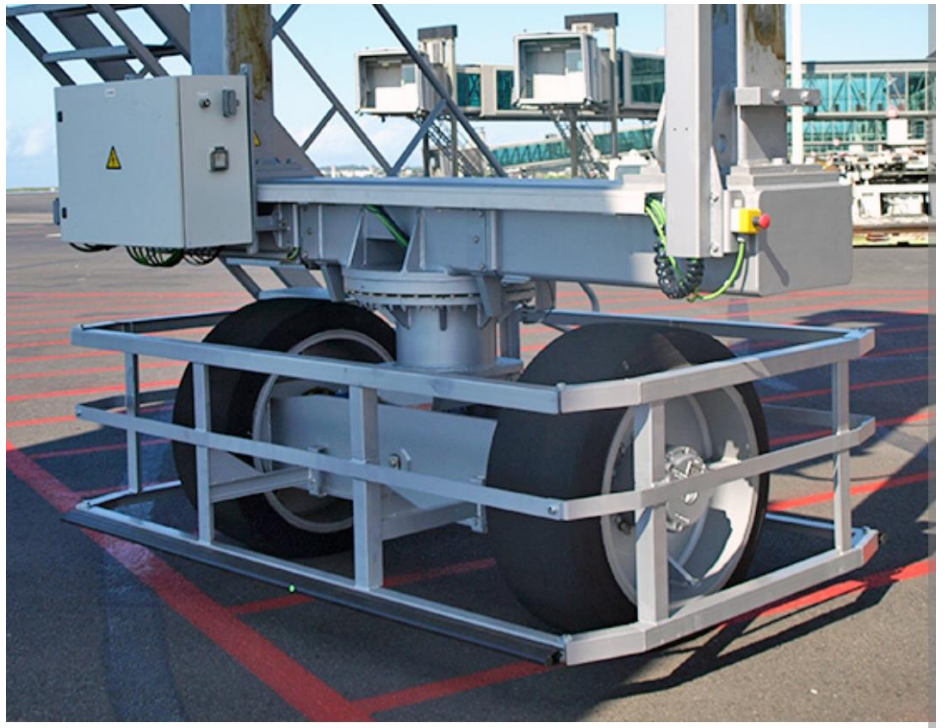
Height adjusting system

- **Hydraulic elevation system**
- **To adjust the height of the aero bridge**
- **Proper maintanence required**



Drive system

- Provide movement to the tunels
- Two havy motors used
- Solid rubber tyers
- Emergency stop button



Tunnel

- Telescopic tunnels
- It can shrink and expand
- High quality steels used
- Passenger walking area

Service access

- Easy access to maintanence work
- Easy access to the cabine
- Emergency exit
- Light and siple design
- Strong havy duty spinning wheels

Rotunda

- It helps to rtate
- 90 degree clockwise and anticlockwise
- Connected to airport terminal
- havy load carrying part

Advandages

- Provide service in any conditions
- Protect from harsh whether
- Provide security for passengers
- Provide good service to the passengers
- Congestion at the airport Will be reduced
- Reduce time lag
- Reduce man power

Dis Advantages

- It allow one aircraft at a time
- High cost
- Trained operator required

Applications

- Used in airports
- Working temperature -45 °C to 80°

Applications

- Used in shipyards
- Also astronauts used to enter space craft

Future scop

- Implimet advanced digital system
- Implement AI systems

Conclusion

The aero bridge provide service in Any harsh wether conditions . It helps the passengers to walk comfortably to the terminals. It provide and ensure the security of the passengers to avoid harsh wether conditions and it also provide faster goods transfer. This is used in corona time for transfer the passengers to the isolated area. Aero bridge will use in evry new airports

Reference

https://youtu.be/WkL7jZZd5xk

https://en.m.wikipedia.org/wiki/Jet_bridge

THANK YOU