

 **LISEPRO**<sup>®</sup>  
FLIGHT INDUSTRY

*presents*

*training systems for*

**MILITARY and SPECIAL FORCES**



*science for a better world*

*Efficient training for special forces and military sports team.*



LISEPRO is the most experienced vertical wind tunnel manufacturer for the army. We have been working with military clients for more than 15 years. Our unique product range includes open-air, wall-to-wall, and recirculation tunnels, which allows meeting different training and budget requirements



## **ARMY DEVELOPMENT**

Professional paratroopers are an essential part of every army. So far, the field training of qualified paratrooper units has been high-risk, complex, time-consuming, and expensive.

A vertical wind tunnel provides free-fall conditions in a controlled environment. The use of a wind tunnel significantly improves the safety of training, skill advancement, time and cost-efficiency.

## MENTAL SKILLS

*In most cases, skydiving is more about mental than physical capabilities. From managing fear of jumping from airplanes to focusing on very specific tasks, it requires strong and specific mental skills. These skills can be efficiently trained in wind tunnels.*

- \* *Fear management and stress resistance.*
- \* *Plane exit training with LISEPRO B.A.S.E. jump chamber.*
- \* *Training of extreme scenarios during day or night time.*
- \* *Time management training for HALO & HAHO jumps.*
- \* *Decision making under stress.*



## PHYSICAL SKILLS

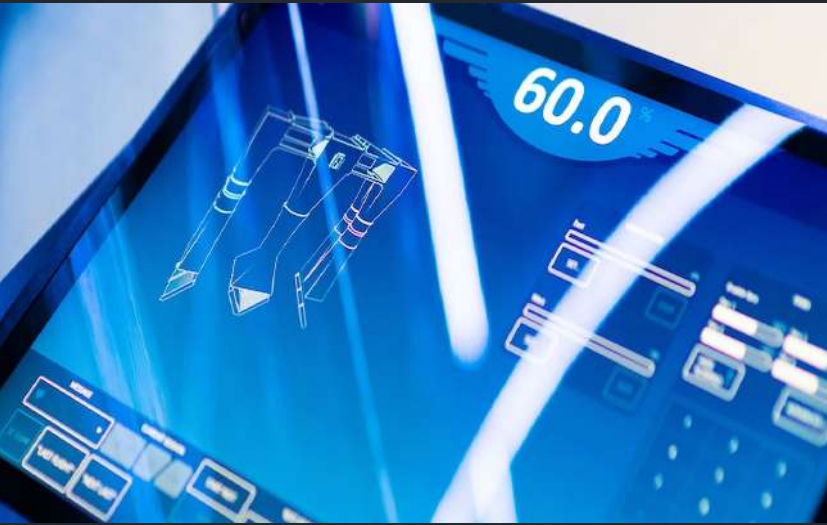
*The more you progress on the path of skydiving, the bigger the importance of physical skills. Workouts in vertical wind tunnels can be performed for unlimited flight time in a safe environment and any weather conditions.*

- \* *Basic and advanced free-fall skills training.*
- \* *Advanced physical coordination, vestibular system, and reaction time.*
- \* *Team synergy and communication in free-fall.*
- \* *Full-gear skydive simulation*

## EFFICIENT COACHING

*LISEPRO tunnels are equipped with cutting-edge airflow and video management systems. This allows learning from mistakes and improving overall skills in a time-efficient manner.*

*Multiple cameras from different angles are filming every flyer. It is possible to analyse performance instantaneously, as the video capturing system ensures flyer identification, tracking, and playback options.*



## WE OFFER



### *Vertical wind tunnel*

*Vertical wind tunnel technology (existing model or custom built tunnel), and its installation outdoors or indoors.*

### *Special training for instructors*

*Full instructor training course to ensure safe and professional tunnel operation.*

### *IT system*

*Our specially designed IT system for the military includes flyer flow management, video recording, and video analysis.*

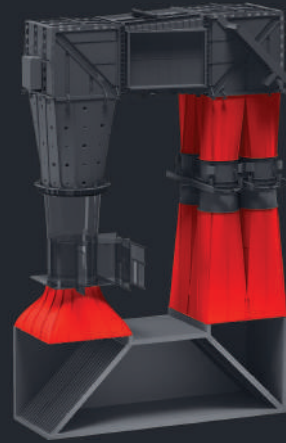
### *Flight equipment*

*Full range of flight equipment for flyers including flight suits, helmets, and goggles.*

### *Technical training*

*Technical manager training for independent operation and maintenance of the wind tunnel.*

# LINEUP



<b>Type</b>	<b>Recirculating</b> Double	<b>Recirculating</b> Single
<b>Infrastructure cost</b>	1,5 - 2,5 million €	1- 2 million €
<b>Sizes</b>	14+, 17 or 21 feet	14+, 17 or 21 feet
<b>Outright Ventilation</b>	<b>YES</b>	<b>YES</b>
<b>Active Cooling</b>	<b>Optional</b>	<b>Optional</b>
<b>Noise level</b>	50 - 55 dB	50 - 55 dB
<b>Wind Speed</b>	270 - 300 km/h	270 - 300 km/h
<b>Speed Reduction</b>	up to 2,15	up to 2.15
<b>Glass height</b>	8 - 18 m	8 - 18 m

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### ***Tunnel maintenance and monitoring***

*Optional on-site/online operational and technical support as well as regular maintenance visits.*

# Flight Chamber

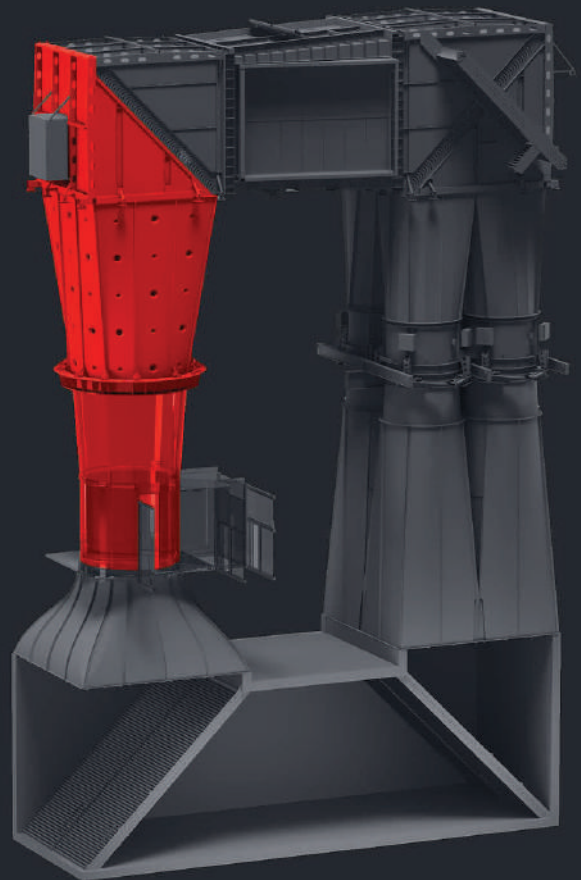


*Wind tunnel's Flight Chamber is what visitors think of as a wind tunnel itself, a space where people fly. Striving to deliver highest levels of safety and comfort to fliers we rethought every part of the flight chamber*

*Revolutionary safety net made of low-drag steel cables absorbs the impact force where it's needed the most - at the outer edge of the flight chamber Padded entrance prevents traumatic injuries even during high-speed collisions and maintains even airflow in the chamber.*

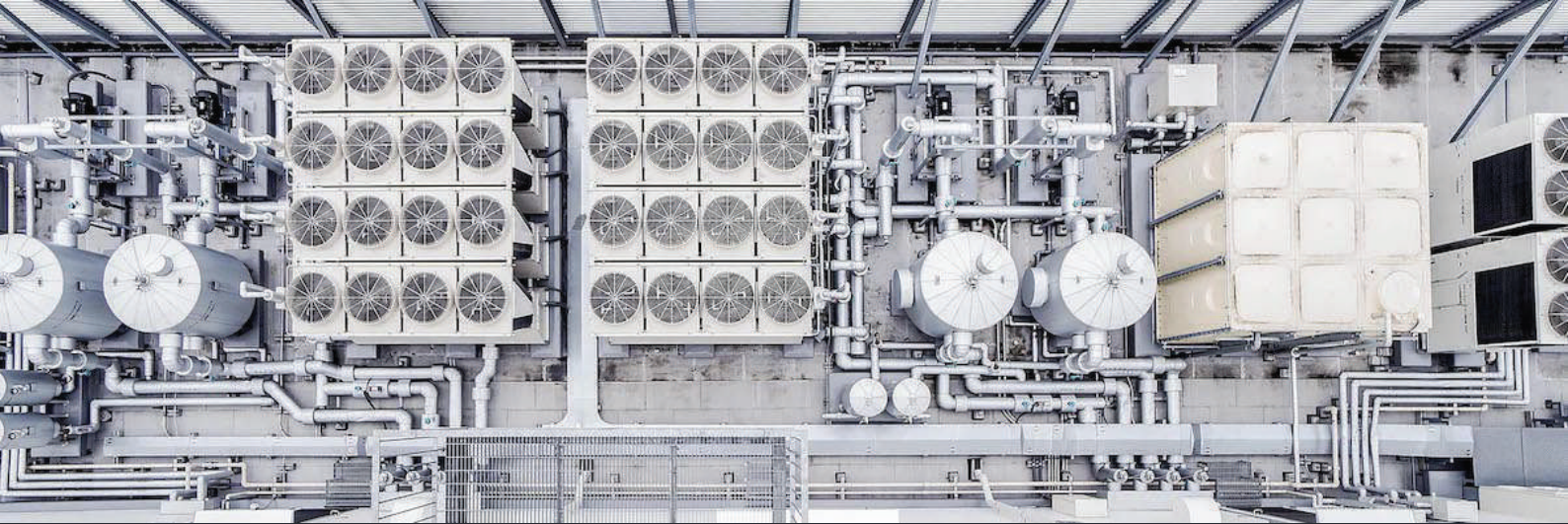
*TT signature conical glass frameless section, allowing for twice as much visible flying space with no compromise on safe speed reduction\* Perfectly round multilayer noise-absorbing glass chambers and noise-free experience for spectators*

<i>Chamber height</i>	<i>24 m 79'</i>
<i>Glass height</i>	<i>8 m 26'</i>
<i>Minimum diameter</i>	<i>4.5 m 14'9"</i>
<i>Airspeed reduction *</i>	<i>2.12x</i>



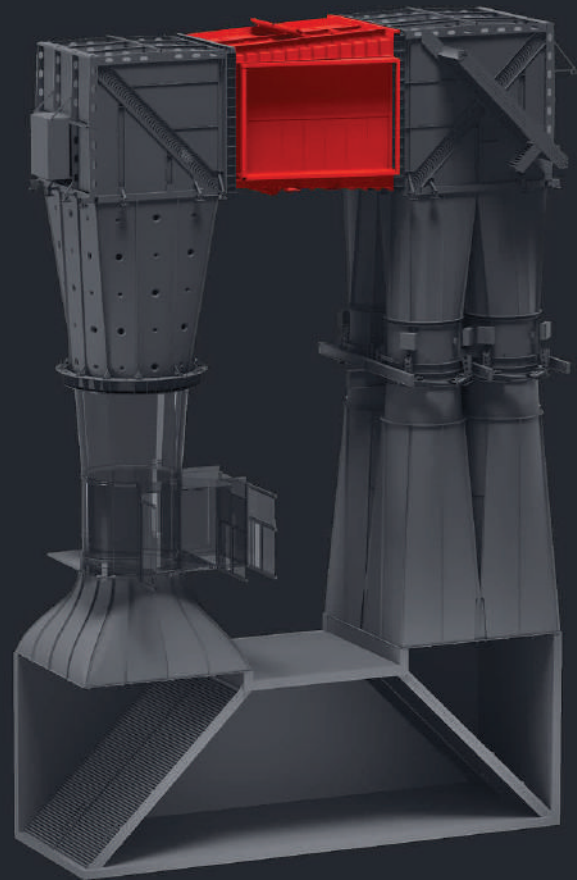
*\* Critical safety feature eliminating high-speed accidents possibility. Speed difference between the levels of Safety net and below 1-st turning vane*

# Climate Control



## Ventilation

*Our wind tunnels are equipped with outright ventilation that provides effective air exchange and airflow cooling without additional costs associated with HVAC appliance. Ventilation louvers replace up to 20% of circulating airflow volume with fresh air efficiently cooling the system in outside temperatures below 30C° leading to total energy consumption reduced by up to 30%.ne*



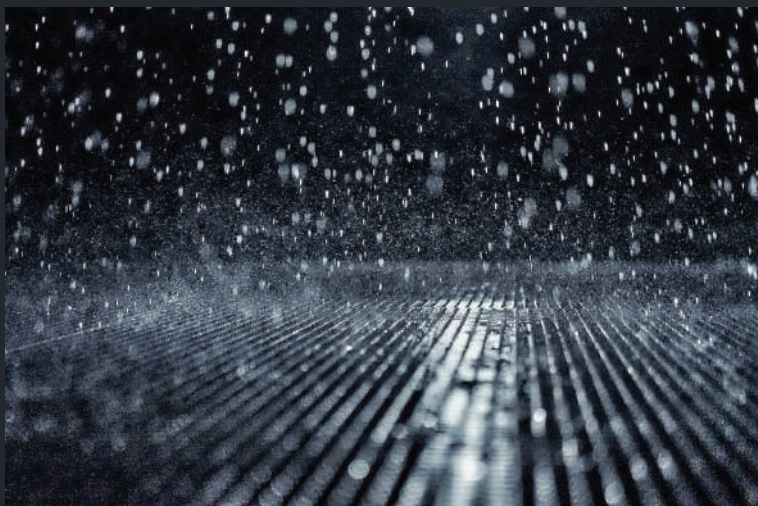
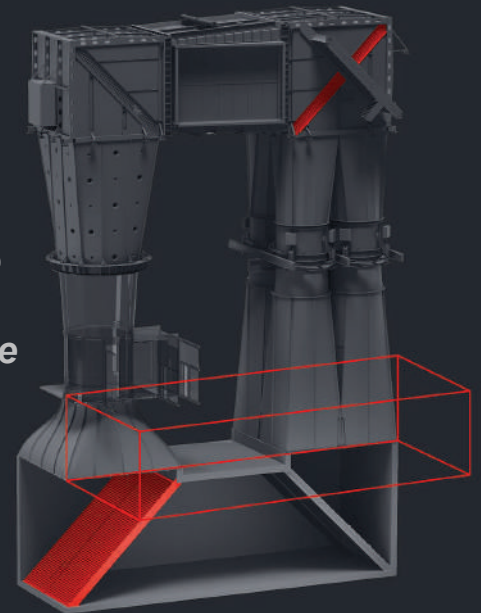


# Active Cooling System



*LISEPRO cooling system relies on uniform airflow cooling via turning vanes assembly. Unlike other wind tunnel technologies in our tunnels cooling fluid is supplied from centralised HVAC systems directly in to the hollow turning vanes acting as heat exchangers. This approach eliminates turbulence occurring if cooled air is injected in the airflow with conventional style systems.*

*Wind tunnel with cooling system can be operated in any extreme climates and virtually inaudible from the outside making it possible for the facility to be located in close proximity to residential areas or any others where outside noise emissions are undesirable.*



*For special purpose and extensive psychological training LISEPRO's wind tunnels may be equipped with severe weather simulation system, introducing heavy rain, low visibility, humidity and lightning within the flight chamber. In combination with advanced cooling system and aircraft hull installed at the BASE-chamber these systems will prepare flyers for extreme weather conditions.*

# Additional Options



## **BASE Jumping Chamber**

*Located at the top of a wind tunnel so-called BASE-chamber is an essential tool for professional skydiving training, technically it is another entrance to the flight chamber making it possible to practice controlled aircraft exit.*

*Due to 2x windspeed reduction at the door LISEPRO's BASE-chamber is the only one suitable for training with stabilising parachute significantly improving safety of such training. On demand, base chamber may be decorated with aircraft interior and equipped with comprehensive set of automations and safety systems*

*The future is in the skies!*





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