



HAILO WIND SYSTEMS

PRODUCTS





*Hailo Wind Systems
stands for outstanding
quality, which is guaranteed
by every single employee!*

*Laura Gross
(Customer Service)*

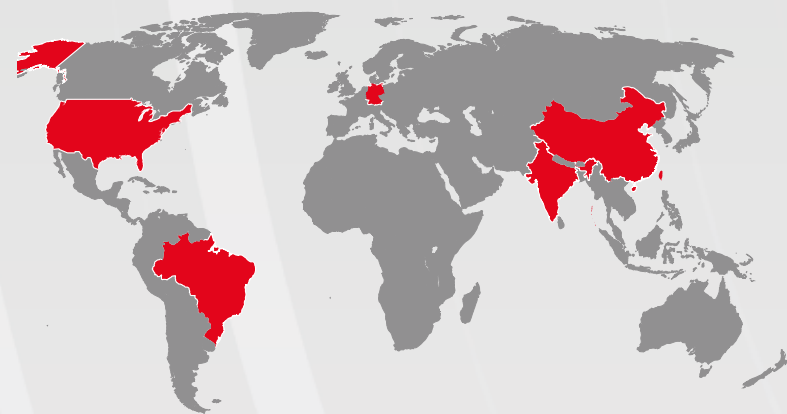
HIGH LEVEL ACCESS SOLUTIONS

TECHNOLOGY FOR HIGHEST STANDARDS

With its decades of experience, Hailo Wind Systems has a comprehensive range of high quality products, services and system solutions for the professional equipment of wind turbines. Service lifts, ladders, fall arrest systems, climb assists, movable platforms, tower equipment and much more: Safety, reliability and quality are always our top priority.

Hailo Wind Systems – High Level Access Solutions

WELCOME TO THE WORLD OF HAILO WIND SYSTEMS



5 LOCAL PRODUCTIONS AND SERVICE CENTERS
OVER 30.000 SQM PRODUCTION AND OFFICE SPACE



2.900
CUSTOMERS

we have reached with
our services and
products



49.000
PROJECTS

have been completed
by us in the wind
power industry



79
COUNTRIES

were quickly and
reliably supplied with
access technology



WE STAND FOR PERFORMANCE AND PASSION

YOUR GLOBAL PARTNER FOR ACCESS TECHNOLOGY

As inventor of the aluminum ladder in Europe over 50 years ago, Hailo introduced the professional ladder systems into the wind turbines. So Hailo was there right from the start! Today, Hailo Wind Systems is one of the world's market and technology leaders for safe and reliable access and climbing solutions.

With our premium ladder systems, customised service lifts, state-of-the-art fall arresters, smart climb assist systems, efficient movable platforms and much more, we provide everything for professional access systems in wind turbines – and other industries.

Along with our comprehensive range of services, our international GWOcertified training center Safety And Rescue Academy (S.A.R.A.) sets the standard for safety training and education in many industries with its fully-equipped training tower, video tutorials and e-learning. With own subsidiaries and service centers on 4 continents, we provide our customers locally produced professional products, excellently trained contact persons and service technicians worldwide.

We are proud of our passionate contribution to sustainable energy generation and increased safety in wind turbines.

PRODUCTS

ACCESS TECHNOLOGY MEETS HIGHEST STANDARDS

With its decades of experience, Hailo Wind Systems has a comprehensive range of professional products and system solutions. Service lifts, ladder and fall arrest systems, climb assists, movable platforms, tower equipment and much more: Our product portfolio always offers the very best quality – for safe and reliable access technology

in wind turbines. Working closely together with global players and leading specialists in the wind energy sector, we are continuously investing in the development of new products and technologies. With this sustainable strategic approach, we are one of the leading suppliers for ladders, fall arrest systems and service lifts. Worldwide.

**Safety, reliability
and quality always
come first.**

Dennis Wittemann
(Head of Quality
Management)



Service lifts

We develop service lifts precisely customized to your requirements. Thanks to our comprehensive expertise, all our ladder- and rope-guided service lifts are characterized by their reliability, quality, smart design and low life-cycle costs.



Ladders and Fall Arrest Systems

High quality rungs with patented beading and a special anti-slide profile ensure that the quality of our ladders is well-known worldwide. Our rail- and rope-based fall arrest systems offer maximum safety and are also available pre-assembled.



Climb Assists and Access Platforms

Our innovative climb assists and our movable platform are the smart alternative to service lifts and are also ideally suited to retrofit projects. Enjoy the advantages of our brandnew solutions and rediscover climbing technology with Hailo Wind Systems.

LADDERS

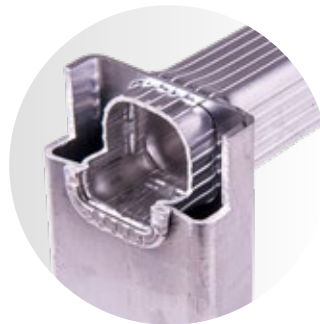
WE INTRODUCED THE PROFESSIONAL LADDER SYSTEM TO WIND POWER!

By using the built-in ladder system in wind turbines, you can really experience the safety benefits of high quality components. Only reliable ladder systems can give you the assurance of safety that should be self-evident.

As the inventor of the aluminum ladder, Hailo introduced the professional ladder system to wind turbines 50 years ago. Since this pioneering achievement, we have continuously developed our ladder systems and brought innovative solutions to the market, such as heated, self-deicing rungs or rails with LED lights. Today we offer an extensive range of ladders that are unique in terms of quality and variety.

High-quality rungs with anti-slip profile and patented beading ensure that our ladders are well-known around the world. Of course, our ladders are internationally certified and available in many widths, lengths and with customized rung spacing.

Whether they are for onshore, offshore, cold climate or lattice towers: With our huge range of ladders and accessories, such as ladder connectors, universal anchorage points, rung repair kits or assembly aids, we will always offer the perfect ladder system for you.



Quality

Patented, double-beaded rung connection for maximum durability.



Safety

More than 50 years of manufacturing expertise and worldwide service experience.



Reliability

High-quality rungs with anti-slip profile and customized rung distance.



YOUR LADDER BENEFITS

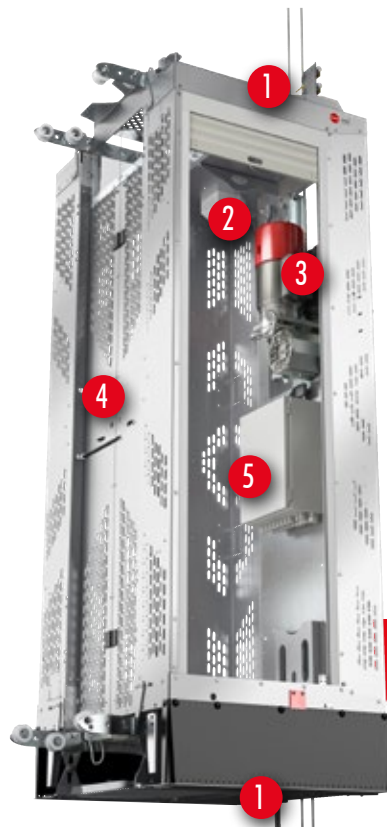
- ✓ Suitable for onshore, offshore and lattice towers
- ✓ High-quality materials and processing
- ✓ Patented beading
- ✓ Non-slip rungs with special anti-slip profile
- ✓ Individual rung distance
- ✓ Worldwide installation, maintenance and repairs
- ✓ Innovative rope- and rail-guided fall arrest systems
- ✓ Extensive range of ladder accessories, such as rung adapters, rail connectors and ladder fixtures
- ✓ Customized solutions like nacelle ladders or mounting aids
- ✓ Extensive ladder accessories



TOPLIFT+ (EDITION)

The TOPlift+ from Hailo Wind Systems sets new standards for ladder-guided service lifts. Besides of several innovative safety features, the TOPlift+ particularly stands out for its great reliability and high-quality processing. Continuous enhancements with improved details and new components have made the TOPlift+ even more robust, reliable and powerful. As a result, downtimes and maintenance times have been significantly reduced, while the levels of safety and quality have been increased. This

has caused professional service lifts which exceed even the highest requirements of our long-term customers. Of course, we offer all service lift models in customized versions to meet, for example, the particular requirements of offshore wind power plants. In addition they are also available in compliance with the Machinery Directive 2006/42/EC, CE certified and / or as cold climate versions (CCV). Also, all TOPlift+ models are ideal for retrofitting to existing wind turbines or nacelle turbines.



SAFETY FEATURES

All TOPlift+ models are equipped with professional monitoring and safety features such as

- 1. Optimized travel route limits and additional limit switches above and below the cabin ensure maximum safety.
- 2. High quality fall arrester to ensure speed limitation during ascent and descent.
- 3. Reliable hoist in accordance with international (quality) standards.
- 4. Smart folding cabin door at the rear for direct access to the ladder in an emergency or for servicing.
- 5. State-of-the-art control cabinets for a better overview and intuitive access to the e-control. Optionally available with innovative display!



ACCORDING TO MACHINERY DIRECTIVE 2006/42/EC
Conformity available worldwide on request

EN 81-44 UPON REQUEST

TOPLIFT+	L1+	L2+	L3+
Payload / Person [max.]	250 kg / 2 Person	250 kg / 2 Person	300 kg / 3 Person
Speed	18 m / min at 50 Hz	18 m / min at 50 Hz	18 m / min at 50 Hz
Temperature range	-20 °C to +50 °C On request down to -35 °C (only L1)	-20 °C to +50 °C On request down to -35 °C (only L2)	-20 °C to +50 °C On request down to -35 °C (only L3)
Lift dimensions LxWxH [mm]	962 x 950 x 2750	962 x 800 x 2750	962 x 1200 x 2750
Platform cut-out min. [mm]	1080 x 1080	930 x 1080	1300 x 1080



NEW FEATURES OF TOPLIFT+

- ✓ Improved hoists & fall arresters
- ✓ E-control with innovative display (optional)
- ✓ Many detailed improvements



GLOBALLIFT+ (EDITION)

With the GLOBALlift R, Hailo Wind Systems has achieved its goal of producing service lifts that meet the highest quality standards quickly and economically anywhere in the world. The new GLOBALlift H+ (Edition) models have been developed on the basis of a rope-operated 2-man cabin, but are also suitable for transporting one person. State-of-the-art safety systems, such as the continuously improved arresters, hoists and overload protection systems, ensure maximum safety at all times. The modular aluminum structure with its special design allows an improved all-

round view, while the compact 1 cabin affords maximum protection and comfort. This has caused professional service lifts which exceed even the highest requirements of our long-term customers. Of course, we offer all service lift models in customized versions to meet, for example, the particular requirements of offshore wind power plants. In addition they are also available in compliance with the Machinery Directive 2006/42/EC, CE certified and / or as cold climate versions (CCV). Also, all TOPlift+ models are ideal for retrofitting to existing wind turbines or nacelle turbines.



SAFETY FEATURES

All GLOBALlift+ models are equipped with professional monitoring and safety features such as

- 1. Optimized travel route limits and additional limit switches above and below the cabin ensure maximum safety.
- 2. High quality fall arrester to ensure speed limitation during ascent and descent.
- 3. Reliable hoist in accordance with international (quality) standards.
- 4. Smart folding cabin door at the rear for direct access to the ladder in an emergency or for servicing. State-of-the-art control cabinets for a better overview and intuitive access to the e-control. Optionally available with innovative display!
- 5. New lateral guide profiles that optimise the guiding characteristics and enable more comfortable usage.

CE ACCORDING TO MACHINERY DIRECTIVE 2006/42/EC
Conformity available worldwide on request

EN 81-44 UPON REQUEST

GLOBALLIFT H / H+ SERIES	H1	H2+	H4	H5.2
Payload / Person [max.]	250 kg / 1 Person	250 kg / 2 Person	250 kg / 2 Person	250 kg / 2 Person
Speed	18 m / min at 50 Hz	18 m / min at 50 Hz	18 m / min at 50 Hz	24 m / min at 60 Hz
Temperature range	-15 °C to +40 °C Up to -35 °C on request	-20 °C to +40 °C	-20 °C to +40 °C	0 °C to +55 °C
Lift dimensions LxWxH [mm]	638 x 670 x 2915	580 x 986 x 3119	703 x 1060 x 2921	815 x 1102 x 3074
Platform cut-out min. [mm]	720 x 720	1300 x 700	1200 x 800	1200 x 940
Cable spacing [mm]	630	1150	1020	1045

GLOBALLIFT R / R+ SERIES	R1+	R2+	R4+
Payload / Person [max.]	250 kg / 2 Person	250 kg / 2 Person	250 kg / 2 Person
Speed	18 m / min at 50 Hz	18 m / min at 50 Hz	18 m / min at 50 Hz
Temperature range	-25 °C to +50 °C On request -30 °C and +35 °C	-25 °C to +50 °C On request -30 °C and +35 °C	-25 °C to +50 °C On request -30 °C and +35 °C
Lift dimensions LxWxH [mm]	683 x 1189 x 2882	683 x 1033 x 2882	780 x 778 x 2882
Platform cut-out min. [mm]	1300 x 800	1200 x 800	900 x 900
Cable spacing [mm]	1150	1020	746

NEW FEATURES OF GLOBALLIFT+

- ✓ Improved hoists & fall arresters
- ✓ E-control with innovative display (optional)
- ✓ Many detailed improvements



MOVABLE PLATFORM

C-LIFT – THE SMART MOVABLE PLATFORM

The C-lift is the smart movable platform from Hailo Wind Systems. Driven via two steel ropes and guided by the fall arrester rail of the ladder system, the movable platform is operated via wireless connection by a drive unit installed on the ground. The C-lift transports one person (up to 120 kg) reliably and safely.

The C-lift not only impresses with its high cost-effectiveness as well as easy installation and operation, but also due to smart features such as its send function, automatic operation (when the treading surfaces are folded in), wireless signal connection, reduced maintenance requirements and its suitability for retrofits.

Versatile safety features such as limit switches for automatic switching off, overload detection, wireless signal redundancies and an emergency-off function, as well as the mandatory twohand operation, ensure the high safety standard of Hailo Wind Systems.



★ HIGHLIGHTS

- ✓ Cost-efficient & smart
- ✓ Fast & comfortable
- ✓ Easy operation & maintenance

Note: Not available in the EU



HIGH TIME SAVINGS
Up to 50 % faster ascent and descent (approx. 150 h/year)



EXTENSIVE SAFETY FEATURES
Reliable system of safety services



OPTIMIZED WORKING CONDITIONS
Significant improvement in working conditions



HIGH COST REDUCTION
Extremely large reduction in total investment per wind turbine



EASY TO USE
Simple installation and operation



FLEXIBLE IN USE
Ideal for retrofit projects

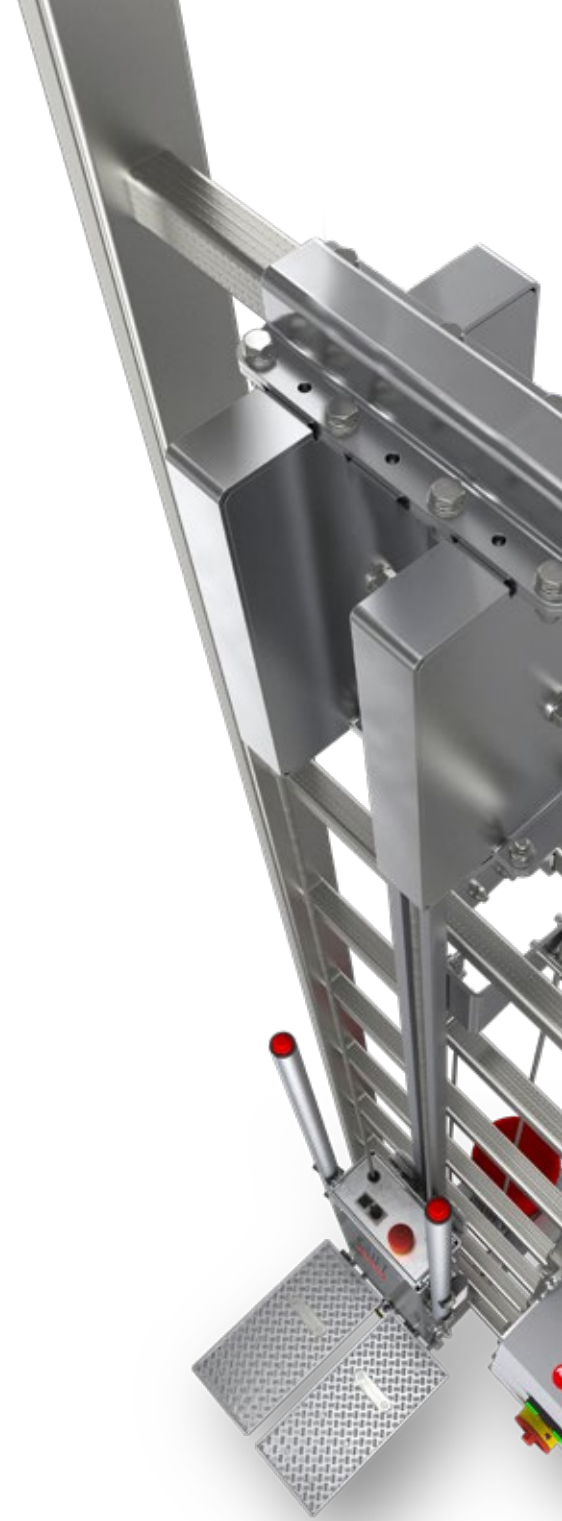


LOW MAINTENANCE EFFORT
Reduction in maintenance and low training requirements



FUTURE TECHNOLOGY
Investing cost-effectively in the future

C-LIFT	TECHNICAL DATA
Weight	26 kg plus drive unit & control unit
User weight	Max. 120 kg
Speed	18 m / min
Operating temperature	-20 °C to +50 °C
Compatible arrester	H-50.2, H-50 and others
Ladder inclination	-3 ° to +15 °
Power	1,1 kW
Functions	Automatic drive, wireless communication, return function and much more.
Safety functions	Overload detection, limit switches, automatic switching off, emergency-off function, two-hand operation, etc.
Safety instructions	Secure the person using compatible fall arrester. The C-Lift does not replace fall protection or PPE!



FALL ARREST SYSTEMS

H-50.2 - SAFETY AT EVERY LEVEL



Our fall arrest systems stand for maximum safety and quality. All systems comply with PPE Directive (EU) 2016/425 for Fall Protection Systems, are internationally certified and are suitable for use as reliable fall protection on fixed ladders. All of the accompanying fall arrest devices, including fixed guides, are also equipped with integrated shock-absorbing elements to minimise impact forces are used successfully worldwide for many years.

OUR FALL ARREST SYSTEMS BENEFITS

-  **MANUFACTURER KNOW-HOW**
Expertise, experience and know-how from specialists
-  **CUSTOMISED PRODUCTS**
Excellent solutions for individual requirements
-  **COMPREHENSIVE SERVICES**
Installation, maintenance and much more from a single partner
-  **HIGH QUALITY STANDARDS**
We are continuously enhancing all of our products

PARTNER H-50.2	TECHNICAL DATA
Weight with BFD (approx.)	1,2 kg
User weight	50 to 136 kg
Possible tilt angles	-3 ° to +15 °
Other special features	Fall protection rail can be used simultaneously with up to 10 persons
	Very simple attachment to the ladder
	Runner detachment at any time
	Very short fall arrester slip path
	Excellent grip on rail even if dirty or oily

H-50.2 FALL ARREST SYSTEM



Our approved rail-guided fall arrest system for maximum safety and reliability:

- ✓ High-quality aluminum extruded profile
- ✓ Worldwide appreciated
- ✓ Continuous, frame-less grooved design
- ✓ Excellent durability
- ✓ Fast installation
- ✓ Long-term safety
- ✓ EN 353-1:2014 and A1:2017 certified

ACCESSORIES

MOBILE DISPLAY E16

The Mobile Display Compact is a practical tool for status and fault readout in service lifts without a display panel. Simply plug it into the control unit and receive a comprehensive status of the service lift in seconds.

Simple, precise and reliable - that's our Mobile Display E16.



RJ 45 SOCKET



★ E16 FEATURES

- ✓ Sturdy multifunctional display
- ✓ Specially developed for service lifts
- ✓ Fast & precise error analysis
- ✓ Accelerated error correction
- ✓ Reduce downtimes
- ✓ Proven display design
- ✓ Easy handling
- ✓ Practical magnetic holder

Many other accessories, like rung adapters or rail rackets are also available in many countries. For more details get in touch with us!





HAILO WIND SYSTEMS

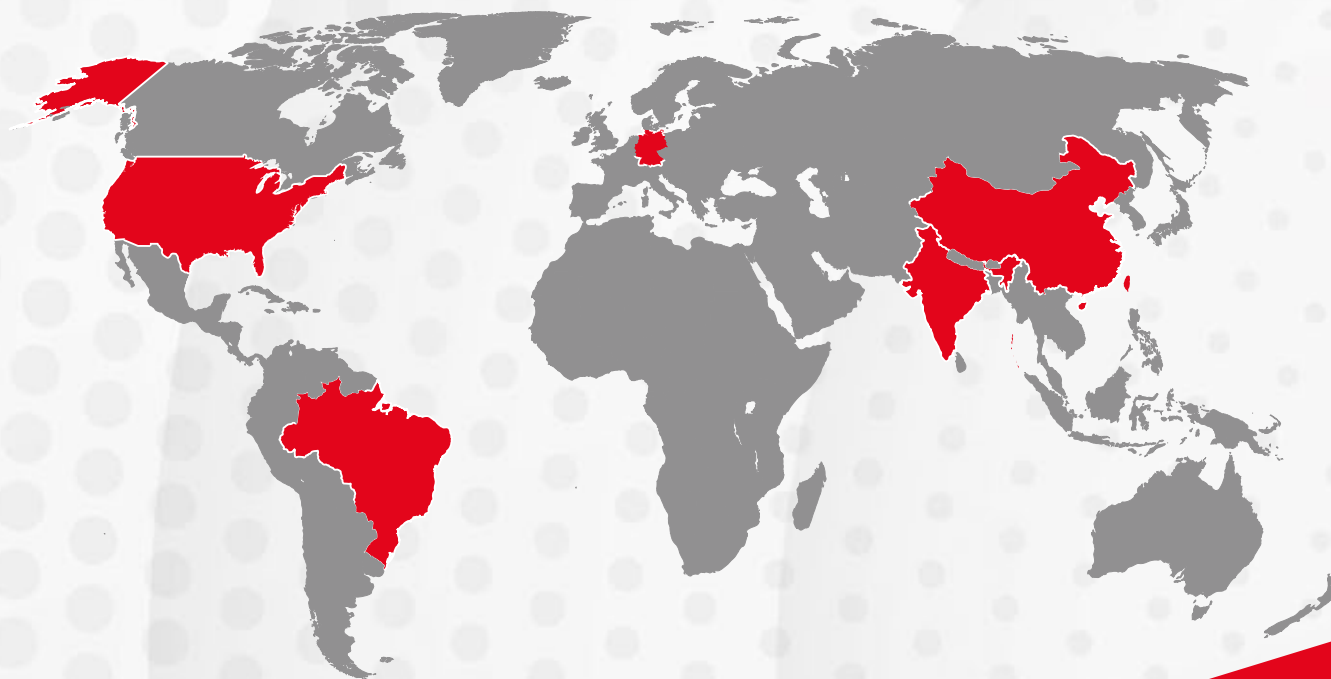
YOUR GLOBAL PARTNER FOR ACCESS SOLUTIONS

Quality, reliability and safety always have top priority for our products and services. Whether service lifts, ladders, fall arrest systems, climb assists, movable platforms, tower equipment, hoists, fall arresters, e-controls, ropes or individual requirements: Hailo Wind Systems as your global partner enables you to achieve new heights with safety.

Hailo Wind Systems – High Level Access Solutions.

FUTURE
TEAMWORK
VALUES
CONFIDENCE
PERFECTION

**SUSTAIN-
ABILITY**
RELIABILITY
QUALITY
AWARENESS
ENGAGEMENT
PRECISION
**ABOVE
AVERAGE**
SOLUTIONS
SAFETY



**HAILO WIND SYSTEMS
GMBH & CO. KG**

Kalteiche-Ring 18
35708 Haiger
+49 27 73 82 1410
info@hailo-windsystems.com
www.hailo-windsystems.com

**HAILO WIND SYSTEMS
SAFETY AND RESCUE ACADEMY**

Siemensstrasse 20
35708 Haiger
+49 27 73 82 1250
training@hailo-windsystems.com
www.hailo-windsystems.com/sara

**HAILO WIND SYSTEMS
(AFTER SALES & SERVICE)**

Essener Str. 1
57234 Wilnsdorf
+49 27 73 82 1410
service@hailo-windsystems.com
www.hailo-windsystems.com/services

**HAILO WIND SYSTEMS
(GUANGZHOU) CO., LTD.**

Room 2005, Jian Bo Hui Building,
No.288-298 Tang An Road, Tianhe District
Guangzhou, 510665
+86 (0) 20 8527 6850
info@hailo-windsystems.cn
www.hailo-windsystems.com/cn

**HAILO WIND SYSTEMS
USA INC.**

1395 Mineral Springs Road
Elberton, GA 30635
+1 706 283 4500
info@hailo-windsystems.us
www.hailo-windsystems.us

**HAILO WIND SYSTEMS
DO BRASIL**

Av. Antônio Artioli, 570 – Bloco Andermatt
Alas 1 à 6 e 8 – Condomínio Swiss Park
Office, 13049-900 Campinas – SP
+55 19 3512-9700
info@hailo-windsystems.br
www.hailo-windsystems.com/br

**HAILO WIND SYSTEMS
INDIA PRIVATE LIMITED**

Building K-21, Ranjangaon
MIDC, Shirur, Pune,
Maharashtra 412209
+91-8483066197
info@hailo-windsystems.in
www.hailowindsystems.com/in