

A low-angle, blue-tinted photograph of a wind turbine. A person's arm and hand are visible on the right, holding onto a metal beam of the turbine structure. The background shows the blades and the tower of the turbine against a clear sky.

prEN 81-44

Status and main changes

Asociación Empresarial Eólica
March 2022

1. Scope and objectives
2. prEN81-44 Status
3. Main new / updated requirements
4. Avanti's lifts according to prEN81-44

Scope and objectives



Scope

- Based on Formal Vote version of prEN 81-44 from March 2022

Objectives

- Inform about prEN81-44 project status
- Highlight main new / updated requirements that may need to be taken care of in advance to publishing of standard

Status

- Draft for Formal Vote was sent to CMC for review and starting the translation process (approx. 3 months) last August 2021.
- After HAS consultant review, evaluation was negative, so draft has been updated. It is expected to send this updated FV version draft to CMC at latest, next 4th April 2022.

Next Steps & Milestones

- Formal Vote phase will start during April 2022
- The estimation from the submission of the Formal Vote to the publication is about 26 weeks
- Publication estimated during Q4 2022

Note: all dates above are based on updated project planning

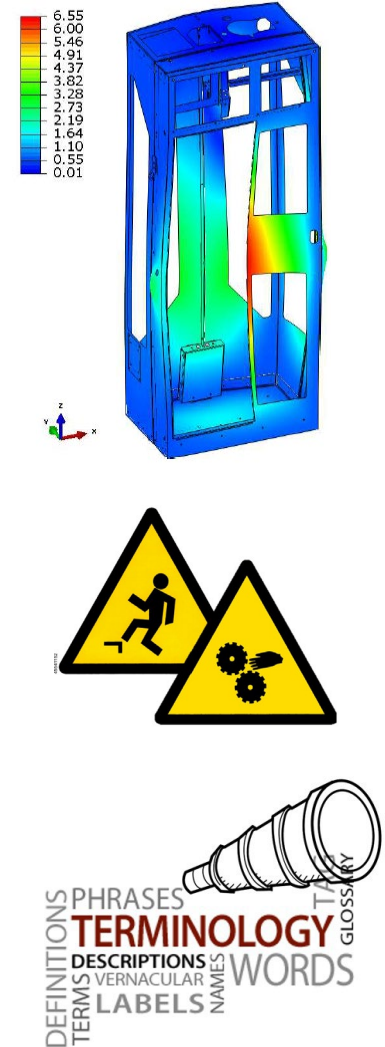
Main new / updated requirements

Main new / updated requirements

- Bucket type lifts are not longer allowed. Landing protection fences shall feature landing gates with interlocking system → fixed fences not allowed.
- Landing gates for ladder guided lifts shall be self-closing.
- Load combinations and partial safety factors are more demanding than current standard → lifts' structure shall be reinforced.
- Higher performance level in some safety elements: e.g PLr = d carrier door interlocking system, PLr = d in obstruction devices for ladder guided lifts → double channel.
- New specific integration clearances requirements: safe spaces above, below and surrounding the carrier's lift, maximum distance from carrier to evacuation ladder 1100 mm.
- Specific warning plates / labels shall be located in landing fences.
- Updated terminology.

Slightly increasing costs expected


COST



Avanti's lifts accord. to prEN81-44



Avanti's lifts according to prEN81-44

- One available model already certified (CE marked) and designed according to prEN81-44 requirements.
- A new model in progress (available during 2022).



Barracuda XL01

CERTIFICATE

EC Type Examination
EC-Directive 2006/42/EC, Article 12, Section 3b
Machinery

Number of registration: 01/205/0985/22
Certification body for machinery NB0035
at TÜV Rheinland Industrie Service GmbH
herewith confirms for the company

AVANTI WIND SYSTEMS TECHNOLOGY, S.L.
Calle Angeles (Los), Num. 88
Pol. Industrial Centrovía
50196 Muela (La) - (Zaragoza)
Spain

the close conformity of the product
Service lift inside wind turbine systems


Technical data:

BARRACUDA XL01	
Main door type	Full sliding door
Service lift speed	18 mm/s ± 10 % (60 Hz)
	21.6 mm/s ± 10 % (60 Hz)
Rated load	400 kg
Service lift weight (max.)	211 kg
Max. no. of persons	3 persons
Max. travel path	100 m
Max. noise level	80 dB (A)
Electrical power supply	400 V (50/60 Hz) 3 phases + N + PE 690 V (50/60 Hz) 3 phases + PE

with the requirements according to annex I of Directive 2006/42/EC about machinery and amending the Directive 95/16/EC of the European Parliament and the Council from May 2006 for adaptation of legal and administration regulations of the member countries regarding safety of machinery.


The verification was proved by EC-type approval test, Test-Report- No.: 21_092-1 from 2022-01-25 and is valid only duty considering the requirements mentioned in this document. The examination was realized on site in Zaragoza, Spain.


This certificate is valid until 2027-01-25

 Certification body
Notified under No. 0035
Dipl.-Ing. Walter Ringhausen

Cologne, 2022-01-25

TÜV Rheinland Industrie Service GmbH
Albionstraße 56, 12103 Berlin
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 Precisely Right.

 Precisely Right.

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Test report no. 21_092-1 from 2022-01-25
Cust.No.: 786455

1. Manufacturer	AVANTI WIND SYSTEMS TECHNOLOGY, S.L. Poligono Industrial Centrovía Calle Los Angeles 88 - naves 1 y 2 E-50196 La Muela - (Zaragoza)
2. Task	EC type-examination for machinery referred to in Annex IV, Item 17 of the Machinery Directive 2006/42/EG for: Service lift in wind power plants Additional application of the draft standard prEN 81-44: Version 2021-07-20

EU-Declaration of Conformity for Machinery
Directive 2006/42/EC, Annex II, A

Manufacturer: Avanti Wind Systems Technology, S.L.
Calle Angeles (Los), 88 - Pol. Ind. CENTROVIA
50196 Muela (La) - Zaragoza - Spain

Phone: (+34) 976 149 524
Fax: (+34) 976 149 508

herewith declares that the model of the following machinery consisting of:

Service Lift model: Barracuda XL01 Serial N°: <serial number>
Manufacturing Date: <DD/MM/YYYY>

installed and checked by an authorised person according to the manual supplied with the service lift
in the following wind turbine, and fulfilling the integration requirements of drawing: AD00005563

Wind Farm: <Wind farm name> Tower N°: <WTG Number>

- is in conformity with the provisions of the Machinery Directive 2006/42/EC as amended at the time
of the declaration

- is in conformity with the provisions of the following additional EU-directives as amended at the time
of the declaration

Electromagnetic compatibility 2014/30/EU

- conforms to the following standards:

EN 1808:2015 Safety requirements on hanging personal lifting equipment; Calculation,
stability, building tests;

EN 60204-1:2018 Safety for machinery; Electrical equipment of machinery; Part 1: General
requirements;

- conforms to the following other standards or specifications:

prEN 81-44:2021 Safety rules for the construction and installation of lifts - Special lifts for the transport of
persons and goods - Part 44: Lifting appliances in wind turbines (version 2021-07-20)


- conforms to the model, which has received the EC Type examination certificate with the registration number
01/205/0985/22, issued by the following notified body, on 2022/01/25:

TÜV Rheinland Industrie Service GmbH, TÜV CERT certifying body for Machinery, Nr. NB0035.

- Responsible for documentation: Germán Sacramento

Address: Los Angeles 88 Nave 1
ES-50196 La Muela
Phone: +34 976 14 95 24

Place: La Muela
Date: <dd/mm/YYYY>

Signature: 

Name: Germán Sacramento
Identification: Technical Director

THANKS FOR YOUR ATTENTION

ANY QUESTION?