



**EXPERTS IN
FOUNDATION
DESIGN FOR WIND
TURBINES**

Anchor Cage Design | High Pedestal
CAT III Verification | SOFT-SPOT® Solution
Geotechnical Consultancy | Piles Design
Rock Anchor

20 years

Reliable – Efficient – Responsive – Worldwide

WWW.CTE-WIND.COM

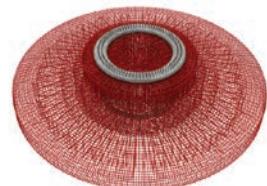


FOUNDATION DESIGN SERVICES

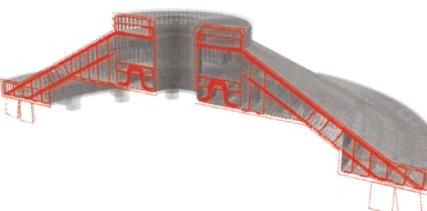
- Preliminary and detailed designs following international standards
- Bill of quantities for tender phases
- Respecting specific wind guidelines and local country regulations
- Resource-saving foundation design
- Time and cost reductions thanks to inventive design solutions
- Participation on standardization committees



INVENTIVE DESIGN SOLUTIONS



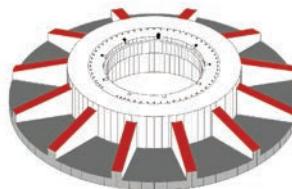
Optimized Gravity Foundation



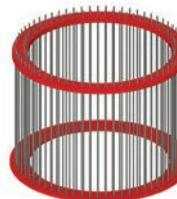
Near-Shore Foundation



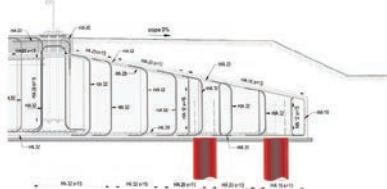
Rock Anchor Foundation



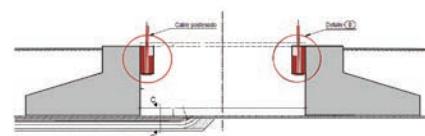
Ribbed Foundation



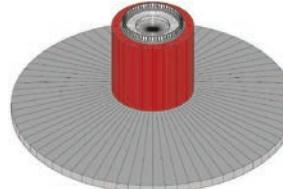
Anchor Cage Design



Piles Design



Concrete Tower Foundation



High Pedestal / Plinth

CTE WIND IN FIGURES

30 000+
Wind Turbines

77
Countries

9
Local Offices

18
Languages
Spoken

40+
Engineers

35%
Female Staff

85%
Senior-Level
Know-How

5 REASONS WHY CTE WIND

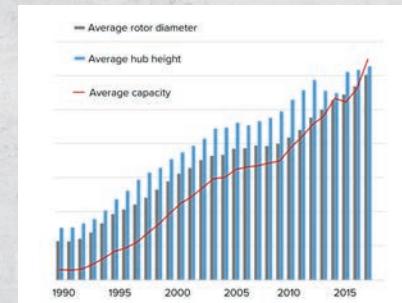
01.
**Design experts
since 2004**

02.
**Certified Design
Method by DNV**

03.
**Trusted relationship
with OEMs**

04.
**Flawless design
and 100% customer
satisfaction**

05.
**Worldwide
insurance liability**



REPOWERING & LIFETIME EXTENSION

For all WTG-foundation
types:

- Fatigue verification
- Lifetime extension
- Repowering

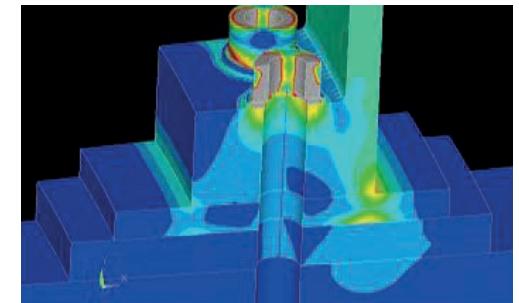
GEOTECHNICAL CONSULTANCY SERVICES

- Design of geotechnical campaigns
- Drafting of geotechnical studies
- Subcontractor management
- Geotechnical report execution
- Synthesis of soil values to choose the best foundation
- Verification of third party reports



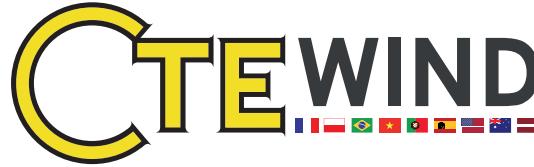
FORENSIC ENGINEERING

- Fact finding on site
- Root cause analysis assessments
- Establishing repair concept
- Site inspections to verify satisfactory repair

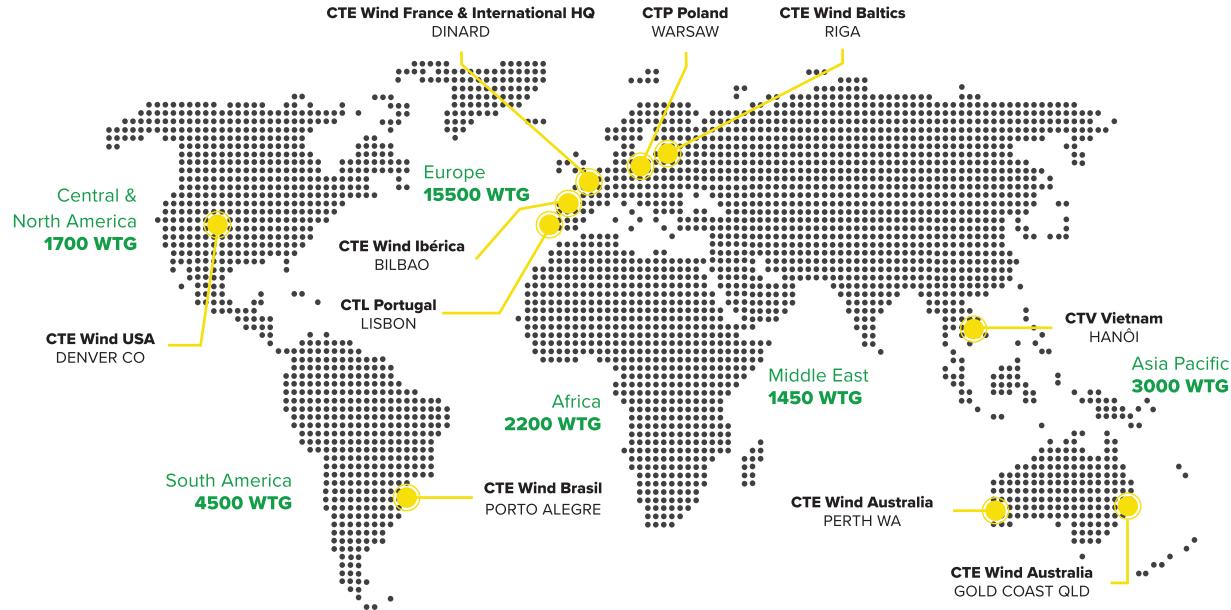


RESEARCH AND DEVELOPMENT

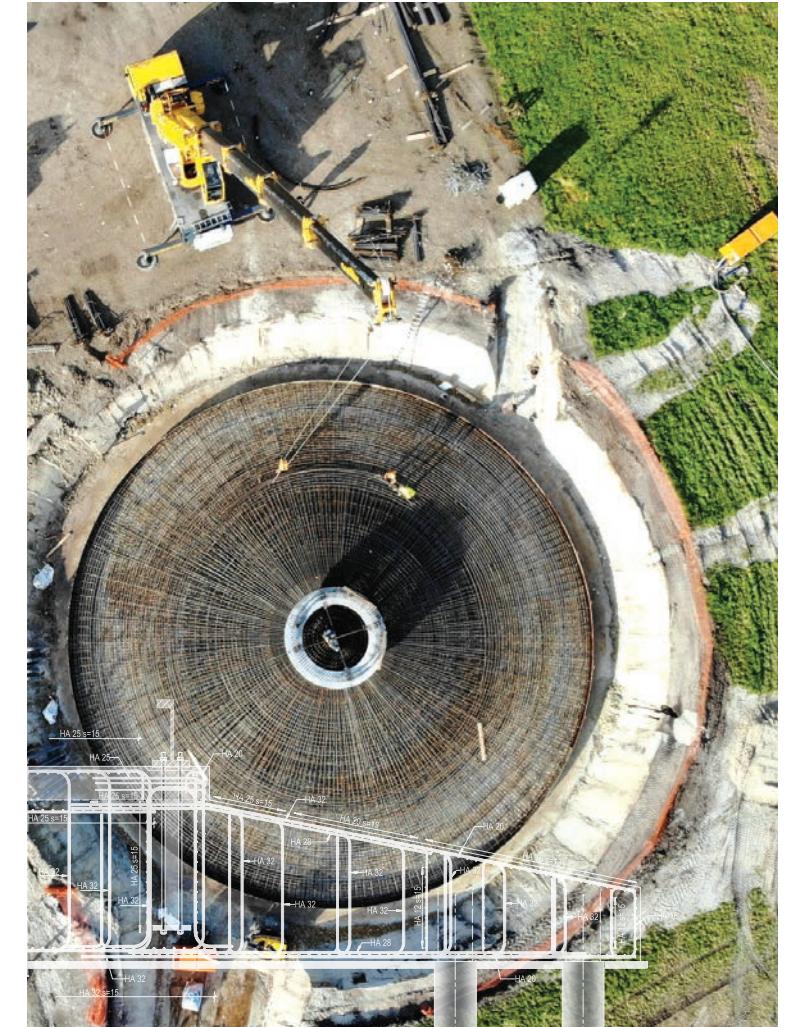
- Non-linear calculations
- Heat development determination by FEM
- Development of special foundations
- Involvement in designs for prototypes



CTE WIND CIVIL ENGINEERING SA
33, RUE DU HAUT CHEMIN, 35780 LA RICHARDAIS, FRANCE
 +33 (0)3 89 66 60 58 |  wind@cte-sa.com |  CTE Wind



Engineering performed for most OEMs:



MEMBER OF

