

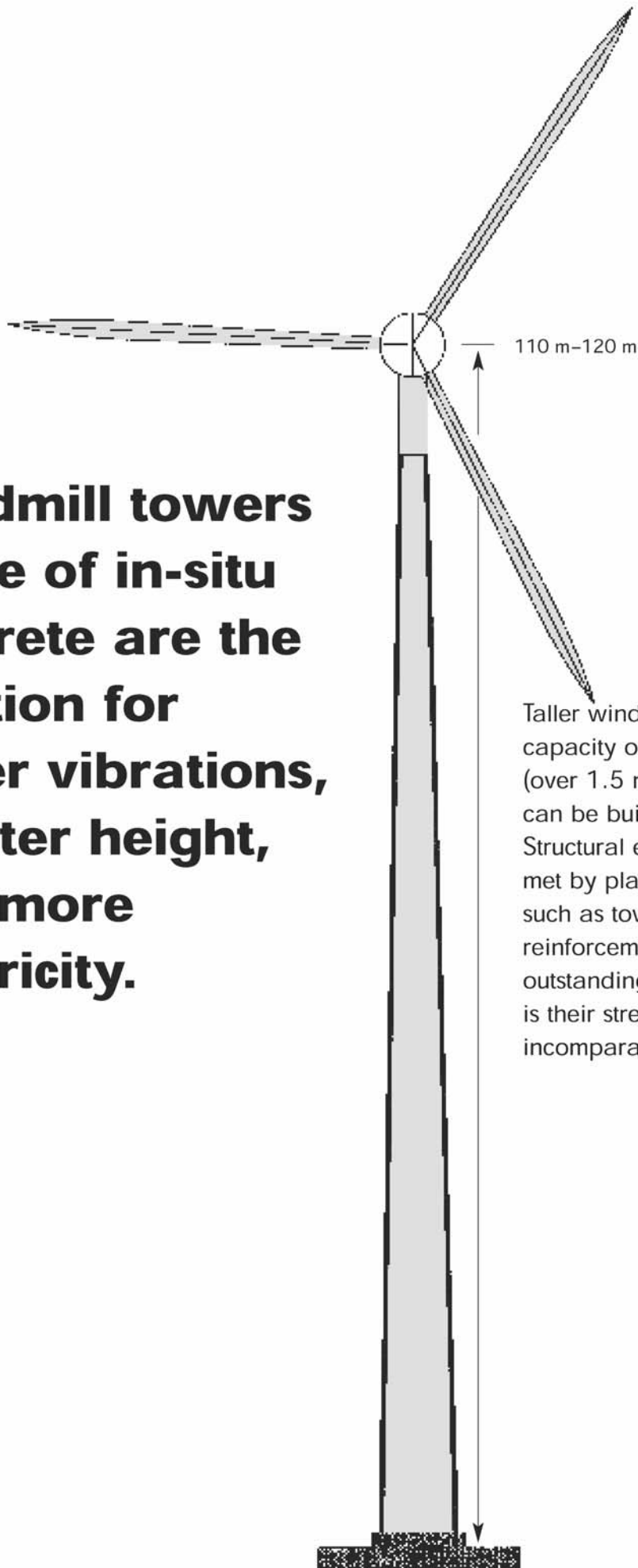


RSB windmill tower formwork:

A new dimension in height and performance.



**Windmill towers
made of in-situ
concrete are the
solution for
lower vibrations,
greater height,
and more
electricity.**



Taller windmill towers increase the capacity of wind-driven power plants (over 1.5 megawatts). Concrete towers can be built to any height. Structural engineering requirements are met by planning and design measures such as tower diameter, prestressing, reinforcement, and wall thickness. One outstanding aspect of concrete towers is their strength, which provides an incomparable freedom from vibrations.



Concrete is what you make of it.

Concrete offers characteristics that are particularly important for windmill towers:

Concrete is strong.

Concrete is maintenance-free.

Concrete is weather resistant.

New RSB formwork method: Fast installation formwork saves

RSB advantages on the ground:

- Simpler, faster assembly of the 20 fixed inner forms
- Positioning of all built-in parts
- Placement of complete reinforcement with ducts for the post-tensioning system

RSB advantages during installation:

- Inner forms with reinforcement are positioned with one lift of the crane
- Fast installation and assembly

RSB advantages when casting concrete:

- No through-wall ties required
- Optimum drop height

RSB advantages after concrete is cast:

- The disassembled formwork from the completed concrete sections can be used one or two days later for the next windmill tower
- Working platform and safety scaffolding can be used for painting works

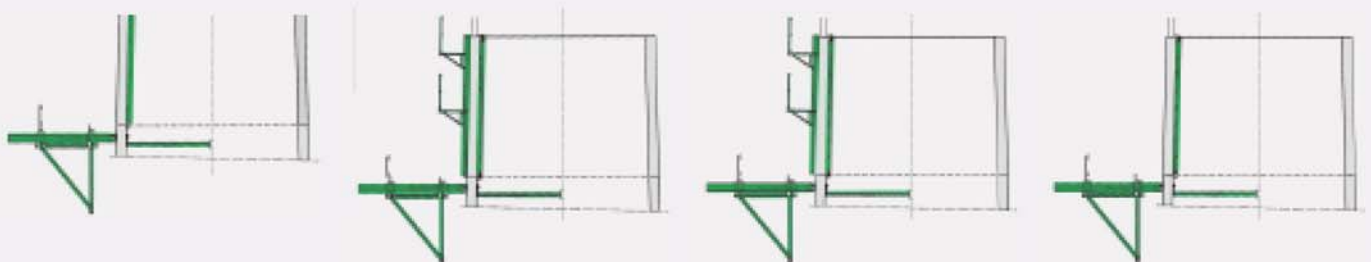


Finished tower



Formwork ready for concrete casting

Five meters higher every day.



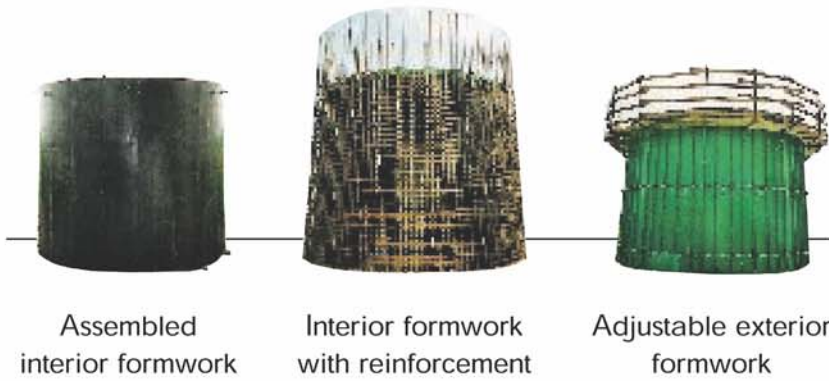
1. Install interior formwork with reinforcement

2. Install exterior formwork

3. Concrete casting

4. Strip exterior formwork

Construction and shifting of interior and exterior formwork time and climbs to new heights.



Assembled interior formwork

Interior formwork with reinforcement

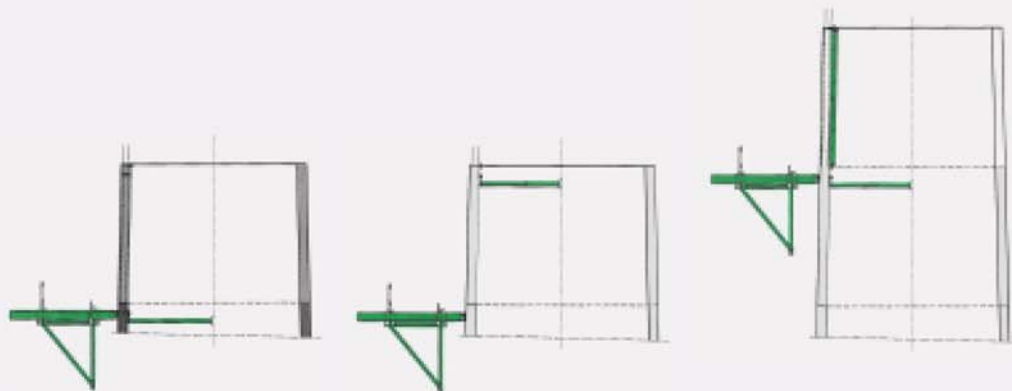
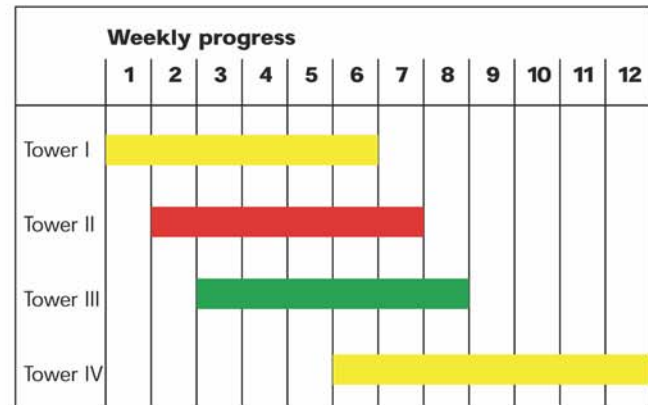
Adjustable exterior formwork



Exterior formwork is lifted in place



Interior formwork for base section



5. Strip interior formwork

6. Close holes left on the inside after anchors have been removed, raise interior platform, and paint exterior concrete

7. Close holes left on the outside after anchors have been removed, raise exterior platform, and place the interior formwork with reinforcement on it



Wind power and manpower.

RSB delivers both formwork technology and know-how to the construction site. The RSB team, project manager, and formwork supervisor organize and coordinate cooperation with the construction company at the site. Such cooperation among specialists has worked extremely well for 20 years now. That's because everyone concentrates on what they do best.



One of two windparks in Meppen, Germany, with 6 windmill towers each, hub height 98 m



Windpark in Wilsum, Germany, with 10 windmill towers, hub height 98 m



Our strength: The more complex, the better.

In other words, we're well equipped for large-scale challenges. As we were in 1989 during construction of the world's biggest egg-shaped digester in Bottrop, Germany. As we were in 1991 during construction of the unconventional water towers in Villejuif near Paris. As we were in 1999 during construction of the VW's spherical pavilion in Wolfsburg, Germany. We simplify complex projects thanks to our knowledge of formwork and the flexibility of our system.





**Around
the clock.**

