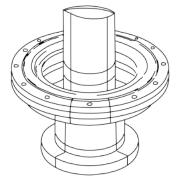
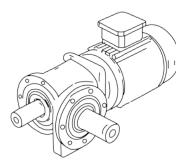
turbines

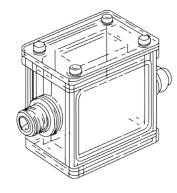
Rewind

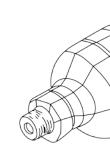
A new life for wind turbines

Vattenfall believes that every ending can spark a new beginning.
Together with designers, engineers, and artists, we explore how every part of a turbine can find new purpose. Discover our six guiding mantras — simple phrases that help us focus, rethink, and see abundance where others might see limitation.











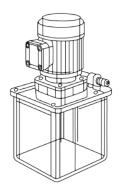


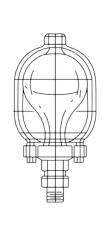


Many imagine that after 25 to 30 years of turning wind into electricity, old turbines are simply taken apart and left to rust away. But the truth is far more inspiring. More than 90% of wind turbine's (in weight) - steel, copper, and electronics - are already reused or recycled. The real challenge lies in the remaining parts — and in how we think about them.

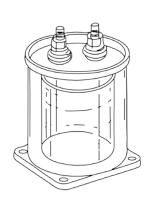
By sharing these mantras, we hope to open a conversation – to challenge assumptions, invite collaboration, and inspire new ways of designing with what already exists.



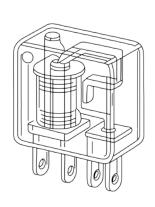


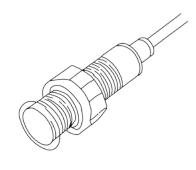














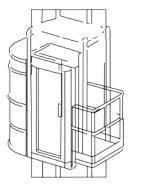
NOL MENOR MANUEL MANUEL

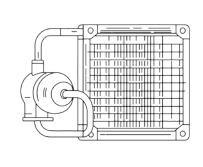
FROM A TO Z

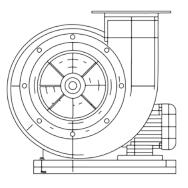
What was your first plan (Plan A) is now your last resort (Plan Z). Think and find previously used parts until that is impossible, then choose new ones.

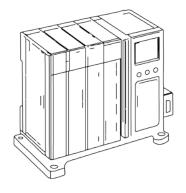
This mantra is about reversing the way we approach design. Instead of starting with a blank page and dreaming of the perfect new component, designers begin with what already exists.

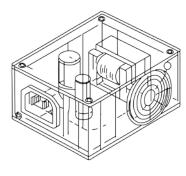
A gearbox that once endured North Sea storms can easily live a second, calmer life powering an irrigation system or small-scale generator. By searching through the alphabet of existing parts before inventing something new, designers discover unexpected possibilities that can be both smarter and more sustainable.

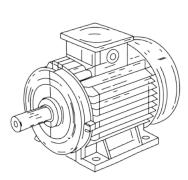


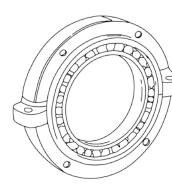


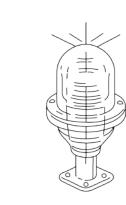










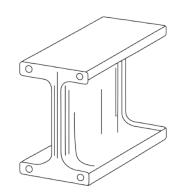


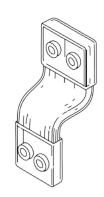


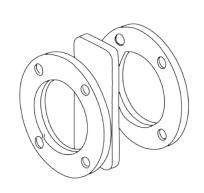
MEND THE GAP

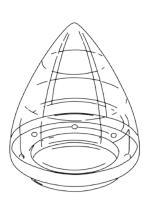
Choose what you can get and fill in the blanks. The smaller the gap, the less you need to mend.

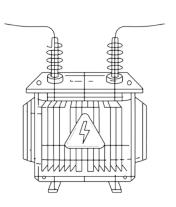
You are designing with parts that someone else chose for you – 25 years ago. No component will ever fit perfectly, but that's part of the creative challenge. Just as an architect adapts a structure to its surroundings, engineers adapt turbine components to new purposes. The nacelle, for instance, has been turned into a tiny house – compact, self-sufficient, and full of character. Designers used what they had, patched the gaps, and created something new and beautiful from existing parts.

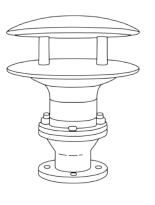


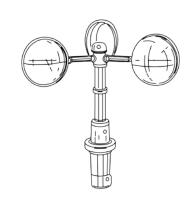












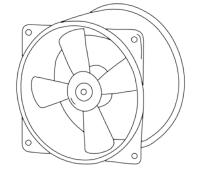


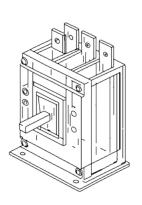
FACT OR FAILURE

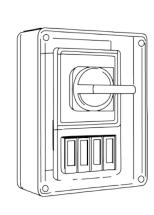
Challenge the habits and assumptions (for example: higher failure rates).

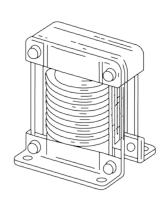
Many people incorrectly assume that old parts are worn out, while in fact the wear and tear on many turbine parts is far less than imagined. A circuit breaker that spent 25 years inside a turbine might still be nearly as reliable as new – especially when used in a less demanding environment. By questioning assumptions about lifespan and risk, designers open doors to a world of high-quality, affordable parts that can continue to serve for decades.

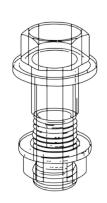


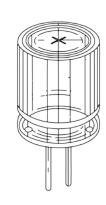


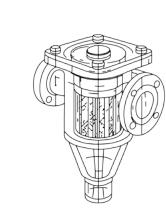










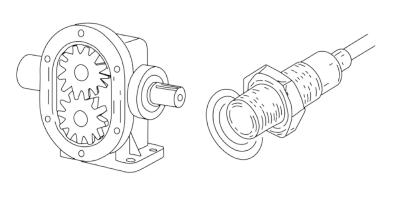


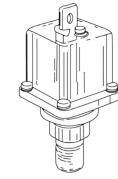


OVERDESIGN IS CERTAIN(TY)

The available component that does the needed job is a certain overdesign – and that gives functional surplus and thus added robustness and certainty.

Wind turbine components are designed for extremes – salt, storms, and constant motion. When used again in milder conditions, they are naturally overqualified. This overdesign provides a built-in margin of safety that extends both lifespan and reliability. A cooling system that once operated offshore, for example, can serve as an air conditioning system for off-grid homes, powered by solar energy. Its overdesign ensures resilience, longevity, and certainty.



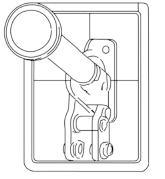


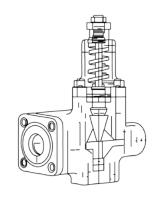


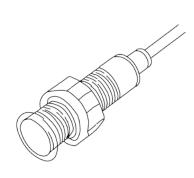
TEAMBUILDING FOR PRESELECTED COMPONENTS

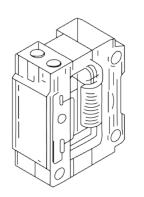
Select the best discrete candidates for the job, make them work for a common purpose.

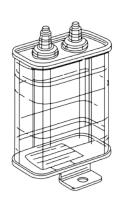
In this mantra, the designer becomes a team manager. Each reused component brings its own strengths and weaknesses. A gearbox, a pump, a cooling unit, and a turbine blade can be combined to create something entirely new – like a circular irrigation system that waters crops with the same precision that once turned wind into power. By understanding how each part contributes to the team, designers orchestrate new systems that are functional, elegant, and sustainable.













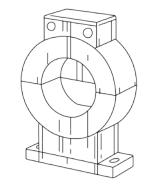


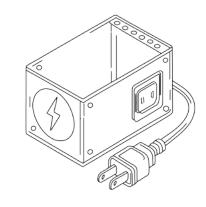
FUNCTIONALITY IS KING

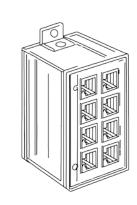
Focus on minimum functional requirements, accommodate odd shapes and cater for physical variability.

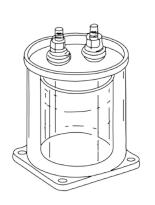
Designing with existing parts starts from the inside out. First make it work, then make it beautiful. Function gives direction, form gives emotion. When old parts find new meaning, their history becomes part of the design — the marks of their past add honesty and depth.

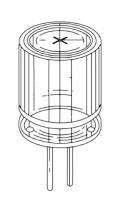
In circular design, shape may be unconventional, but the functionality remains the guiding principle. A rotor blade might become an irrigation arm, a bus stop canopy, or a playground sculpture. Its unusual shape invites curiosity rather than compromise.

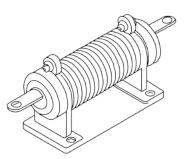


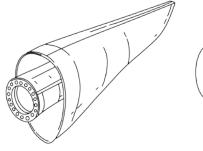
















Together, these six mantras form a new vision for renewable energy. They challenge us to think more like nature itself – where nothing is wasted, and everything finds a new purpose. Just as natural ecosystems reuse and regenerate materials in endless cycles, the same can be true for wind energy. Components can evolve, adapt, and live again, bridging the gap between technology and the natural world.

When renewable energy learns to transform itself, every ending becomes the start of something new.

