Abstract: The wide range of crane types and sizes offered by the market expresses the responsiveness of the lifting industry to meet the variety of challenges posed by the built environment. One such emerging set of challenges is the outcome of the growing rate of wind turbine installation. Wind energy is one of the largest alternative energy production methods today, and as the global push for greener energy sources is increasing, so is the number of windmills. This paper addresses the unique lifting challenges posed by windmill installation and maintenance. These challenges have been met by leading crane manufacturers in various ways to produce products not seen before on the construction scene. The paper focuses on two such products representing two different concepts and provides the development and design rational of each. Engineering is impacted by unique height, lifting capacity, site preparation, and environmental requirements. The accelerated rate of global wind energy use; the increasing number, height, and component weight of turbine towers; and the persistent search for new territories for wind farms are likely to further produce more innovative solutions.