14-16 YEARS

## Copper in Wind Power 1

## Answers

## 1.Why is copper used for the coils in the generator?

Copper is soft and malleable, making it easy to bend into intricate shapes. Copper also has extremely high conductivity, allowing it to carry huge currents without overheating.

2. In Figure 2, the copper wire looks darker than pure copper. Why is this?

The copper wire has a coating of lacquer so that each turn is insulated from the next.

2. Research the electrical power output of modern large wind turbines. What is the largest one you can find? Does there seem to be an upper limit?

As of 2014, the largest wind turbines are around 8MW capacity. The power depends on the blade length. As they get larger, the engineering gets harder.

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