



Megger^R

WWW.MEGGER.COM

Wind turbine test leads for low
resistance ohmmeter

Megger is a registered trademark

Title	Wind turbine test leads for low resistance ohmmeter
Author	Paul Swinerd
Date	January 2010
Keywords	Wind turbine, test leads, lightning protection
Abstract	Robust test leads have been specially designed for low resistance testing of wind turbines. The new leads lead to more accurate and repeatable results.

Email	Paul.Swinerd@megger.com
--------------	-------------------------

In the manufacture and maintenance of wind turbines, low resistance testing is essential to verify the continuity of the lightning protection conductors in the turbine blades. In principle, this testing is straightforward but, in practice, there's a problem: the turbine blades are invariably tens of metres long and sourcing quality test leads of sufficient length is difficult.

The traditional solution is for test engineers and technicians who work with wind turbines to fabricate their own test leads, but this is time consuming and inconvenient, and the results are often uncertain. In particular, leads fabricated on an ad-hoc basis can be hard to handle and prone to tangling during use.

At the request of leading manufacturers of wind turbines, Megger has developed its KC series of test leads specifically to address these problems. Believed to be the world's first commercially available products of their type, the leads are available in a range of different lengths and are equally suitable for use on site or in a manufacturing plant where very large equipment must be tested.

For convenience and ease of handling, the leads are supplied as standard on a heavy-duty cable reel that is fitted with a friction brake to minimise the risk of tangles when paying out the cable.

The leads are terminated with large, robust Kelvin clips that have been specially designed to offer ease of use while providing the consistently reliable connections needed to ensure accurate and repeatable test results. Included with each lead set is a cable fitted with a duplex handspike for probing the lightning receptors on the tips of the turbine blades.

KC test leads are compatible with most types of low resistance ohmmeter but, when selecting an instrument to use with them, there are many benefits to choosing a model that, like the Megger DLRO10HD, combines robust construction to ensure reliable operation in the field, with a high test current capability to reveal faults that might otherwise go undetected.

Where frequent outdoor use is anticipated, an ingress protection rating of at least IP54 when the instrument is in use is also highly desirable, as this will allow it to be used even in wet weather.



Wind turbine test leads for low
resistance ohmmeter