

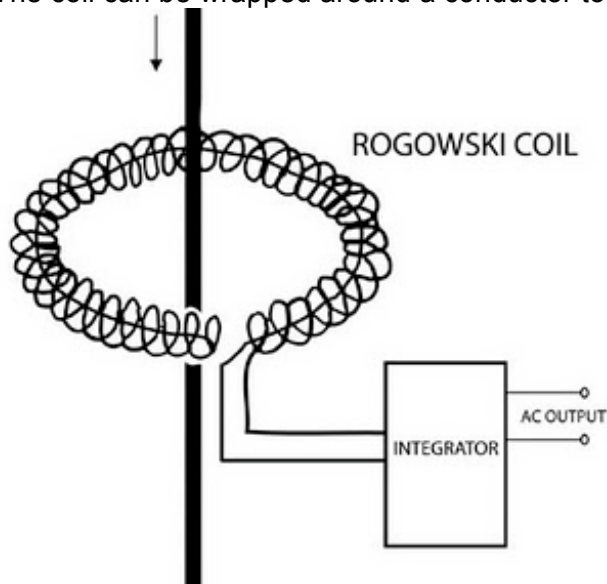
## What is a Rogowski Coil?

The Rogowski Coil is a coil which is used to measure alternating currents and fast changing current impulses.

It is named after Walter Rogowski, a German Physicist.

The Rogowski Coil consists of a coil of wire wound in a helical manner. One end of the coil is taken through the coil itself and brought to the other side. Thus, the coil has both its ends at the same side.

The coil can be wrapped around a conductor to measure the current. The Voltage induced in



the coil will be proportional to the rate of change of current in the primary conductor. The voltage thus induced can be connected to an electronic integrator which will generate a signal in accordance with the changing current signal.

The advantage of the Rogowski coil over the tradition [current transformer](#) is that it can be easily wrapped around the conductor. This permits online [measurements](#) of systems without requiring a shutdown. Besides, as the Rogowski Coil has an air core instead of a metallic core, it does not get saturated while measuring large currents.

The Rogowski coil is also immune to stray electromagnetic interference to a large extent.