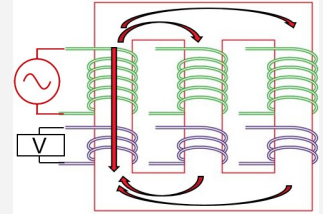


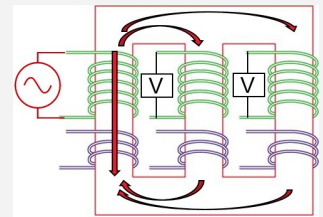
## Transformer Turns Ratio Magnetic Balance

Transformer turns ratio is measured by applying line frequency AC voltage to one winding of a transformer and measuring the induced voltage on the corresponding winding. Magnetic balance excites the transformer the same way, but instead of measuring the induced voltage on the corresponding winding, the induced voltage on the same winding is measured.

### Turns Ratio



### Magnetic Balance



The **TTRU3** is capable of performing a magnetic balance test on any vector configuration in under 30 seconds. But what are the benefits to this method of testing?



### Demag Confirmation

Transformer magnetization can be confirmed with magnetic balance.

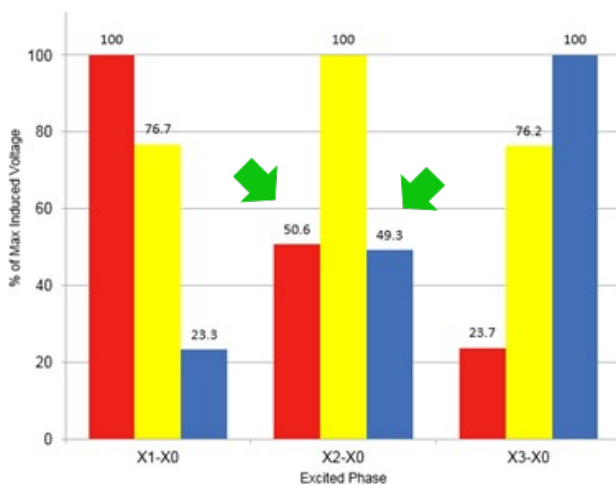


### Mechanical Integrity

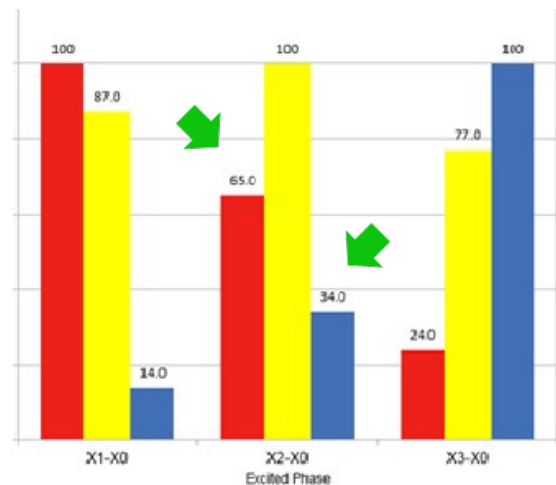
Interstrand shorts, closed loops around the core, and crushed insulation can be detected.

## Example

The example below shows a typical transformer, and a transformer that is magnetized. Note when the middle phase is excited, the magnetized transformer shows imbalance in the other two phases.



**Typical**



**Magnetized**