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**Basics of
SWA Cables**



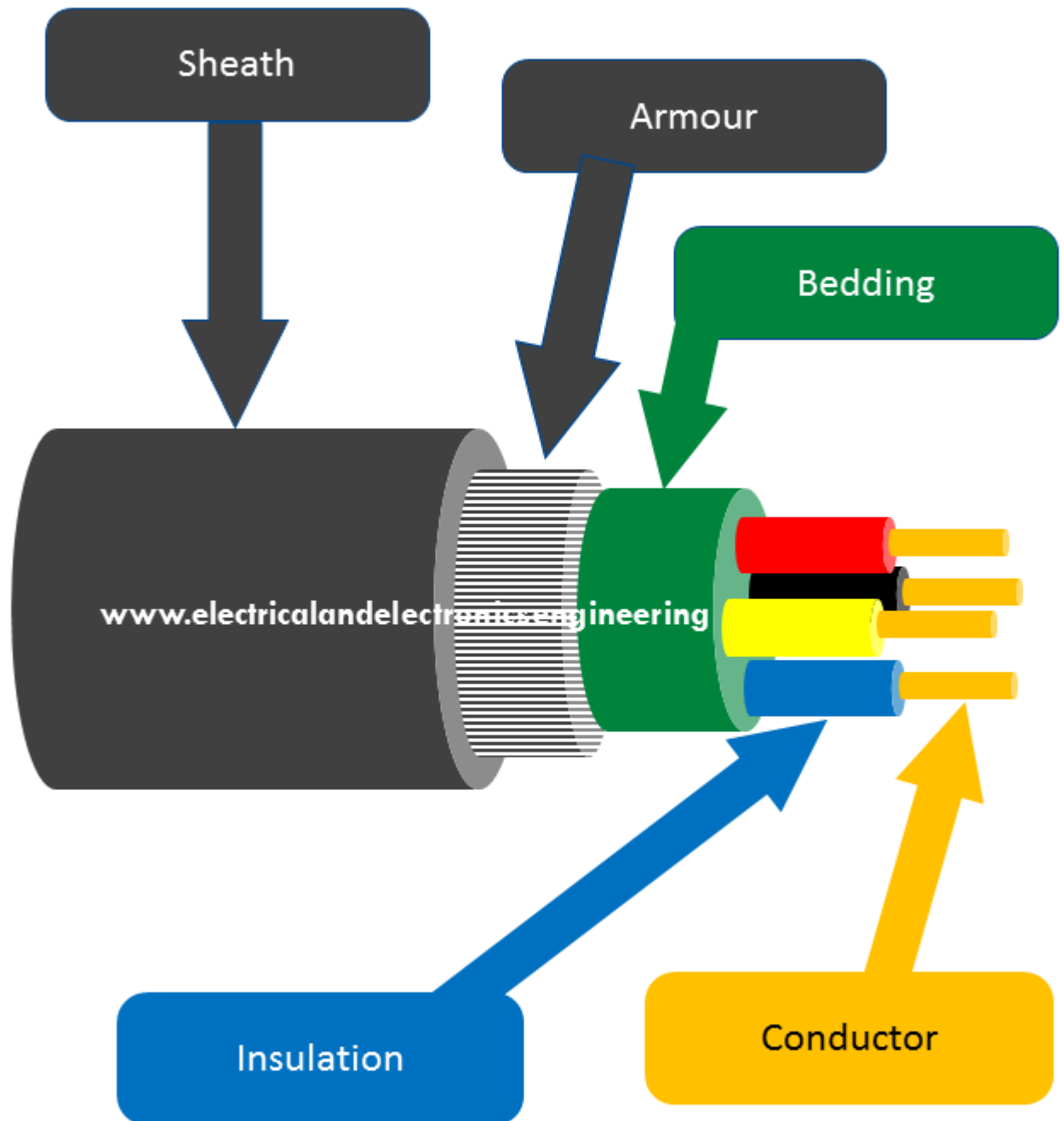
What is SWA Cable

SWA or Steel Wire Armoured cable is a hardwearing power cable that is designed to deliver power for mains supply. It contains a steel wire armour that provides mechanical protection against external stresses.

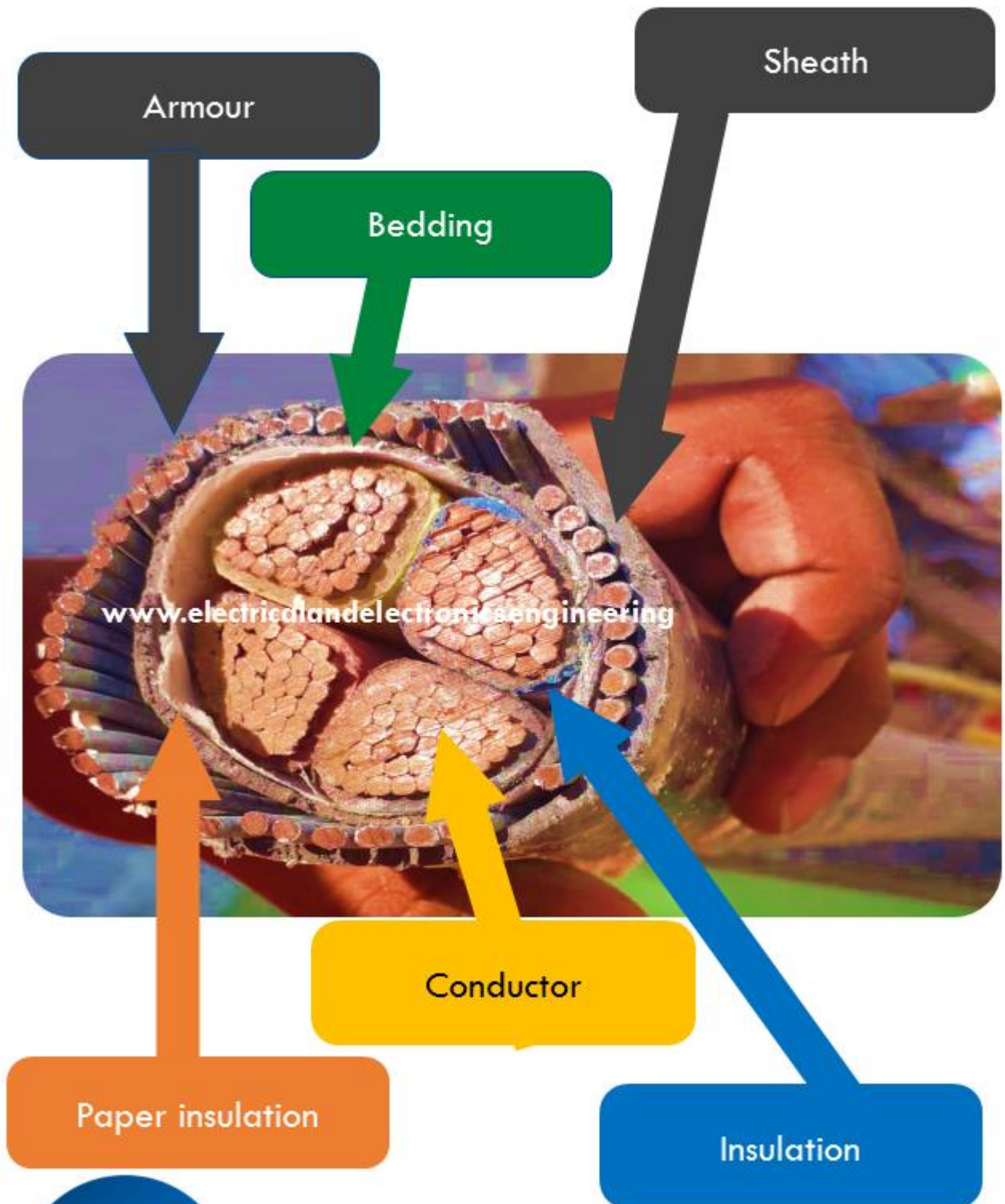


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The figure below displays general construction of SWA cables.



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Practical Applications of SWA cables

Underground Power Transmission

Power distribution from stations to SMBs

Power distribution in ducting networks



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Types of SWA Cables

SWA cables are available 2,3,4,5, and 7 cores. Figure below displays some of them

2 Core



3 Core



4 Core



5 Core



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Types of faults on SWA Cables

Open Circuit fault

A break in cable results in an open circuit fault. The open circuit fault can be detected using megger. The resistance between conductor and earth is measured using megger. If the resistance is broken the megger will indicate infinite resistance.

Short circuit fault

Whenever two conductors of multi-core cable come in contact with each other due to insulation failure, the resulting fault is known as short-circuit fault. For detection of short circuit fault the megger should be connected to two conductors. If megger gives zero reading, it means that short circuit fault exists.

Earth fault

Whenever a conductor comes in contact with earth, it is known as



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