Eletromagnetic cable

Electromagnetic shielding is common place and is used in signal and power cables. And will help to reduce EMC and RFI and is normally only useful from about 100KHz and above. It has little or no effect interference as produced by electro mechanical devices such as motors, electromechanical transducers and transformers devices.

Magnetic shield using Metal shields for reducing radiated magnet field and magnet field susceptibility has been known about for many years and is used in many common place items.

A Magnetic shielded power cable will radiated about 80% less magnetic flux field than an unshielded power cable.
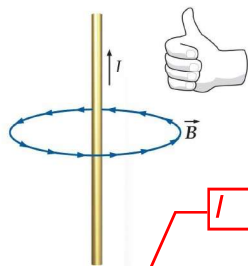
EWA have combine the EMC shield or Faraday cage with magnetic shielding to reduce radiated field and reduce the risk to the cable susceptibility to outside interference over a bigger bandwidth.

And by using a flexible magnetic materia[...]more us[...]ilable at the time of writing this document.

Note:- Fe,Ni,Co plastic mix is patented by me for TQ, unfortunately these material when used with plastic like PVC can a do destroy the tool use to draw the cable and make it very brittle and unusable.

EWA however have developed a complex compound not using these Metals to produce a magnetic plastic mix. But this also put considerable wear on the tools needed to draw the cable, so with a costly tool we have achieved what I wanted to do with TQ but with the added advantage of controling the maximum flux density.

 Fig 1:01 Below shows the magnetic fields concentrically around the conductor.

Consider a current I in a straight wire of infinite length.

The magnetic field lines are concentric circles in a planes perpendicular to the wire.

The magnitude of the magnetic field at distance R from the centre of the wire is:-

$$B = \mu_o I / 2\pi R$$

Annotations (red):
- drop the fullstop and use and
- shielding
- magnetic
- magnetic
- entire sentence needs rewriting
- who are EWA?
- combined
- wider?
- who are TQ?
- materials
- and
- metals
- used
- controlling
- ,
- I
- in planes, not in a planes
- pasted image instead of symbols in MS Word