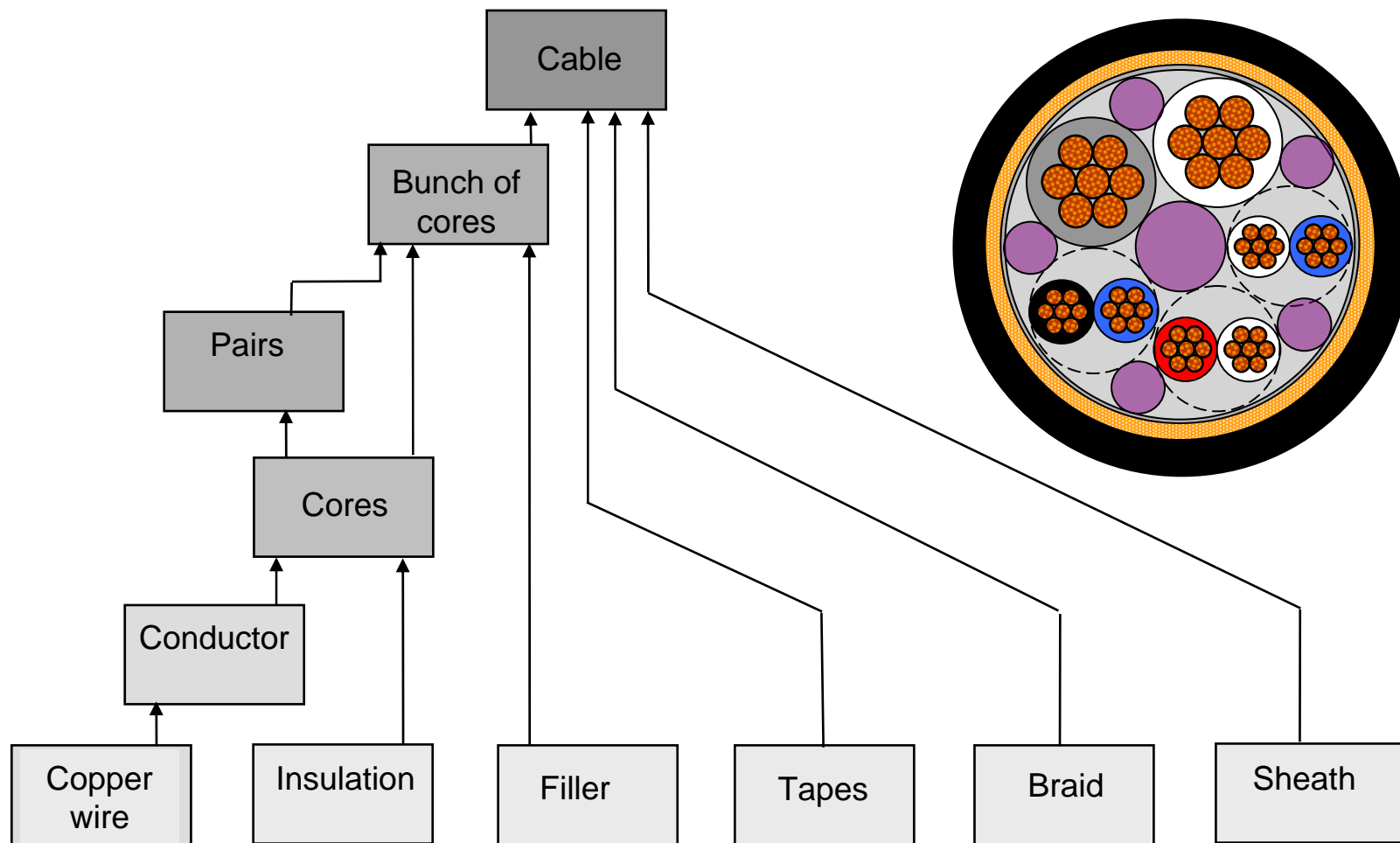


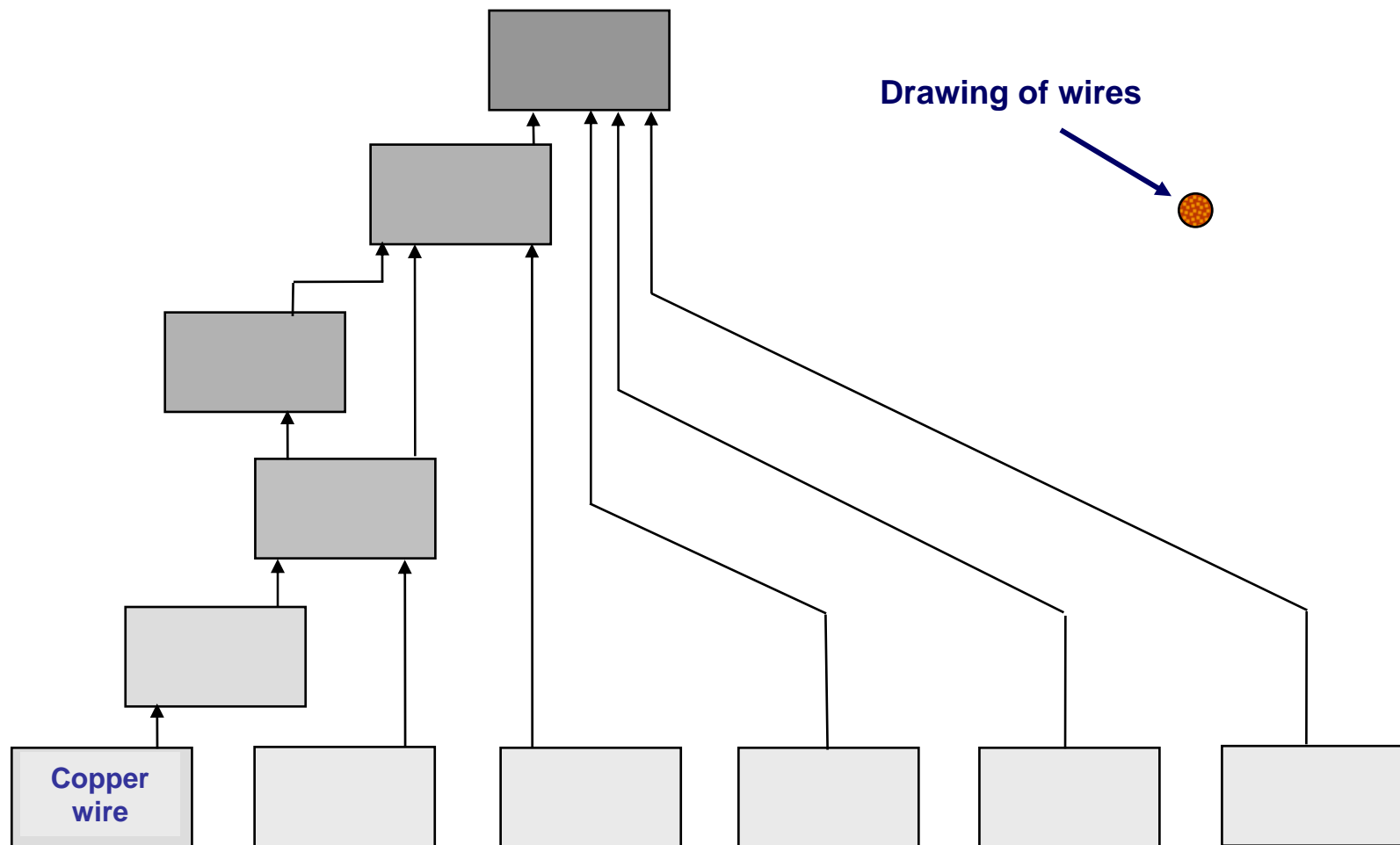


Wire & Cable RADOX®

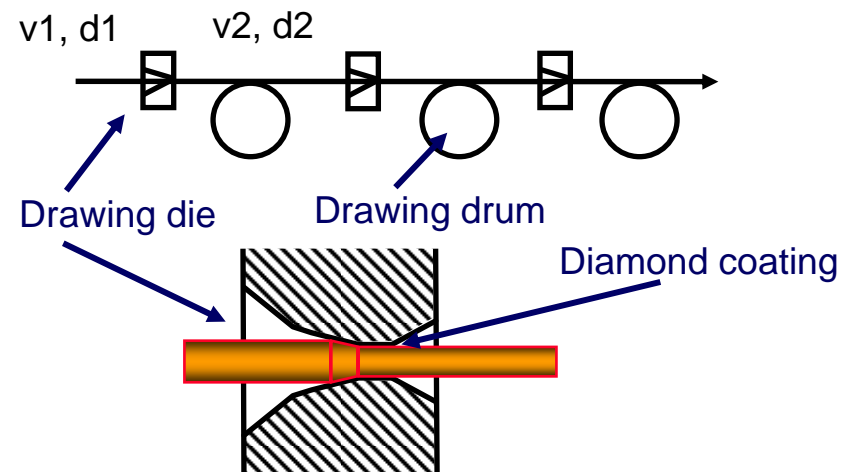
Verification of cable design



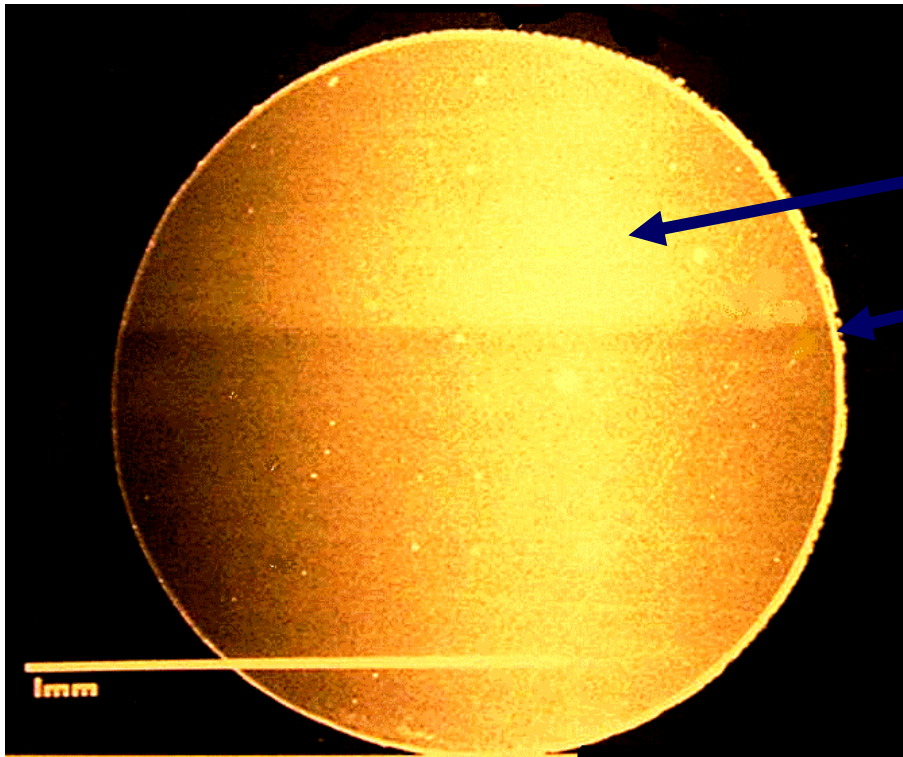
Drawing of wires



Drawing of wire



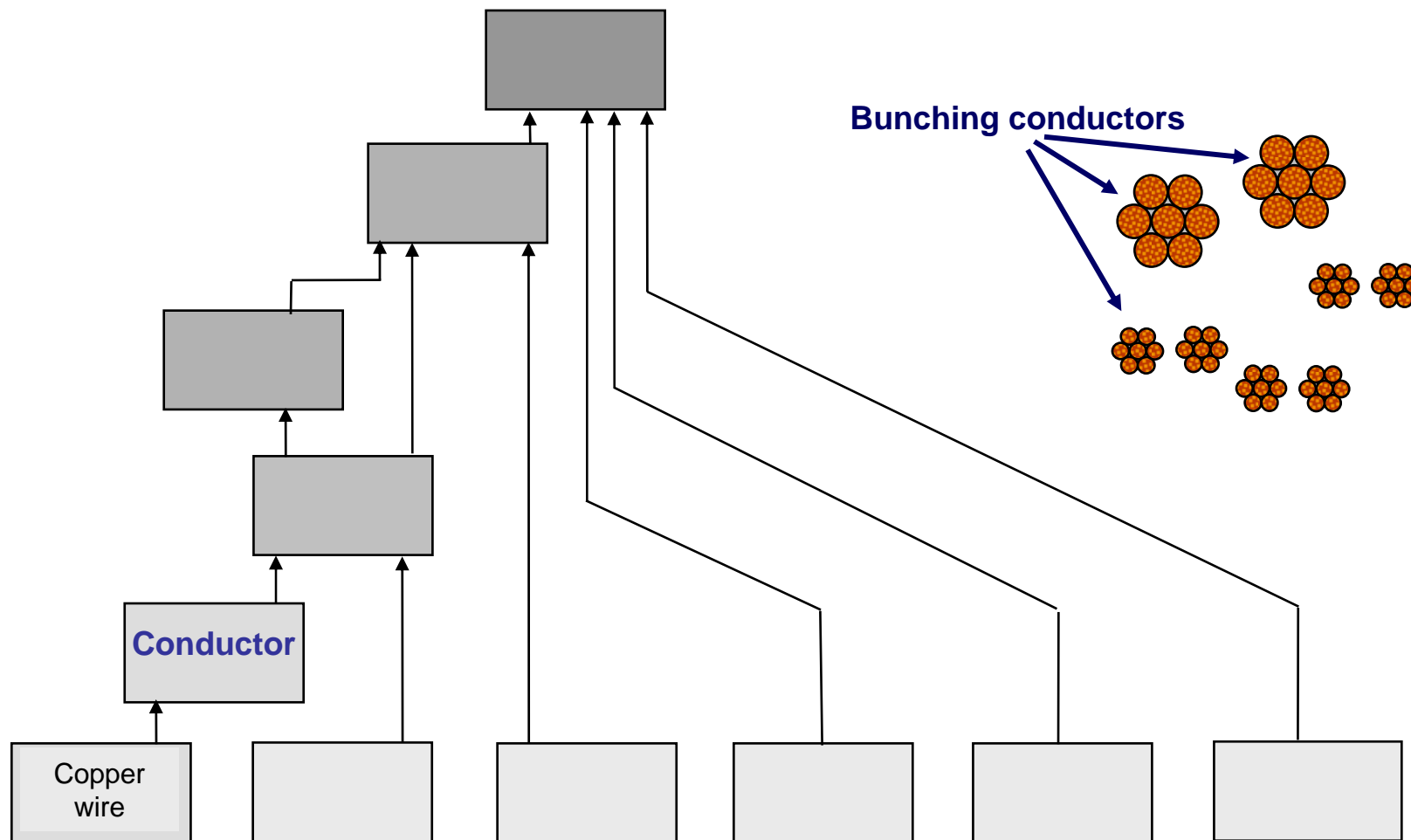
Tinning



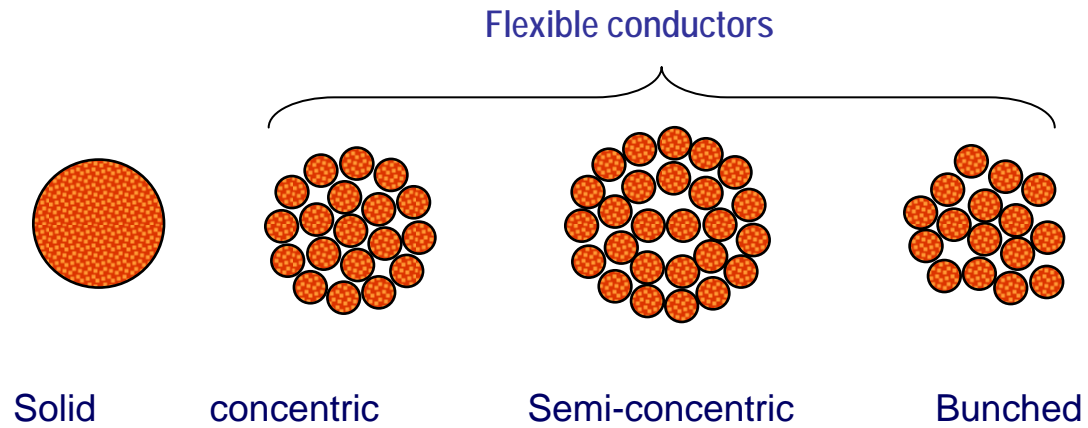
Copper conductor (~ 2mm)

Tin coating (or Nickel, Silver, ...)

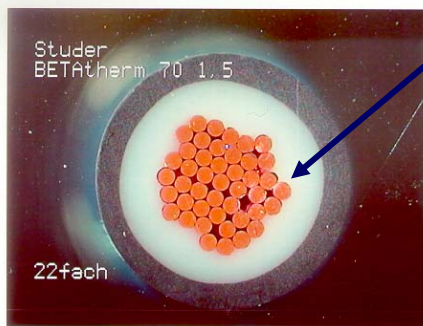
Bunching conductors



Conductor types

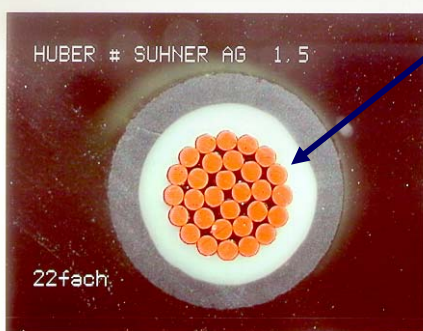


Conductor types



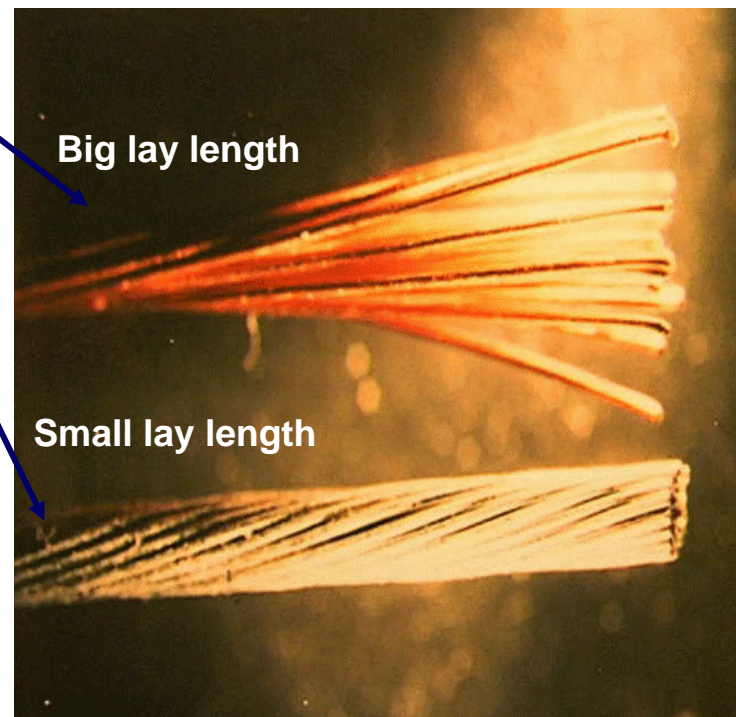
Bunched conductor

- cheap solution
- Increased strip force (not Easy to strip → cutting some strands)
- conductor spreading

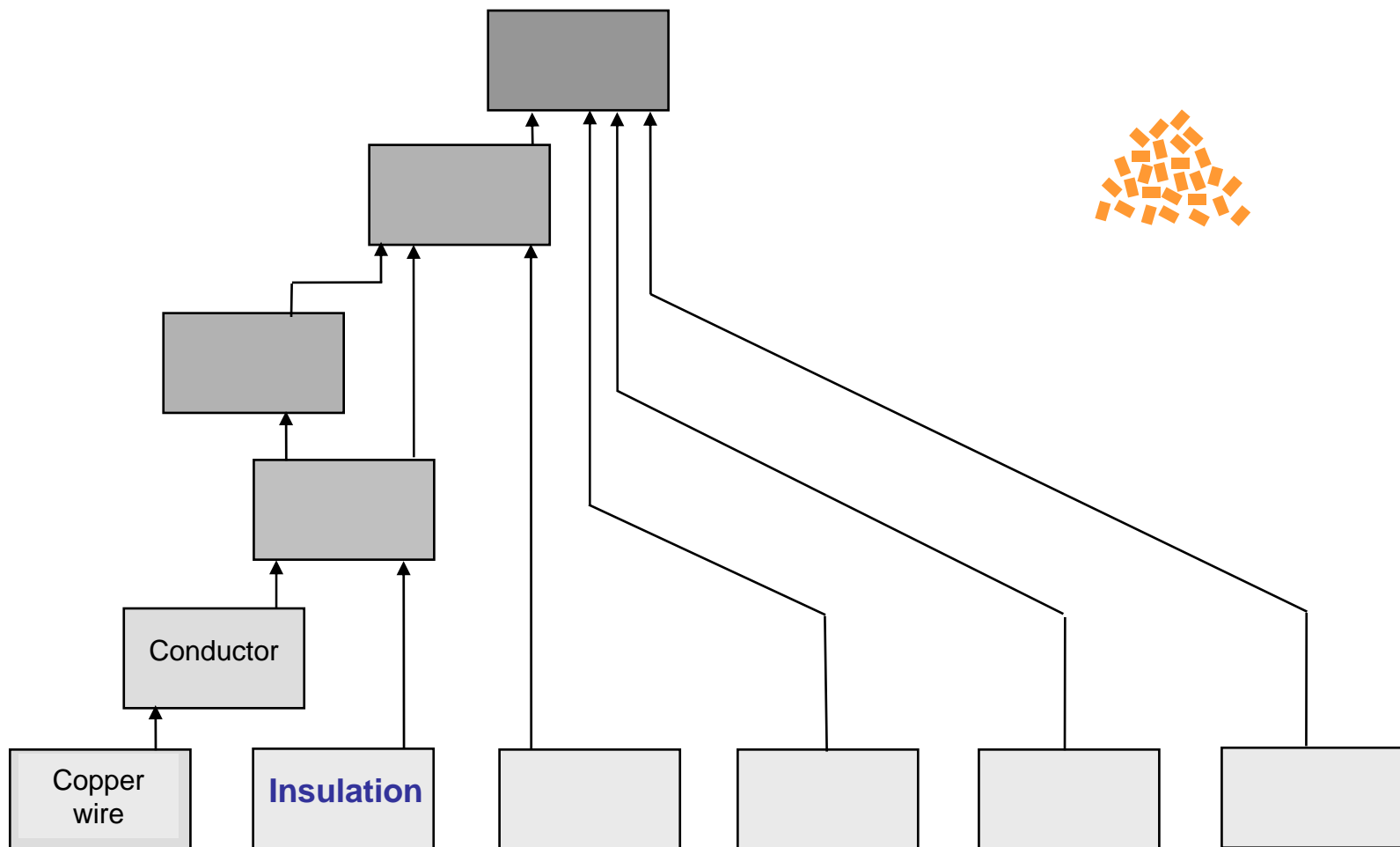


Semi concentric conductor

- conductor stays in its shape
- easy to strip
- more expensive solution for the wire cost, but mostly cheaper to process the wire



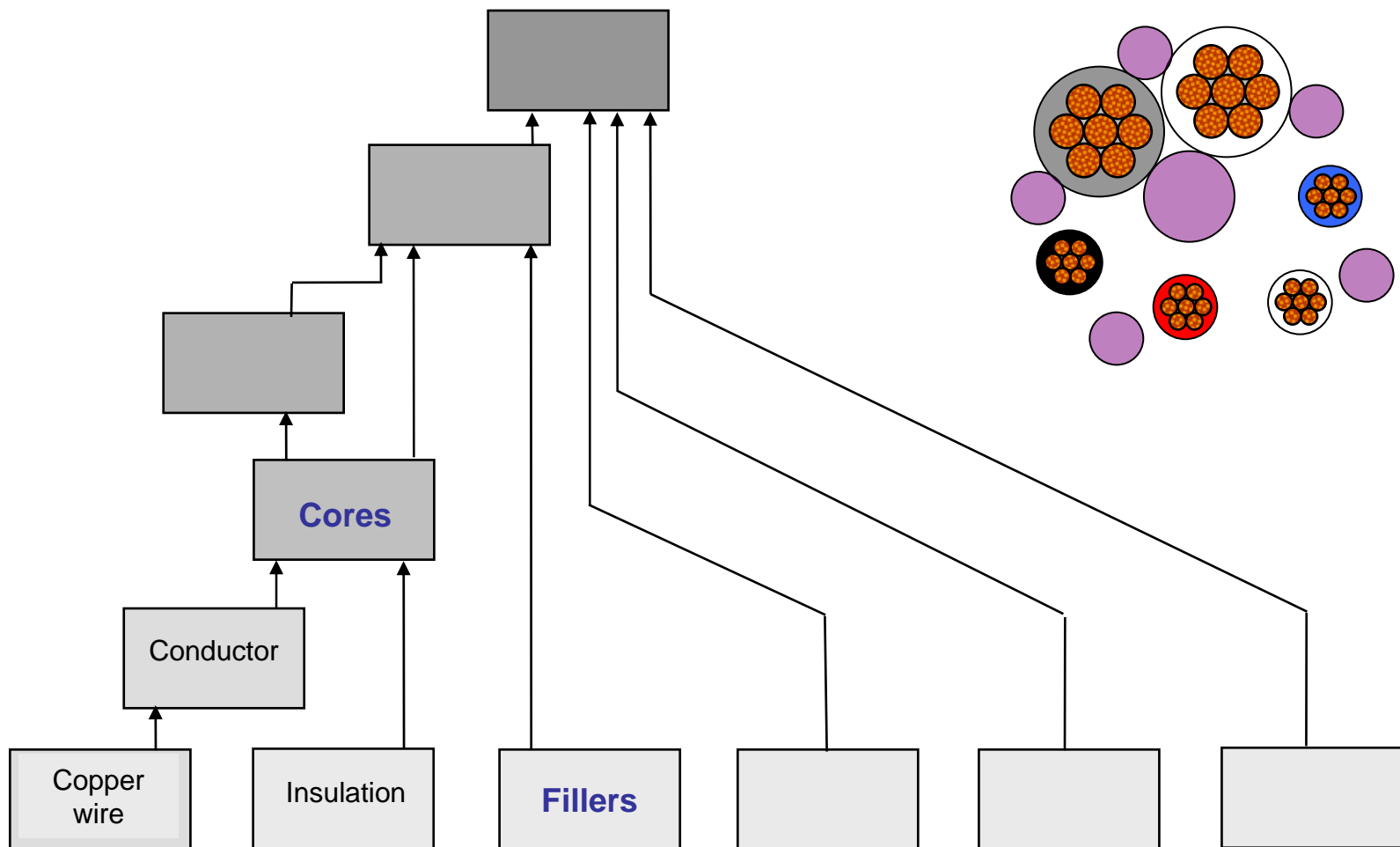
Compounding



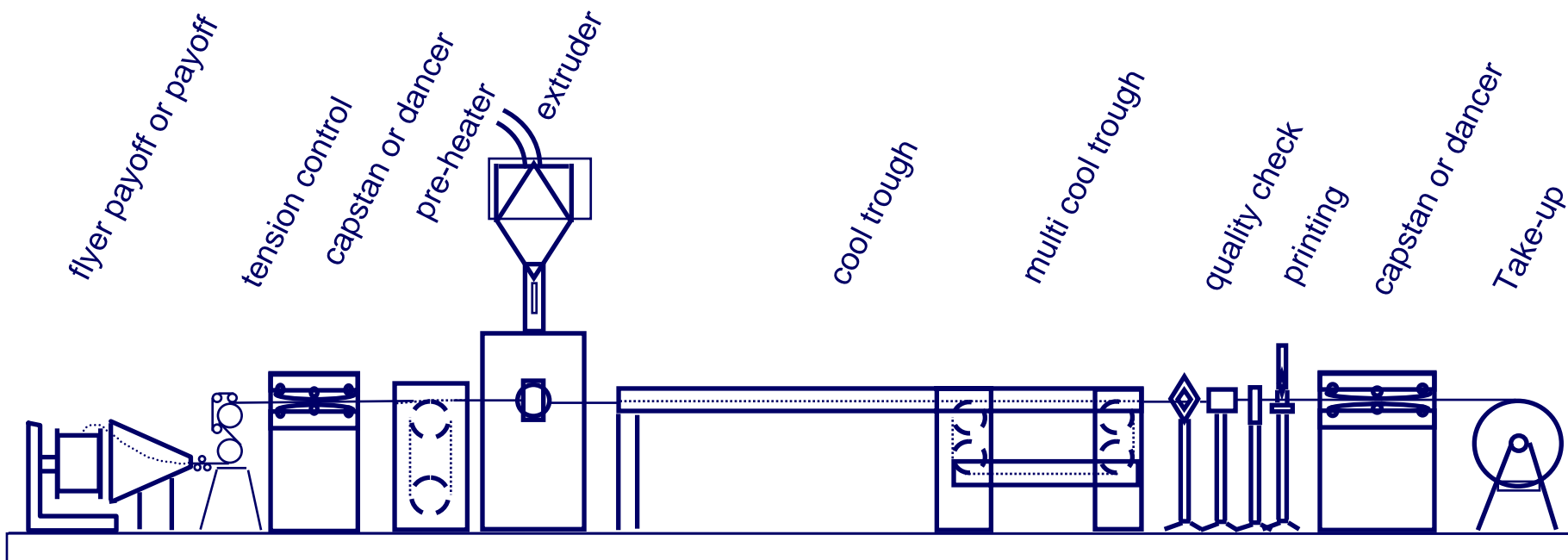
Compounding RADOX



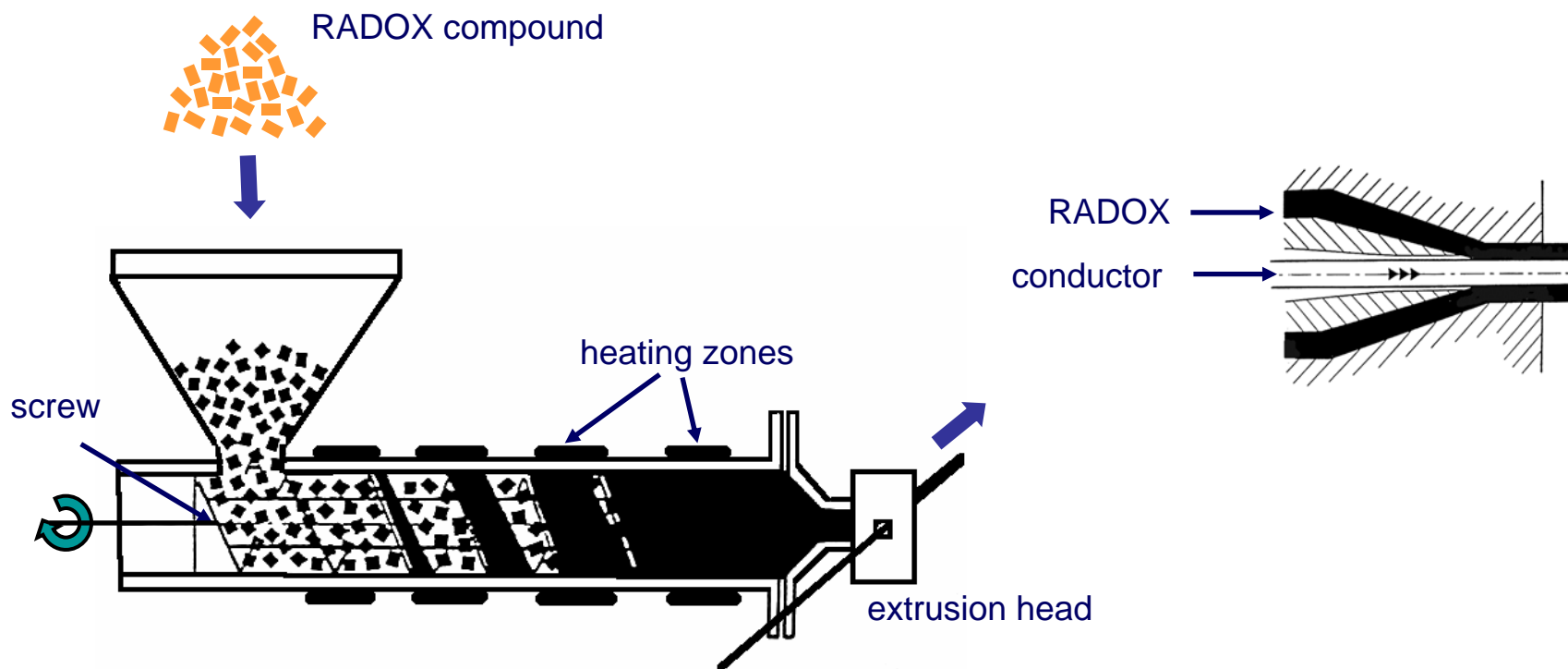
Extrusion and crosslinking RADOX



Extrusion Process

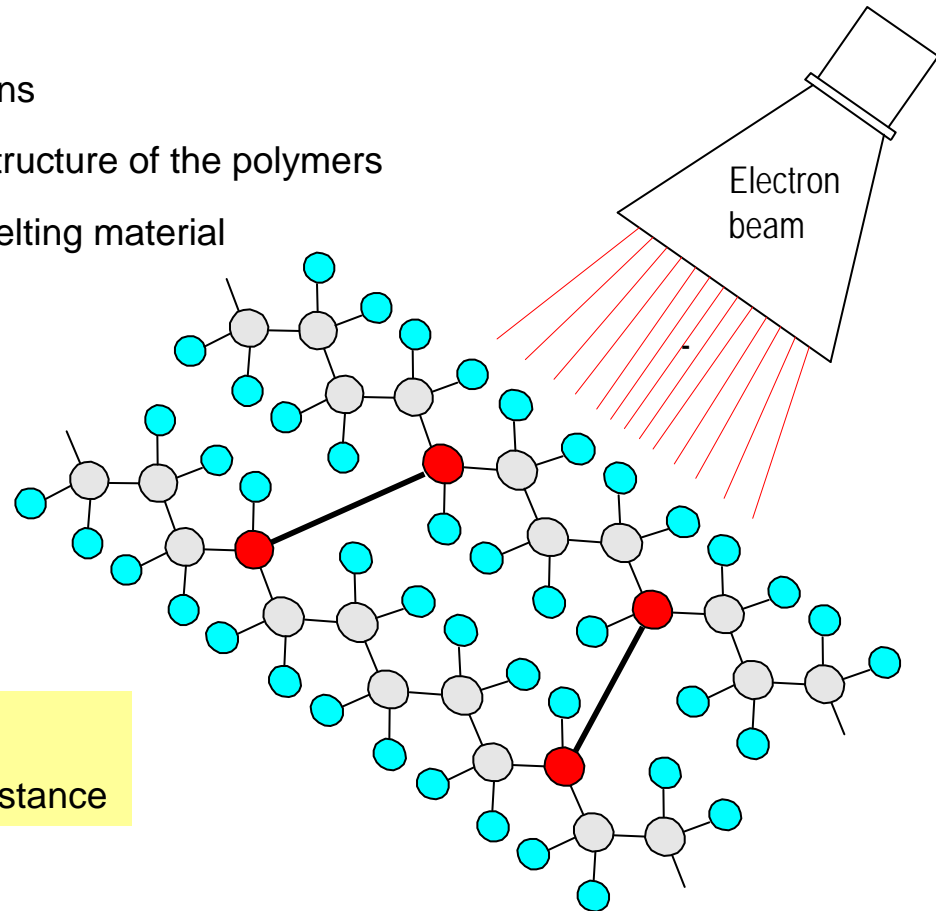


Extrusion Process



Crosslinking

- Cross linking with high energy electrons
- Cross linking changes the chemical structure of the polymers
- A melting material, becomes a non melting material



Improvement of:

- Heat, mechanical and chemical resistance

RADOX Technology

Material Technology:

- R&D
- Compounding



Process Know-How:

- Copper
- Extrusion
- Cabling/Twisting
- EMC



Electronbeam -Technology

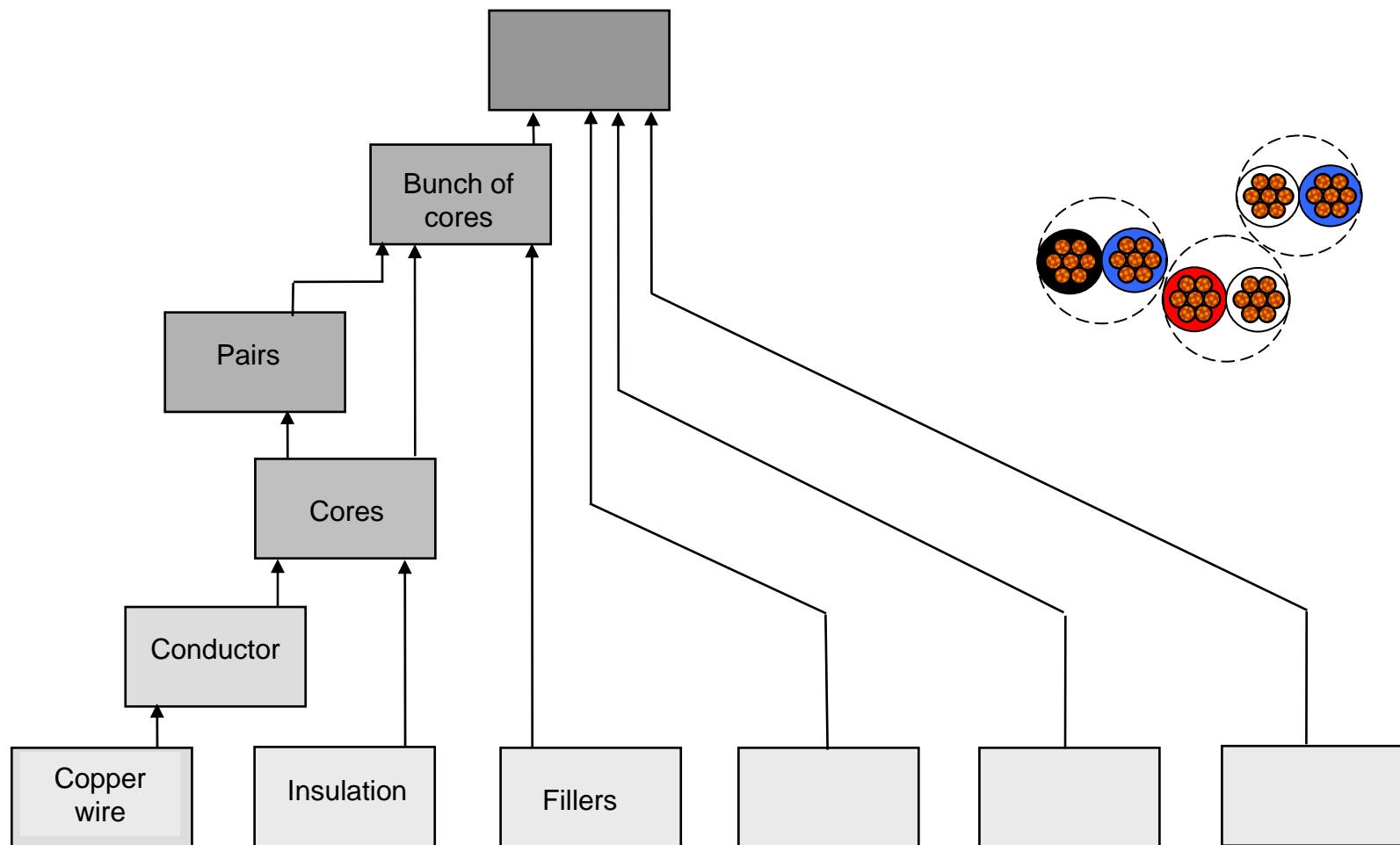


All process at
one place!

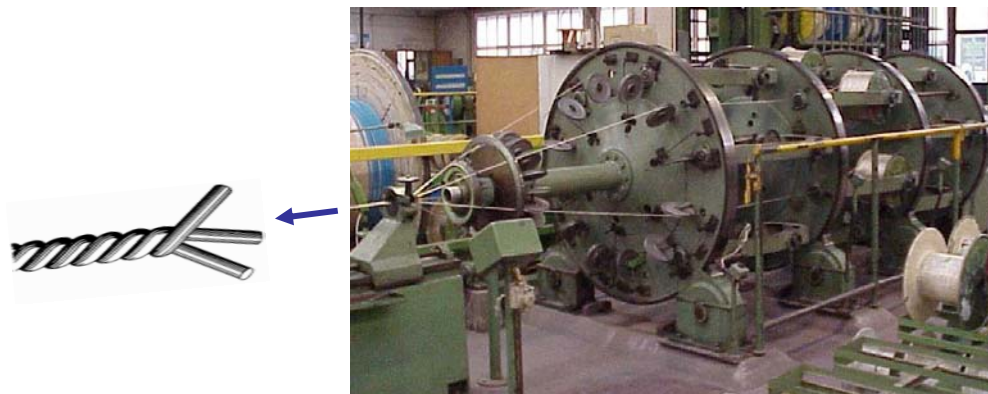


RADOX =
Radiation X-linking

Cabling of cores

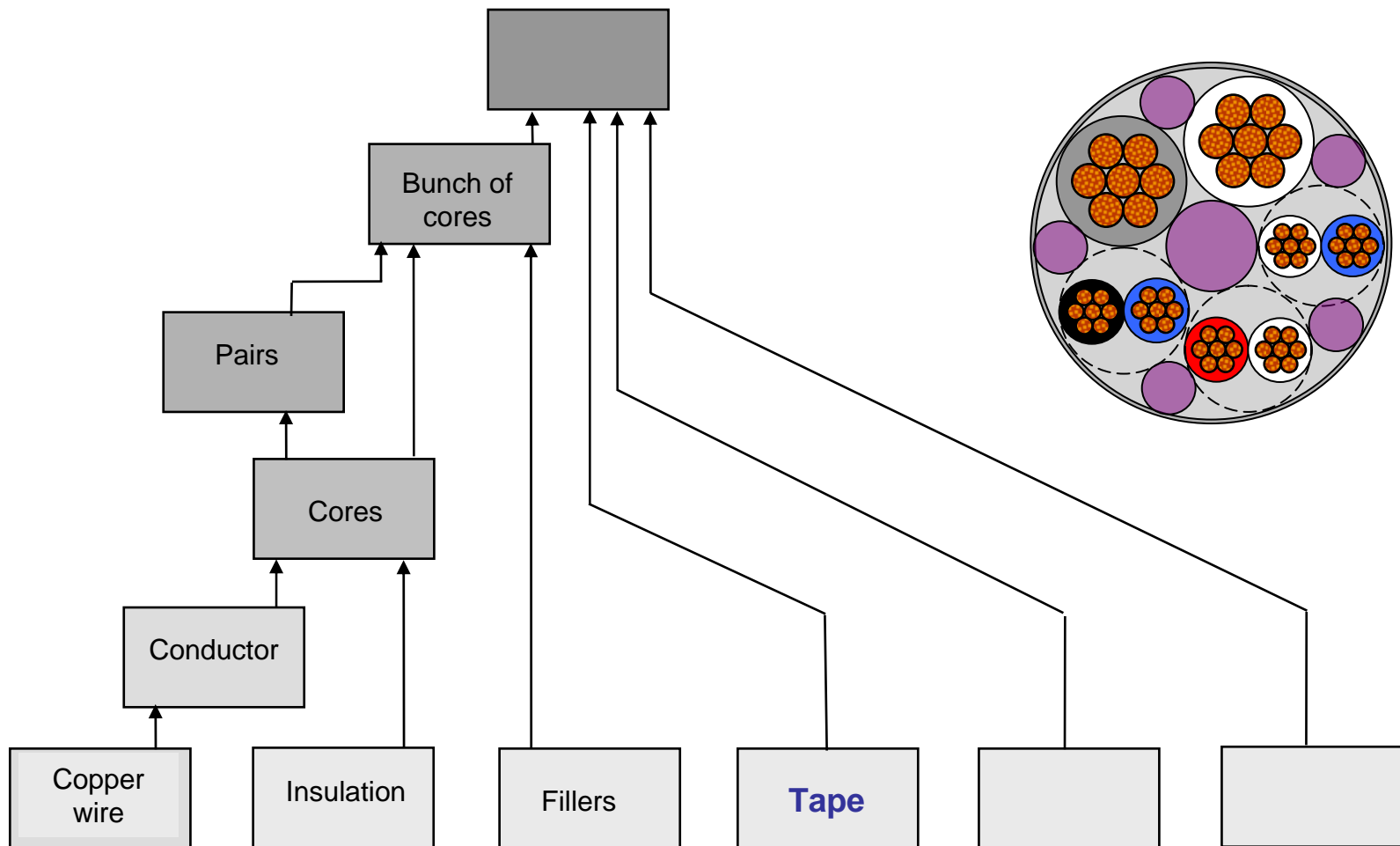


Cablings of cores

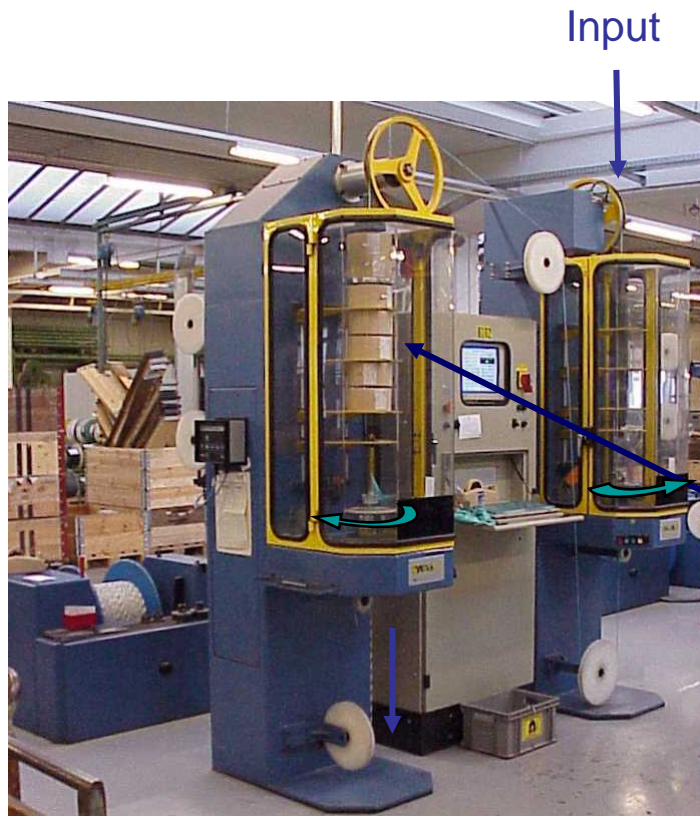


Some cabling machine takes up to 42 Cabling spools

Wrapping tapes



Wrapping tapes

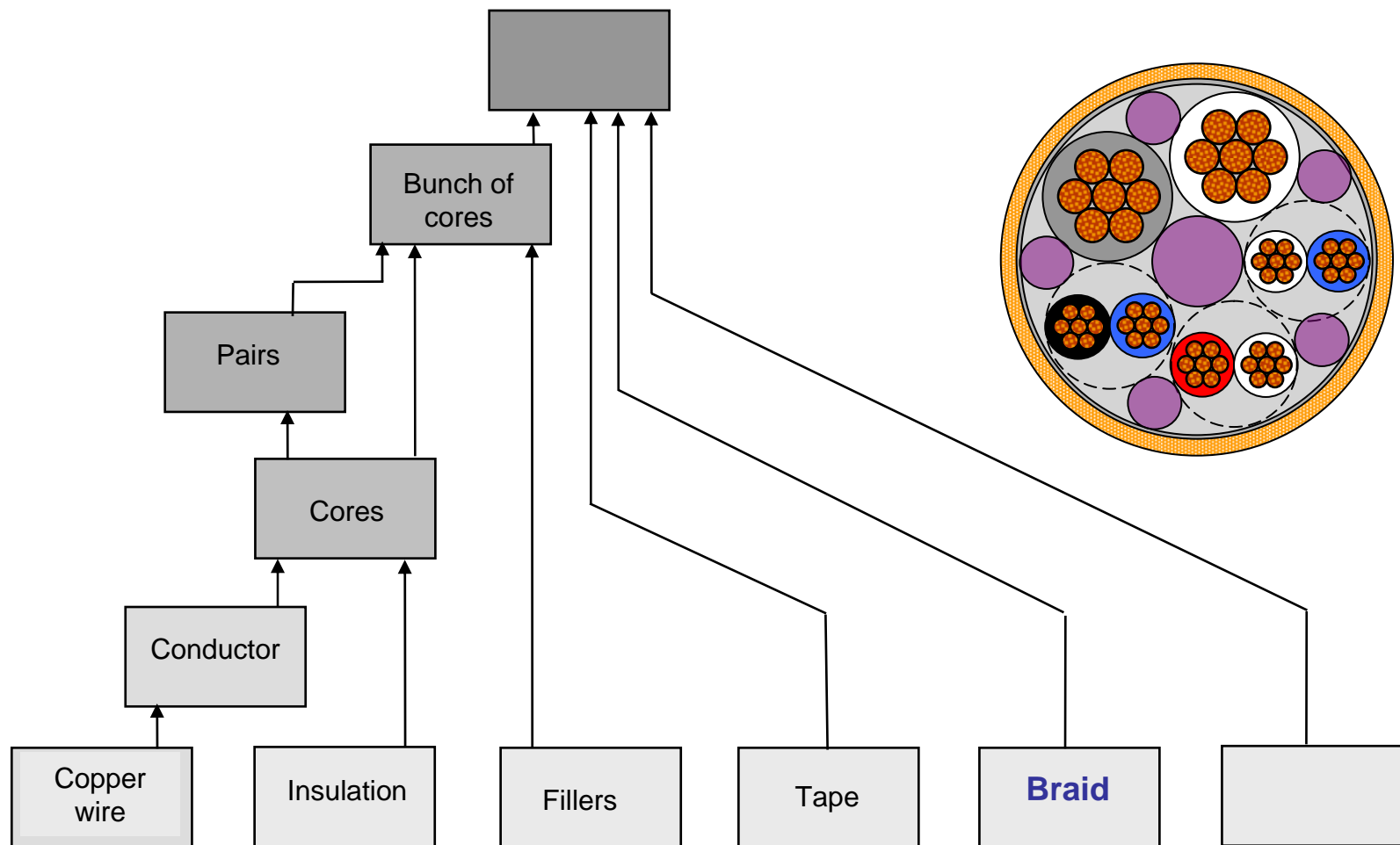


- Tapes for flame resistance
- Tape to fix bundles
- Tape to prevent sticking with jacket
- Tape to make stripping easier

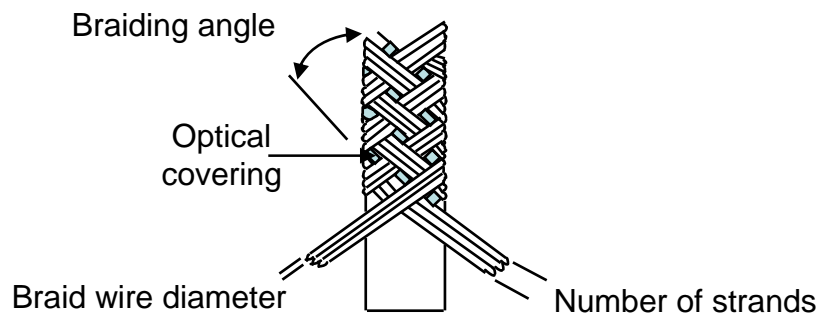
Wrapping tapes

Output

Braiding



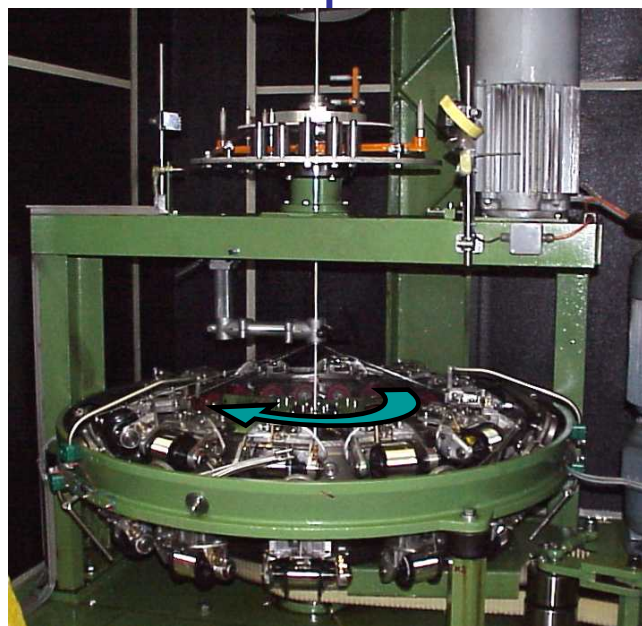
Braiding



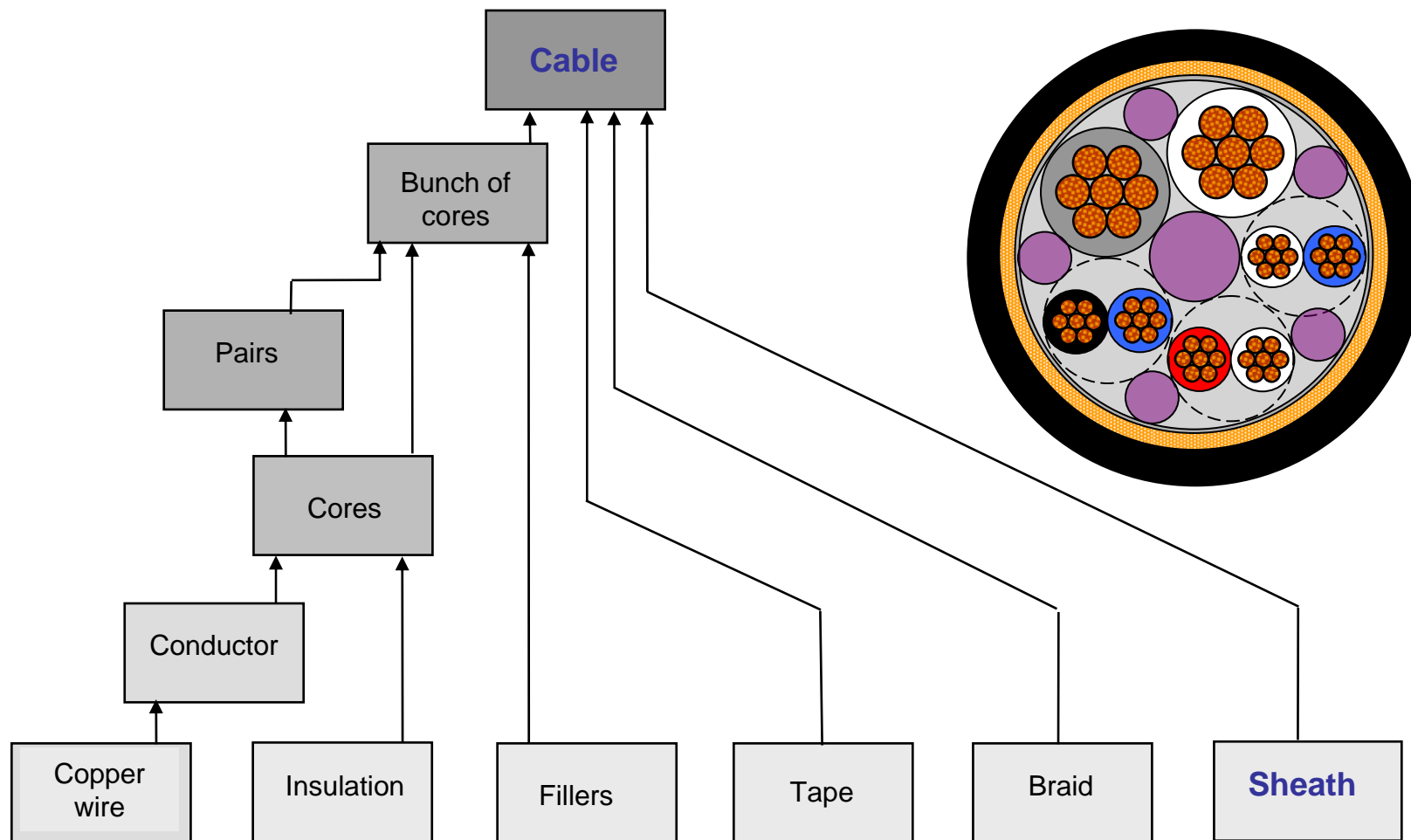
EMC protection (Electro Magnetic Compatibility) through:

Copper screen or

Aluminium tape



Jacket extrusion



Testing laboratories

- **Chemical Laboratory**
(analyze cable materials, competitors products, etc.)
- **Physical and electrical Laboratory**



Fire tests



Bending test



Bending rotation test