

## Continuous Sheathing in Very Long Lengths

BWE started its pioneering work to develop a continuous sheathing process 20 years ago. The world's first continuous Aluminium Sheathing machine, a **Conklad 350** was delivered to a Japanese customer in 1986.

Many systems have been delivered since then and the Conklad process has become the Industry Standard for OPGW and CATV cables production.

The fundamental reason why Conklad machines are so successful at sheathing is that, instead of just adapting an existing machine, BWE designed a new machine giving it the rigidity required to ensure a balanced flow of aluminium under very high extrusion pressures.

The Conklad 350 uses 2 x 9.5mm feedstock rods and has a working range of 5 to 20mm. For 5mm cable core the wall thickness can go down to 0.35mm. The limitation on wall thicknesses for large tubes depends on drawability rather than the extrusion process. Typically 20mm cores are sheathed with at least a 1mm wall.

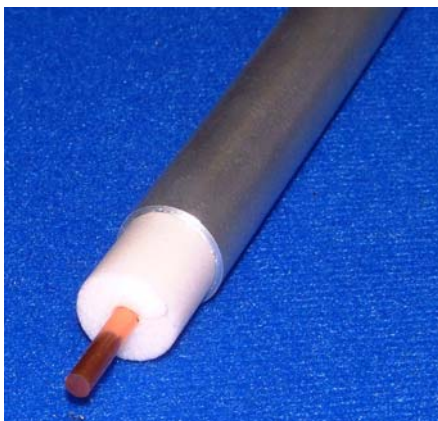
The sheath is extruded oversize and, generally, drawn in-line by around 30%. CATV cables are drawn to a tight fit on the core, while OPGW usually requires a loose fit.



OPGW Cable

For heavy-walled OPGW, output becomes an issue because the line speed must be high enough to avoid thermal damage while the core is briefly in the "hot zone". The Conklad 350 is capable of delivering more than 500 kg/hour while the **Conklad 400** can deliver over 800 kg/hour using 2 x 12.0mm feedstock rods.

The **Conklad 550** uses 2 x 12.0mm or 2 x 15.0mm feedstock rods and is used for large sheathing applications. In-line drawing can be used for cores up to 35mm diameter, for example, CATV Trunk Cables. For Power Cables, the sheath is reduced with a rotating corrugation head. The Conklad 550 can deliver more than 1,000 kg/hour.



CATV Cable

### Features

- **Continuous Sheathing in Very Long Lengths.**
- **Precision, Seamless Sheath.**
- **Line Speeds up to 150 m/min.**
- **Wall Thicknesses down to 0.35mm.**
- **Outputs up to 1,000 kg/hour.**
- **Low Capital Cost.**
- **Low Running Cost.**

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Cold Welding · Continuous Extrusion · Continuous Cladding · Continuous Sheathing

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