Draka's 5 Innovations to Increase Cable Density

Although the challenge for Draka's product innovation teams is to predict network infrastructure needs in ten years' time, we still continuously drive innovations to ensure customers have flexibility today to maximise their existing infrastructures within the cable density challenges they already face.

Draka, part of the Prysmian Group, have copper and fibre manufacturing facilities across the UK and Europe. As part of the largest cable manufacturer in the world, Draka call on the Group's world-class technical resources to reduce cable OD's, increase fibre counts within existing cables designs and provide infrastructure designers with more options for future expansion.

The first key driver we see today are cabling ducts close to capacity and the cost and challenges of installing new ducting between buildings becoming prohibitive. Draka have responded by:

1. Increasing fibre count per tube and reducing fibre size: It is now commonplace to see 24 fibres per tube within Draka designs, whilst maintaining the advantages of internal/external application with full Cca CPR compliance up to 432 fibres. Prysmian are now rolling out 200-micron fibre, which will allow tube sizes to further reduce and drive down cable OD.
2. Ribbon fibre is the next game changer in cable OD, and Draka are developing the capability to roll out this technology in volume into the infrastructure market.

Within buildings we are seeing limited space as basket tray and risers become close to capacity. Here we are responding by:

3. Hybrid designs that allow power, copper data and optical fibres to be incorporated into a single cable, saving both space and cost.
4. Prysmian's Sirocco blown fibre system is now fully intergraded into the Draka Universal Cabling warranty programme, offering increased design and expansion flexibility.
5. Copper cables continue to reduce in OD: The Draka Cat 6 U/UTP cable is a class leading 5.8mm in OD, our Cat 6a F/FTP is now 7.2mm and planned to be sub 7mm in the next round of design updates.

We can't predict the future, but Draka can be trusted to offer every possible option to future-proof your network.

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