

# MYTH BUSTER

## Destroying the CFL myth

arely has a light source been more misunderstood, and received such bad press for so long. So why is it that twenty–plus years after it's launch, the humble compact fluorescent lamp (CFL) hasn't managed to shake off its ugly sister image? It seems everyone has an opinion on it, and what's wrong with it.

We went in search of answers, and came across sword-wielding Robert Chelsom, managing director of Blackpool-based Chelsom, who takes up the case in an attempt to destroy some of the myths that abound in the world of compact fluorescent lamps.

Why are people often negative about compact fluorescent lamps(CFLs)?

In my opinion, it is almost as though compact fluorescent lamps came out 20 years too early, in terms of development. What I mean is, there were certain facets of compact fluorescent lamps, which didn't do the right job when they first hit the market, but all that has now changed. People say:

#### Compact fluorescent lamps are bulky...

Yes, the early ones were, but there are now all sorts of shapes and sizes, which are at least as small as any old-fashioned incandescent lamp, including candle shapes.

## Compact fluorescent lamps give cold light...

Absolutely untrue today! CFLs are available in a wide range of colour temperatures, both warmer and cooler than their incandescent equivalents. The range of 2,700K to 3,000K covers what most of us would call warm white, and this gives an identical colour temperature to incandescent. The two would be indistinguishable in conjunction with a fabric shade.

#### Compact fluorescent lamps flicker...

Originally, with mechanical control gear, they did, but not at all today with modern electronic control gear.

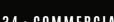
#### Compact fluorescent lamps are slow to reach full light output...

FL's are mostly called 'instant start', meaning they reach full light output in a matter of seconds rather than minutes.

#### Compact fluorescent lamps are not dimmable...

Not true! Most manufacturers offer a self-ballasted dimmable lamp, for example the Osram 18W, which dims very well with a good dimming range. For non self-ballasted lamps, dimming control gear is readily available, although it can be costly and somewhat bulky. »»

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#### Compact fluorescent lamps are expensive...

CFLs have continued to fall in price since the day they were launched, and now represent excellent value for money against other light sources.

### Compact fluorescent lamps are stolen from hotel rooms...

In the early days, when they cost £12 each and were a relative rarity, maybe that was the case. Today they are not worth stealing cost-wise, and most people have them at home anyway.

#### So, are LEDs the answer to all our future lighting requirements?

I think the answer has to be a definite 'no' for now. It took a long time to create an LED, which gave out warm white light. Reds, greens and blues were followed by a cold, blue-white light, but as long as the manufacturing source is good quality, acceptable warm white colours are now available.

Good quality manufacturing also means a consistency of colour temperature, because with some cheap sources of supply, almost every lamp gives out a slightly different colour shade.

LED light is linear and has therefore been perfect for display and navigational lighting as well as back lighting and task lights. Making LED light shine through 360 degrees (to replicate the light patterns of incandescent lamps) has been more of a challenge. Manufacturers continue to invent new ways to try and make that happen, but so far there is always one blank spot in the 360-degree circle.

LEDs only reach their claimed lamp life if they have an extremely good heat sink and good ventilation inside any luminaire. Without that, the claimed 25,000-hour, 50,000-hour or even 100,000-hour lamp life can drop to under 10,000 hours.

However, they are the future, and will continue to develop with long lamp life, good colour and dimming capabilities. Be careful with dimming however, as it is essential that the LED lamps are compatible with the proposed dimming gear. Watch out for first cost too! LED lamps are still pretty expensive and need to be in use an awful lot to become cost effective against CFL equivalent options.

# Does Far Eastern manufacturing have a perceived quality issue, and is the perception correct?

Yes, I think unfortunately, in some quarters, it still does. Personally speaking I think nothing could be further from the truth – remember the Chinese were making exquisite porcelain vases when, in Britain, we could hardly put a mud hut together! It is just like any other manufacturing in any other country where there are

extremes of low quality and high quality, good work places and bad work places, high standards and low standards. The fact that the Chinese have just put a rocket on the moon perhaps shows their high standards of technical and quality achievements today.

In some cases, and in my industry, their quality of engineering and finish is better than I have come across anywhere in the world. Obviously all that has to be driven by good QC (we have our own factory inspectors controlling that), and, more importantly, it has to start with good design, which good Chinese factories really appreciate and can't wait to receive.

The world's a small place today, and many geographical areas have different fields of manufacturing expertise. The important thing is that, as a UK-based product designer, I know where to have something manufactured with a perfect blend of price and quality. I am in no way knocking UK manufacturing, and we are extremely proud of our 'made in Blackpool' statement, because our in-house and local skills allow us to create the most spectacular one-off custom pieces for the hospitality sector.

#### CONTACT

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