

and detail into the die-casting as possible, to cut the number of basic nuts and bolts. Production manager Bill Crawford's role in the Strand team took on a special responsibility for planning the introduction of Quartet into production at Kirkcaldy.

Strand's product manager for Quartet, Mike Cawte, said, 'There was a great deal of teamwork throughout the project. It wasn't just a question of Will producing the design and handing it over to us. We were constantly back and forwards, sharing ideas.'

'Every credit must be given to the R+D team who not only provided a valuable input in the initial creative stages of Will's work but then went on to take total responsibility for translating the agreed design into the product you see today.'

THERE IS NO REASON WHY A BEAUTIFUL PRODUCT SHOULDN'T BE CHEAPER THAN AN UGLY ONE AS LONG AS IT IS WELL ENGINEERED

Prior to producing scale wooden models to use in the final debate on physical appearance of the Quartet, Will spent many hours talking to lighting technicians and seeing at first-hand how they handle lamps in a working surrounding. This information was crucial in deciding, for example, how the housing would open to allow lamp changes.

Will explained, 'If you have a series of products on the market with similar optical properties you have to prove that your product is better than someone else's. The luminaire has to survive on a number of points. Above all it has to be good at getting the light onto a stage. If your luminaire doesn't look as good as someone else's, then people will make a very quick judgement.'

'A similar judgement can be made if



Strand's design team: draughtsman Dougie Hunter (left) and design engineer George Patterson on the CAD system.

the price is too high. The whole time in the design stage you are literally working to design money out of it.

'There is no reason why a beautiful product shouldn't be cheaper than an ugly one, as long as it is well engineered. We also wanted to think that in five years time, the Strand Quartet will still be the one that people want to pick up.'

As to the overall shape of the new luminaire, Will said, 'A lot of the shape has come as a result of the lamp tray pivot point and the need for easy lamp replacement when up a ladder.'

'The ideal pivot position will provide clearance for lamp and other components and happens to be located in the cooler lower part of the lamp tray, providing an ideal position for incorporating the handle.'

A plastic moulding was determined as the most effective way of isolating

the operator's handle from heat and power, allowing air to circulate around areas liable to retain heat and providing a suitable access point for the cable.

Given that there is so much input from Strand R+D staff, why use an outside design consultant?

Will explained, 'One thing we are very good at is visualising the end product, while someone who is working in detail the whole time can find it difficult to stand back and take an overall view. Then if you change one thing on the design the effect on other components can be co-ordinated. The arrangement worked very well without compromising the design.'

London Associates have won a major design award this year, the British Design Award, for their work on the new Planet Safe for Chubb. This is a fire and security safe weighing half the amount of traditional safes.

QUARTET - A LOOK AT THE FINER POINTS

- Quartet sets new standards in luminaire design and construction
- Exciting style derived from ergonomic and operational requirements
- Designed to conform to IEC 598 — 2.17, the international standard for luminaire safety
- Bridges the gap in performance terms between Minim — which it

replaces — and Prelude

- Outstrips Minim in terms of quality and features
- Available in four models — 22/40 Variable Profile Spot; 25° Fixed Angle Profile Spot; Fresnel and PC Spot
- Profiles fitted with beam distribution adjustment
- Smooth lens adjustment

incorporating unique toggle-action locking, is fitted to profiles

- All models incorporate an integral handle arrangement in advanced engineering plastics to provide a comfortable operating temperature and access for input wiring
- Handle position provides pivot point for lamp tray to give excellent access for lamp replacement