

## *Design Narrative 5*

*a g rao*

### Starter for Crompton Greaves

Crompton Greaves Ltd had approached me for the design of their starter! This was 5 Ampere starter which is used widely. I had seen the same capacity starter designed at NID by Prof Kumar Vyas, for Larson & Turbo(L&T) when I was a student. L & T was the market leader. Mr. I.C. Joseph who later became a visiting faculty at IDC used to come for client meetings to NID. Kumar had a great sensitivity for radius. We used to watch him with admiration when he used to give final touches to the mock up models himself! I still remember him marking radii on a plastic model of new Alldrop door latch which I had designed as a part of my diploma project. I had cleverly adopted a suit case latch for the door latch. I was so excited in coming with a new mechanism that I had not thought of the radii in the corners. Once I followed the markings made by 'Kumar', the product became friendly looking and attractive.

*A suggestion at the right time is so important in design pedagogy! These are not planned inputs in design education, but part of project guidance. Student-teacher interaction at this stage is crucial as the student is unable to see the problem! Many times students do not realize that it is important to show their rough models at trial stage to get a right feedback! Real learning happens at these moments!*

Starter was a simple product. I finalized two designs after exploring several alternatives. Scope of change in form was limited. Main focus was on details of form like radii and chamfers of the body. Switch shroud and small details of switch tops were the next 'visual element' to create an 'Identity'.

One alternative was based on the box shape which was followed by L & T. Changing the form completely has great risk if the company is not the market leader. effective Marketing would demand advertisements in T.V. For an industrial product like starter companies were not geared up for this. T.V also had not spread extensively. Cost of TV advertisements were also prohibitive. The retailers would be selling the products of competitors as well Often companies which introduce the products later try to sell the product on the basis of lesser price with the same features and quality as that of market leader!. It would be prudent design strategy to sell a product with similar physiognomy! The first design was in blue colour with chamfer and radii combination. It had an attractive slope on the top on which company logo was placed boldly.

My second alternative was quite different with a large radius coming on one of the sides. The form had a flow in tune with the cable. The colour was 'earthy brown'.

When I made the presentation, I recommended the first alternative with a blue colour. Some of the engineers started liking the second alternative. Then I explained the strategic concerns for marketing. I was more worried of the sophisticated slopes and radii getting exactly translated into production. I discussed with the engineer who was in charge of tool making. He assured me that there is no problem at all. In those days, no CAD and CAM facilities were there for tool making. The mould-cavities had to be either machined or spark eroded from a copper master! Making radii in the cavity as negative shape needs special skills of tool makers. The presentation had a happy ending as the company accepted the design. Models & drawings were given soon after.

But the story did not end there. The starter I designed was based on the guts or inner parts provided by the company. I came to know much later that the company had introduced a changed version of design which we gave, with new guts or inner parts which they started procuring from another party. The company did not have the courtesy or concern to consult me. The product seem to have made a big stride in their sale. In the Eastern zone where the power supply used to fluctuate, people started using starter for air conditioners in the offices! And the Crompton Product fitted well into office and home surrounding. It became successful as a consumer product rather than an industrial product!.

Incidentally the company's Nasik unit again approached me after couple of years for design of another range of starters. I was Head of IDC at that time. They had brought the earlier model as well. They said it was selling very well and they had made only minor changes. The general manager was new to the starter division. He seemed well exposed to demands of 'Aesthetics'. I told them that I was very upset about changes in the design without consulting us. I arranged a presentation of the my original design in IDC conference room and explained the team how much background work went in to the design and how they had damaged the design.. How the radii at the slopes was distorted was shown with visual examples. 'The smooth flow of form, laboriously worked out had disappeared' I said, ' Sales can't be a sole measure of good design! The new general manager was truly apologetic. He said that his engineers do not understand the nuance of 'Aesthetics'! Then he revealed that he had a 'philosophy' back ground and had later moved into Management studies ! On his suggestion we conducted a 3 Day course for their engineers on 'product form'! Whether the soup bowls looked 'Soft' or 'Hard' was the talk of the table during Lunch time!

That is when you realize that aesthetic exposures have to be a part of a culture or through education. Engineering Education in India certainly needs a strong dose of 'aesthetics through design'!

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