Tvilum alias IKEA trusts in BENDER

The company Tvilum-Scanbirk in Denmark, who produces approx. 75% of all IKEA wood-products, has chosen an IT system, with BENDER IRDH and EDS for the production.

Tvilum-Scanbirk's business concept is to design, manufacture and market high quality functional board based furniture, at competitive prices. The Tvilum-Scanbirk Group designs, manufactures an extensive range of furniture based on chipboard or MDF with a surface of foil, melamine or veneer.

In order to be responsive to market trends and demands; they maintain a constant focus on product development. The phrase "two a day" reflects that Tvilum-Scanbirk design approx. 400 new models a year!

Tvilum-Scanbirk is manufacturing approx. 12 million pieces of furniture a year – corresponding to nearly 60,000 pieces of furniture a day or more then 8,000 pieces, per employee annually (1,400 employees).

The Tvilum-Scanbirk Group's products are marketed and sold in more than 60 countries around the world. The main markets are North America, Germany, Denmark and the rest of Scandinavia, which account for approx. two thirds of the total sales. Approx. 90% of the Tvilum-Scanbirk products is exported. The turnover for the Tvilum-Scanbirk Group was approx. 322 million Euro in 2003.

The Tvilum-Scanbirk has now decided, that all the electrical power supply to the production at low voltage level (400 V), must be an IT system, with BENDER insulation monitor and EDS systems for localization of insulation faults in the production. The IT system is chosen to maintain the high demands of production reliability, and to maintain the international standards regarding protection against fire (DIN VDE0100-482), which are new in Denmark.

Previously all the production lines at Tvilum-Scanbirk were supplied from a traditional TN-C or TN-C-S system. These traditional TN-systems Tvilum-Scanbirk could not accept any more, because the leakage currents were too high.

The typical application for the electrical power supply at Tvilum-Scanbirk (alias IKEA), consits of a 1200 KVA power transformer 10 KV/0.4 KV with Dyn5 connection (3 phase + N) at each production hall. The 400 V systems are monitored by BENDER A-ISOMETERs® IRDH575 and EDS470 systems.

Ulrik Fournais

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