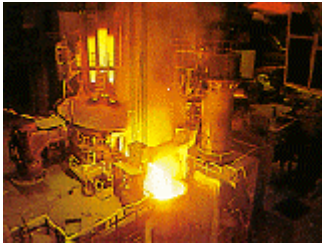


BU AC Systems Application Portfolio

Application Responsible Unit
BUU FACTS



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SVC & SVC Light for Industry

Industry as well as commercial and domestic groups of users demand power quality. Flickering lamps are no longer accepted, nor are deratings or interruptions of industrial processes due to insufficient power quality.

Demands for increased steel production and rules for network disturbances have, together with increasing cost of energy, made reactive power compensation a profitable solution in the steel industry. A modern and cost efficient steel melting process demands a stable and steady voltage support for the Electric Arc Furnace. With dynamic reactive power compensation, the random voltage variations characterised by an arc furnace are minimised. The minimised voltage variations are achieved by continuously compensating the reactive power consumption from the arc furnace. The result is an overall improvement of the furnace operation, which leads to better process and production economy. ABB exercises with Static Var Compensation for the steel industry goes back to the early seventies.

A common trend among steel produces is to increase the rating of the Electrical Arc Furnace. Often, the power supply is poor and insufficient. In order to make the investment possible, ABB offers reactive power compensation with special attention to weak networks with severe voltage support problems. The concept is named SVC Light®, and is today a well proven technology. The SVC Light can be connected directly to the furnace bus without any intermediate transformer.