10.0 NTPC Experience in Making Fly Ash Bricks

To promote and demonstrate the use of fly ash bricks in building construction and other work, NTPC have set up pilot cum demonstration fly ash brick manufacturing plants at all its coal based stations. Fly ash bricks are being produced using cement as binding material on regular basis at all the stations. The bricks are used for power plant buildings, residential buildings of township and other construction / maintenance works. Most of the stations are having number of hydraulic presses of capacity 8,000 – 10,000 bricks per 8 hours shift operation. At NTPC Dadri and NTPC Talcher Thermal few vibro presses are also installed for making FAB. In expansion projects viz. Talcher Kaniha (Orissa), Simhadri & Ramagundam (A.P), Rihand (U.P), Korba and green field project Sipat (Chhattisgarh), FAB have been exclusively used in plant and township construction works. About 48 crores FAB have been produced in these plants and utilized in the works. The compressive strength of these bricks are in the rage of about 80-150 Kg/ cm2. At NTPC Talcher-Kaniha, FAB are being produced using about 2% of gypsum in addition to cement and bricks are of very good quality.

At NTPC Dadri, Ash Utilization Technology park has also been developed wherein other fly ash based products like floor tiles, paving tiles, roof tiles, interlocking blocks etc are being manufactured.
Suggestion:

Since electricity is an essential requirement of each human society and in India major part of power is produced using coal which produces fly ash. Each one who consumes power has a moral responsibility to contribute for its utilization. Fly ash bricks are environment friendly bricks and can be easily produced in factory as well as at construction site. There is a need to shift users habit and utilize environment friendly Fly Ash Bricks in place of conventionally made clay bricks.