



State Award – Gujarat

Modified Wood Based Culturally Accepted Crematorium

Arjunbhai M. Paghdar
Junagadh, Gujarat
Scout: CRSD

Arjun Bhai (56) is engaged in construction and brick making business. He has dedicated his life for solving the problems of common people and conservation of nature. He was awarded at NIF's 8th National Grassroots Innovation Awards for his brick/block making machine. He has also made a wood splitting machine, cow dung log and pot making machine and a mobile chabutra (bird feeding platform).

As per Hindu rituals funeral is by cremation generally where about 400 kg of wood is used. In India, millions of tons of wood is burnt every year in cremating dead bodies. Arjunbhai has designed a biomass gasification based cremation process, wherein a closed mummy shape is made of

refractory bricks to ensure minimum heat loss. He has placed doors at front and rear end of structure to perform Hindu rituals. The inner side of the top cover is filled with cera-wool, which can tolerate high temperature. Blowers and nozzles are provided which release air to accelerate the cremation process. Charcoal filters and caustic soda filters have been provided for air filtration and a chimney for air exhaust.

The average time taken to burn a dead body (about 80kg weight) is 70-90 minutes while consuming 70 to 80 kg of wood as compared to 3-4 hours in conventional method consuming around 400 kg of wood. The cost of modified crematorium is about Rs 2 lakh.

