

Development of Manufacturing Method for Non-Burnt Bricks Using Fly-Ash to Reduce CO_2 and Air pollution in India

Abstract

The aim of this feasibility study is to achieve the SDGs by reducing the environmental load and to improve the working environment of the brick manufacturing industry, which encompasses serious social problem in India.

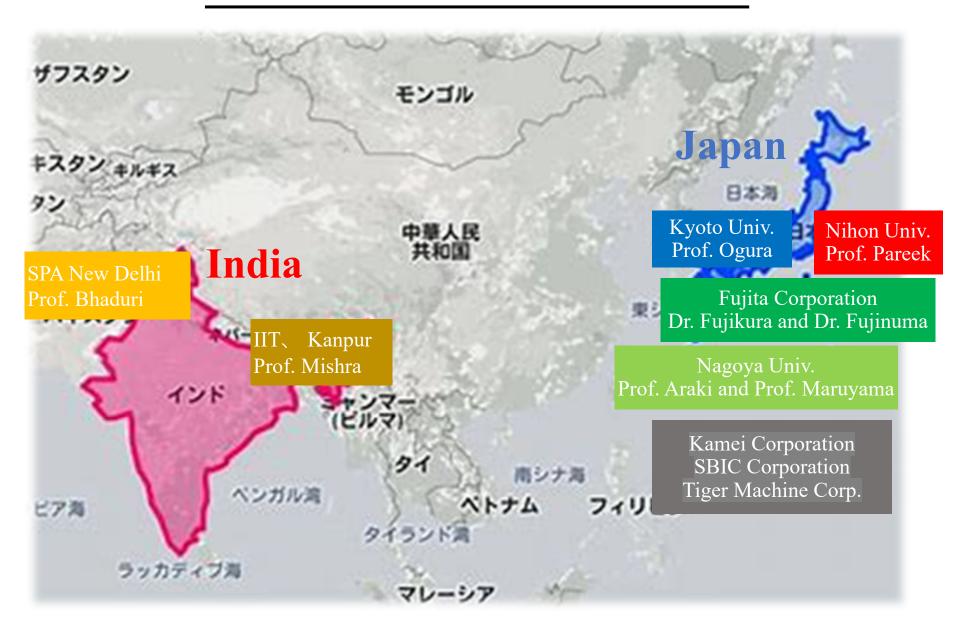
The applicants have been working on the development of non-burnt bricks with extremely low environmental impact factor, in a very a good working environment, and is excellent in both quality and cost.

This study is planned to focus on the feasibility of the use of a new non-burnt brick and it's widespread use in the construction industry.

Assuming Gujarat state as a major implementation site of the non-burnt bricks, the following two topics will be focused on for the feasibility study.

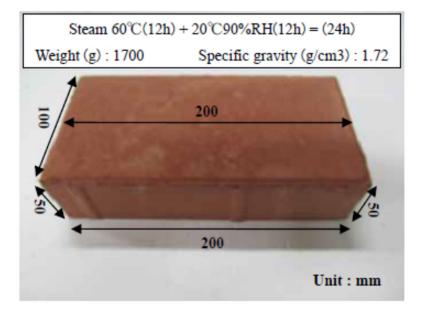
 (1) Field survey to prepare a plan for the social implementation of non-burnt bricks.
(2) Technical coordination to examine local materials for mix designs, manufacturing process and utilization method in construction industry.

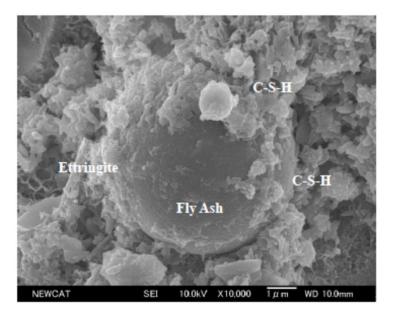
Research and Development Framework



Mix proportions and production method for Non-Burnt Bricks







Manufacturing Process for non-burnt bricks

	Material	Stock	Mixing	Molding	Dry	Burnt	Curing	Delivery
Existing manufacturing process for burnt bricks	Soil, Sand	Stock	Mixing	Molding	Demold and drying in outside	Burnt using coal et al.	Curing, Stock	Delivery
Manufacturing process for non- burnt bricks	Cement, FA, Sand, Additives	Stock	Mixing by special machines	Compressive molding and steam curing by special machines	(Unnecessary)		Curing, Stock	Delivery