

Project Number:	AP15573236
Project Title:	Establishment of a company for the production of hyper-pressed bricks based on sensor cement compositions with nano-additives
Results of scientific and (or) scientific-technical activities:	RSSTA22RKII008 Cement compositions with "fly" ash for sensory materials and hyper-pressed bricks
Applicant:	Non-Commercial Joint Stock Company "Kazakh Agrotechnical University named after Saken Seifullin"
Grant Recipient:	"KAZBM – KAZAKHSTAN BUILDING MIXTURES" LLP
Private Partner:	"DENAUB Union" LLP
Implementation Period:	2022-2024
Implementation Location (City/Region):	Pavlodar Region
Industry:	Manufacturing Industry
Project Goal:	To establish a company for the production of hyper-pressed bricks
Project outcomes and results:	<p>New materials, molding modes for the technology of production of hyperpressed bricks by semi-dry molding method are proposed. By compression of cement-mineral composition with moisture content of 8-10% under pressure from 30 to 60MPa using fly ash from Ekibastuz coals, improved strength characteristics are achieved. Increase of strength is achieved as a result of presence in fly ash of micro- and nano additives, appearance of additional intermolecular forces and hydration of active phases of raw materials.</p> <p>The cost price of bricks used in construction will be reduced due to replacement of part of expensive cement with industrial waste by more than 20%</p>
Advantages	<p>The implementation of the new technology is estimated to reduce the environmental impact of waste.</p> <p>The project implementation will solve the problem of construction materials shortage, disruption of logistic chains through the use of local raw materials, and overconsumption of resources in construction.</p>
Implementation Status:	Completed
Website:	https://kazbm.kz/
List of Products with Prices:	Hyper-pressed brick
Project Team (Full Names):	Rimma Kalmanbaevna Niyazbekova, Kirill Nikolaevich Zhemchugov, Bakytzhan Nurzhanovich Salimov, Lazzat Sarsenbaevna Shansharova

