

Elematic, 37801 Akaa, Finland

New Production Equipment at B. G. Shirke to Mitigate Housing Shortfall in India

B. G. Shirke Construction Technology is one of India's oldest construction companies and well known for their pioneering efforts in introducing prefab building technology in India way back in 1972. With its history deeply rooted in civil engineering and high quality housing projects, the company has been in operations for over seventy years. Early on its founder decided to focus on quality and modern ways of industrializing civil engineering construction - an ethos that still carries through today.



Customized equipment from Elematic to produce 3S Prefab elements as per Shirke's own design on mass scale has been successfully put to use in executing mass housing projects.

"It has been the dream of our founder Chairman, Padmashri B.G. Shirke to industrialize the civil engineering construction in our country by manufacturing standardized precast components for building construction," said V.G Jana, the Senior Chief Executive at B G Shirke Construction Technology Pvt Ltd (BGSCTPL).

One of the Indian company's keys to success has been its ability to adopt new construction technologies early.

"We were the first company to develop prefab construction called 3S Prefab Technology in India and till date no other construction agency has been able to match the prefab residential construction amounting to over 50 million sq. ft. built-up area, comprising over 200,000 tenements especially in Economically Weaker Section (EWS) and Low Income Group (LIG) category," said Jana.

India has a massive, chronic shortage of housing with an estimated 20 million houses needed to be built. Jana admits the task ahead is monumental. "Even with collective efforts of few companies like us, it would take many years to mitigate this housing shortfall," Jana said.



The wall and floor slab lines are in two sheds adjoining to each other with both having transportation and distribution systems, molds, all production and handling equipment and curing system.



The '3S' column is a unique product of Shirke, having hollow cores and relatively new technology for Elematic. The molds for B.G Shirke were developed based on a previous machine model for a similar hollow core product.

Therefore, ambitious mass housing projects need time tested and proven prefab technology to be able to succeed with a timely and efficient manner. The customized equipment from Elematic to produce 3S Prefab elements as per Shirke's own design on mass scale has been successfully put to its use towards executing mass housing projects.

BGSCTPL has recently set up three production lines at Delhi for precast products from Elematic - Circulation lines for room size floor slab, special walls and '3-S' columns. "Shirke wanted customized precast molds and equipment for casting precast components and the company had therefore special technical requirements which we delivered for them," said Tarmo Sahala, Area Sales Director for Elematic.

Most building sites have limited lifting capacity, yet all the precast elements have to fulfill certain characteristic. B.G. Shirke's needs were no exception.

"All the molds and equipment were thus designed accordingly. The wall and floor slab lines are in two sheds adjoining to each other with both having transportation and distribution systems, molds, all production and handling equipment and curing system," Sahala explained.

The '3S' column is a unique product of 'Shirke' having hollow cores and relatively new technology for Elematic to develop the molds for B.G Shirke based on a previous machine model for a similar product to the hollow core. "These columns are not too heavy to handle and install. The hollows

The innovative connection technology for prefabricated concrete elements



BT-Spannschloss® (turnbuckle)

Connecting system for quick, safe and dry connection of pre-fabricated concrete elements

- immediately loaded with tensile and shear forces

RubberElast® Self-adhesive precast element sealant

- fast processing by compression



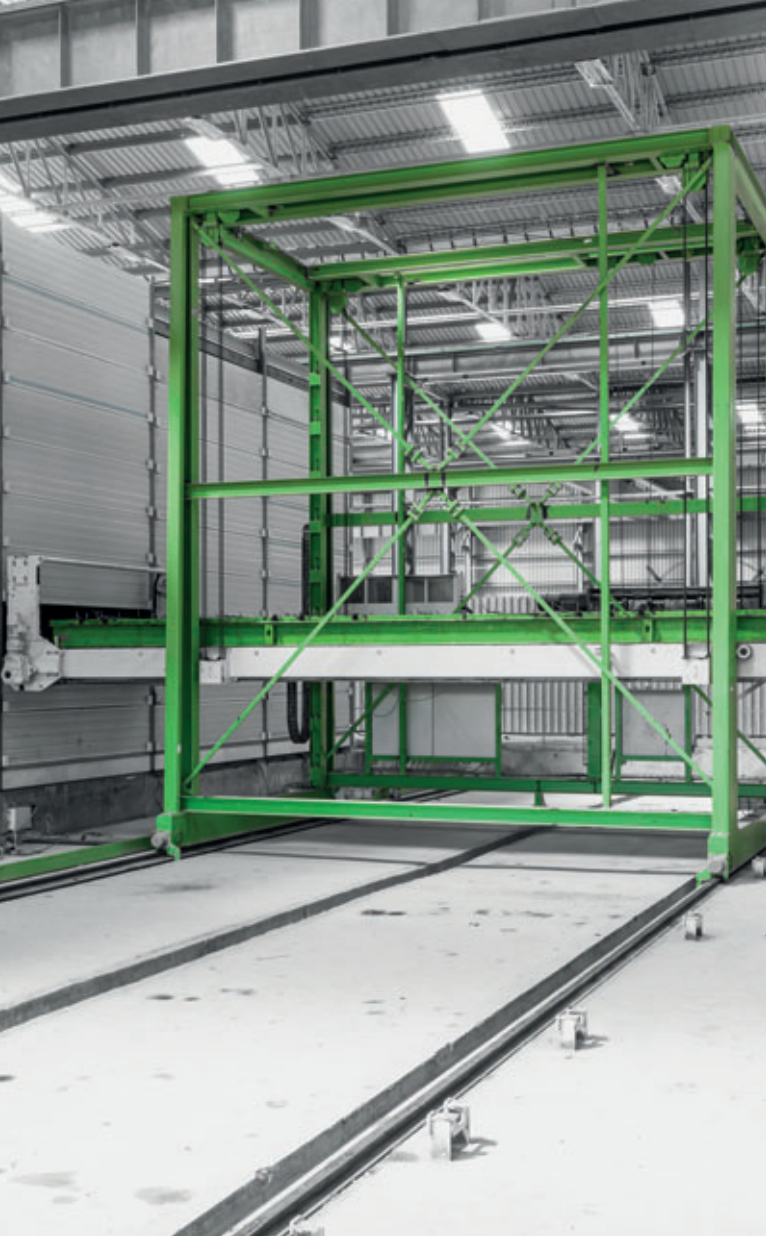
www.bt-spanschloss.com

B.T. innovation GmbH
Sudenburger Wuhne 60
D-39116 Magdeburg

T +49 391 7352-0
F +49 391 7352-52

www.bt-innovation.de





BGSCTPL has recently set up three production lines at Delhi for precast products from Elematic: Circulation lines for room size floor slab, special walls and '3S' columns.



The relationship between Shirke and Elematic is set to continue and grow in years to come. According to Elematic's Tarmo Sahala, Shirke trusts the way Elematic handles after sales and services and also the company's workmanship being high quality.

are filled with concrete and necessary design reinforcement as per B.G. Shirke's design," added Sahala.

"Presently, we are executing prestigious mega housing projects comprising over 50 thousand tenements for Delhi Development Authority (DDA), as well as dozens of other projects across the country," Jana said.

For B. G. Shirke, quality and speed are basic principles for constructing enormous housing projects across the country for which it dwells on prompt project schedules, which have little room for delays and no compromise on quality.

"Their time frame for their projects is very strict, which would be impossible to execute it in a traditional way," Sahala said.

"Our '3S' Prefab technology provides us with crucial factors such as stability of the structure incorporating earthquake resistance, safety, adaptability to various climatic conditions, thermal insulation, acoustic insulation and conformity to the codal provisions that form the backbone of 3S technology," Jana explained.

Add to the list an ability to increase production capacity, create higher quality finishing, material savings and less waste, and this Indian group really has a winning formula with 3S pre-cast technology.

Water saving created by using precast technology can make a real difference to construction projects in India, where resources are scarce. "With precast, almost no water is needed at a building site and overall water consumption is much less compared to traditional way," Sahala added.

The two companies had already co-operated before, which helped the co-operation to deepen further. "Few years back we delivered them a floor slab production line and everything went well and they were happy with us. They also trust us the way we handle after sales and services and our workmanship being high quality," Sahala said. The relationship between the two companies is set to continue and grow in years to come.

"Because they have special demands, it allows us to make new innovations and applications, which means the entire industry benefits," Sahala concluded.



Elematic sponsored the free download possibility of the pdf of this article for all readers of CPI. Please check the website www.cpi-worldwide.com/channels/elematic or scan the QR code with your smartphone to get direct access to this website.



FURTHER INFORMATION



Elematic
Airalantie 2
P.O. Box 33
37801 Akaa, Finland
T +358 3 549511
F +358 3 5495300
sales@elematic.com
www.elematic.com



B. G. Shirke Construction Technology Pvt. Ltd.
72-76, Mundhwa,
Pune - 411036, India
www.shirkegroup.com