

HSS Case Study:

Major Infrastructural Development in Pakistan

Karachi, the city of lights, has always been a busy & crowded place for commuters and pedestrians. There was always a need for a commuting solution that would make the lives of Karachiites easier. Recently, the Government decided to work on a mass transit project for Karachi - **Greenline Bus Rapid Transit System (BRTS)**

PROJECT:

To build a total of 22 bus stations across 22 KM Greeline route in Karachi.

CHALLENGE:

After some major infrastructural developments in Punjab, this was one of the major projects by the Federal Govt. in Sindh so it had to be carried out efficiently and transparently while also delivering an aesthetically appealing result.

Karachi Infrastructural Development Company Limited (KIDCL) had to execute the project with many stakeholders involved. As one of the stakeholders, IIL's role was that of a pipe manufacturer & supplier for the construction of 22 Bus Stations using IIL Hollow Structural Sections (HSS).

The main challenges for IIL included:

- ❶ Odd sizes were proposed in the initial design but the sizes that IIL manufactures were found to be a complete fit once the design was revised.
- ❷ Steel prices were extremely volatile throughout the duration of the project. IIL displayed its professional commitment by maintaining its prices at initially quoted levels.
- ❸ Ensuring timely availability of product to prevent on-site delays.

MATERIAL:

- ❶ 10"x10" IIL HSS were used for columns & sitting area.
- ❷ 4"x4" IIL HSS were used for columns & sitting area.
- ❸ 8"~12" IIL HSS were used as main structure support
- ❹ 32 mm & 65 mm IIL HSS were used for trusses.



EXECUTION:

Major civil work was carried out at various bus stations sites across the Greenline route. Once this was completed, IIL Hollow Structural Sections (HSS) were used for setting up the bus stations. The stations were constructed within a very short time frame as compared to if they would have been constructed using RCC. Structural sections also carry an aesthetic value which was further enhanced when the completed stations were painted, making it more appealing for the Karachiites.

“Seems like the decision of using Structural Sections for the construction of Bus Stations has worked really well” - Consultant



ACHIEVEMENT:

Timely delivery of material which assisted in the swift & smooth execution of the Greenline project.

“I haven't come across many steel structures but this looks amazing ! I look forward to visiting the bus stations once the project gets operational” - Commuter

PROJECT VIDEO:

To watch the video, kindly visit our exclusive HSS section on our website | www.iil.com.pk/HSS

ABOUT THE COMPANY

International Industries Limited (IIL) is Pakistan's largest manufacturer of steel, stainless steel and plastic pipes with an annual manufacturing capacity of 750,000 tons and annual revenues of almost Rs. 25 billion.
