

# HSS Case Study:







## Lahore's Metro Train Project: OrangeLine

The Government of Punjab initiated the OrangeLine Metro Train Project in Lahore which set an example for future infrastructural development projects in the country. IIL is proud to be associated with this mega project through the use of IIL's Hollow Structural Sections (HSS).

### PROJECT:




To build 24 elevated & 2 underground stations that stretching across a span of 27.1 KM.

### OBJECTIVES:




-  Fast project completion.
-  Cost effective solution.
-  Solution that requires less maintenance.
-  Flexibility for expansion.
-  Increase in structural stability.
-  Increased torsional capacity.



### CHALLENGE:

-  Creating awareness about applications & benefits of IIL HSS amongst key stakeholders including consultants & contractors.
-  Accomodating the required design elements which were beyond the capabilities of the product.
-  Ensuring timely availability of correct sizes and thicknesses.

### MATERIAL:




-  10"x10" IIL HSS were used for staircase shed & column.
-  8"x8" IIL HSS were used for staircase shed & column.
-  6"x6" IIL HSS were used for overpasses (connecting platform b/w staircase & station)



## EXECUTION:

This mega-project faced many hurdles during the completion of its civil work due to Court sanctions and stay orders. Nevertheless, upon successful completion of the concrete structures the aesthetically appealing facade of the elevated stations along with the staircase sheds and overpasses were completed using IIL HSS within a duration of 5 months for all Package 1 stations. Speed of work using IIL HSS in comparison to RCC structures allowed the contractor to complete the job effectively, efficiently and with greater aesthetical value.

## ACHIEVEMENT:

-  Delivery of IIL HSS within committed time frames and with competitive rates
-  No quality defects or delivery delays
-  Remaining closely involved during entire construction process including construction oversight, supervision and coordination with fabricators, contracts & consultants to ensure seamless experience with IIL HSS.

## PROJECT VIDEO:

To watch the video, kindly visit our exclusive HSS section on our website | [www.iil.com.pk/HSS](http://www.iil.com.pk/HSS)

“The nature of project required a material that could withstand heavy weight as well as carry aesthetic value. There was no better choice then to opt for IIL’s Hollow Sections” - *Consultant*



“I experienced the train during the test run and I must say the stations look amazingly beautiful with those orange colored steel pipes” - *Commuter*

## 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.