

HSS Case Study:

Industrial Warehouse with 15 Ton crane

When building a factory warehouse, it is critical to be able to save construction time & cost while maintaining the durability and strength of the building. IIL's Hollow Structural Sections (HSS) are ideal for such applications and were recently used in a large warehouse space outside Lahore.

PROJECT:

To complete a 100,000 sq ft industrial warehouse with weight bearing capacity of at least 15 tons.

OBJECTIVES:

- ⊗ Fast & non-disruptive project completion.
- ⊗ Durable, cost effective & structurally stable solution.
- ⊗ Flexibility for expansion.
- ⊗ Increased torsional capacity.

CHALLENGE:

- ⊗ Continuation of the warehouse construction using IIL's HSS was a challenge because some of the warehouse columns had already been constructed using traditional methods (RCC + rebar).
- ⊗ Ensuring weight bearing capacity for a 15 ton overhead crane.
- ⊗ Completion of the project without disrupting day-to-day work in the warehouse space.

MATERIAL:

- ⊗ 10"x10" IIL HSS were used as main columns
- ⊗ 8"x8" IIL HSS were used as horizontal beams
- ⊗ 4"x4" IIL HSS were used as purlins
- ⊗ ISL Galvanized Sheets were used for roofing



EXECUTION:

- ③ IIL's HSS was used for the columns, beams, purlins & trusses.
- ③ The structure was erected in less than 3 months, which is at least half the time it would have taken using RCC + Re-bar.
- ③ Strength of steel was proven as the 15-ton crane ran seamlessly on the steel structure.



ACHIEVEMENT:

- ③ Completion of structure in shorter time frame.
- ③ Multiple costs-saving including, including labor & fabrication.

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.
