



The trusses were lifted into place as two halves, with a central splice completed while the sections were held aloft.

# Trusses create industrial solution

Having celebrated 50 years of being based in North Wales, pharmaceutical company Ipsen is expanding its operations with a new steel framed production and office block.

Structural steelwork is providing the design and construction answers for a new pharmaceutical manufacturing facility at Ipsen BioPharm’s Wrexham site.

Part of France-based Ipsen Group, the global manufacturer is expanding its largest site in the UK, where it develops drugs for neurological conditions.

Exporting to more than 90 countries, the facility opened more than 50 years ago and employs close to 500 people, making it one of the main employers in the town. The company says the £75M investment will provide a state-of-the-art facility that will enhance production on the site.

Included in the construction project is the provision of 24 car parking spaces dedicated to the new building, in addition to the 264 existing spaces used by Ipsen staff across the whole estate.

Located on a plot previously occupied by one of the company’s old warehouses and a despatch building, the new facility measures 62m-long × 34m-wide and stands 21m tall.

Designed by Lovelock Mitchell Architects, the three-storey, 11,148m<sup>2</sup> structure will accommodate open-plan ground floor offices, above which there will be a large column-free production level, while an uppermost floor will house plant. Adding some invaluable extra floor space, the building will also



Truss sections are bolted up before being lifted into place.

have a ground floor mezzanine, which covers approximately half of the entire footprint.

The design of the production floor had a big say in the choice of a steel framing solution for the project, as JPS Managing Director Jonathan Paull, explains: “Steelwork was chosen primarily due to the long spans required to create the desired column-free production floor.

“We also have a very tight programme for design and delivery of the building, and so steelwork was also selected for its speed of erection. It has helped us achieve a watertight shell and core in the shortest possible time.”

Prior to the steelwork erection commencing, a



Steel frame model showing the column-free production space, formed by the roof trusses, and office areas on the lower floors.

ground improvement programme was undertaken, which included the installation of vibro-stone columns to support the ground floor slab. Piled (precast driven piles) foundations were also installed, to support the steel columns of the main frame.

Working on behalf of main contractor MPH Construction, EvadX fabricated, supplied and erected 650t of steelwork for the project.

A traditional beam and column design, based around a 7m grid, adequately accommodates the ground floor and mezzanine office spaces, but the production level required something more substantial to form the necessary long spans.

For this part of the building, a series of six trusses, which are 6.3m deep and span the entire width of the structure, have been installed.

"Because of their size, the trusses were delivered to site piece-small and then assembled on the ground," says EvadX Contracts Manager Andrew Roberts.

"We used a variety of mobile cranes onsite, but to lift the completed trusses into place we utilised a couple of 150t-capacity units."

As well as creating the column-free production space, the trusses are also supporting the uppermost plant equipment floor within their depth. Their work does not end there, as suspended from the underside of the six trusses is a maintenance walkway.



## FACT FILE

**Ipsen manufacturing facility, Wrexham**

Main Client: Ipsen BioPharm

Architect: Lovelock Mitchell

Main contractor: MPH Construction

Structural engineer: JPS

Steelwork contractor: EvadX

Steel tonnage: 650t

A variety of cranes, up to 150t-capacity, were used for the erection programme.

Throughout the structure, the steelwork supports precast concrete planks with a structural topping to form a composite flooring solution. The exception are some isolated areas where there is open mesh flooring, notably around plant and equipment on the top floor, and a few places on the mezzanine.

The diaphragm action of the completed concrete floors provides stability to the steel frame, and this is supplemented by bracing, located in the walls and roof.

Interestingly, the scheme also incorporates a number of precast lift and stair cores, which were erected prior to the steel frame commencing, but these are not utilised as stability-giving elements.

The initial announcement for this project was made in June 2023, during a tree-planting ceremony to mark the 50th anniversary of the Wrexham site.

At the ceremony, Wrexham's Mayor, Councillor Andy Williams, said, "Through the creation of numerous jobs over five decades, Ipsen's Wrexham site has contributed significantly to the growth of the local economy, while working sustainably and ethically, making it a shining example to businesses locally and globally.

"From driving global health to 'going green' and helping local students pursue careers in the life sciences sector, Ipsen Wrexham has much to be proud of as a community partner and global innovator."

Ipsen CEO, David Loew, said: "The 50th anniversary of Ipsen's Wrexham site marks a proud moment for our company. We have seen huge growth in demand at this important site, and we are pleased to continue our investment in the area and contribute positively to the local economy." ■

*"Steelwork was chosen primarily due to the long spans required to create the desired column-free production floor. Steelwork was also selected for its speed of erection. It has helped us achieve a watertight shell and core in the shortest possible time."*

The completed state-of-the-art facility will enhance Ipsen's largest UK site.

