

Title (en)

Assembling method and assembly jig of building structure composed of pipe structure

Title (de)

Zusammenbaumethode und Zusammenbaulehre für eine aus einer Rohrstruktur gebildete Gebäudestruktur

Title (fr)

Méthode d'assemblage et gabarit d'assemblage d'une structure de bâtiment formée à partir d'une structure en tubes

Publication

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Application

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Abstract (en)

The invention provides a method and an assembly jig for fixing a pipe structure unit manufactured by assembling tenons and mortises formed on end portions of pipes to a building structure. The pipe structure unit 10 comprises large-diameter pipes 20, 30, 40 and 50 and small-diameter pipes 60, 70 and 80 which are assembled on an assembly jig 100 by assembling tenons and mortises formed in advance on the ends of the pipes via laser machining. The pipes are provided with mounting portions disposed on the other ends thereof, which are used to temporarily tighten the pipes to flanges of pillars 200 and 210. A jack 130 of the assembly jig 100 is lifted to compress the gaps formed at the tenons and temporarily tightened portions, and the pipes are fully tightened in this state. If necessary, the joint portions of the pipes are welded via spot welding and the like to complete the building structure.

IPC 8 full level

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