

Abstract

A super-long span double-layer space grid dome erecting technique, characterized in that it replaces the wind tunnel test for the whole spherical structure by the wind load of the grid calculated by the wind tunnel simulation software in order to calculate the precise steel consumption, then calculate the sizes and nodes of the rod pieces, which solved the full framing erection problems of limited quality control and high cost by implementing circle-by-circle closing method and lifting the small-piece units with small gin pole hangers and unit-installing method. The present invention can magnificently reduce the steel consumption and the constructing cost, as well as shorten the construction period by at least 50%.