progressive harbor city poised on the Sea of Japan, Pusan, Korea, is now the home to a convention center and exhibition hall composed of a prismatic glass gallery and a dramatically sloped roof. Both building elements are structured in steel in this 900,000 sq. ft. flagship convention and exhibition facility.

The curved glass circulation spine of the convention center is a 27 frame tri-chordal truss spanning 754’. The truss is generated by slicing a doughnut-shaped “torus of revolution” that accommodates the gallery’s curved, graduated geometry. Cantilevered steel pipe columns support the truss and the expansive glass curtainwall system.

Twenty-seven inclined bowstring trusses span 351’ to shelter an exhibition space 800’ in length. The resulting clear span area of 280,800 sq. ft. affords ultimate flexibility for staging exhibitions of any variety. The steel wide-flange truss framework is tilted toward clerestory windows letting in both natural light and views of the coastal mountains beyond.

Cascading into the glass gallery, a monumental stair gives the maritime allusion of a glass and steel serpent. Steel plate “vertebrae” support sandblasted glass treads while the railings are built of glass on stainless steel balustrades.
The sense of drama and tension between the glazed masses of this complex take advantage of the properties of steel: essentially straight, linear elements are composed in astonishing geometries. Only steel could have created this extremely light long span...an architectural gem.

JURORS’ COMMENTS

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