

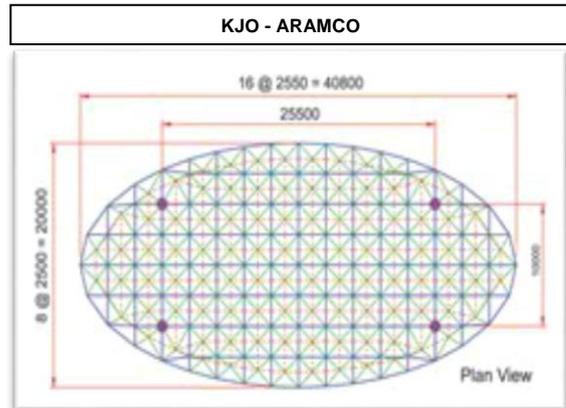
SALIENT FEATURES OF THE ME-SSP SPACE FRAME SYSTEM



ME-SSP Space Frame System

The ME-SSP Advantage:

Space frames are an advantageous form of steel structures. Compared to other forms of steel construction, space frames are characterized by their light weight, high stiffness and their ability to be produced and finished in controlled factory environment. Advantage of the ME-SSP as a space frame system however is endowed through continuous improvements of the product. The ME-SSP advantage is underpinned by its structural potential and long term durability, in addition to its aesthetics and versatility.



Long Term Durability: The ME-SSP Advantage:



ME-SSP space frame system is a robust and versatile space frame product engineered for durability and performance excellence. The service performance of the ME-SSP system in this regard has positioned it to be one of the most favorite products in the engineered space frame market.

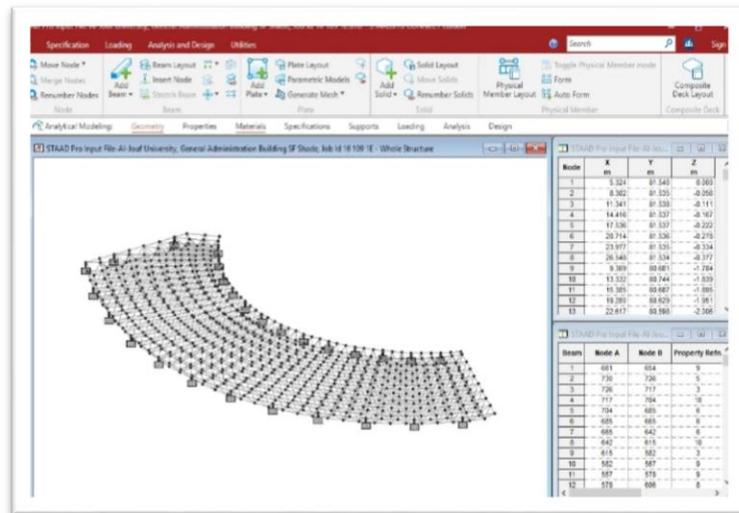
The greatest achievement of the ME-SSP space frame system lies in its extended durability performance, made possible by the ability of its members to be fully hot-dipped galvanized (HDG), a process which provides ultimate protection against the elements of nature. The ME-SSP system is thus uniquely engineered for structural and durability performances that are well beyond the reach of many other peer space frame systems in the market.

Structural Design: The STAAD.Pro Advantage:

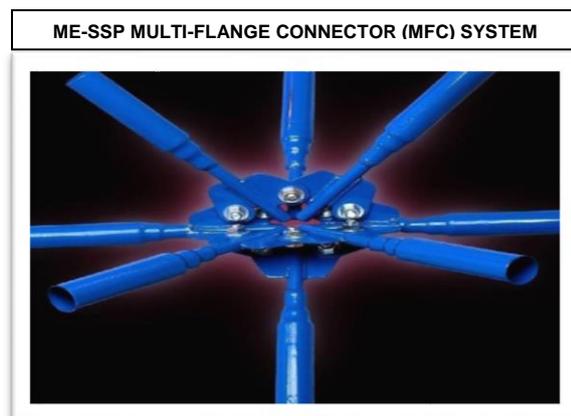
Structural analysis and design of ME-SSP space frame system is based on industry standard structural routines driven by STAAD.Pro software package. With an unparalleled quality assurance program, STAAD.Pro is widely used professional choice software for analyzing and designing steel space frame structures. As such the inherent benefits of using STAAD.Pro Software for ME-SSP system is that it contains all the necessary tools required to achieve design of the system as per latest international design standards, codes and specification.



The STAAD PRO software not only offer robust capabilities for three dimensional designs of the ME-SSP structure but also offer an extremely flexible modeling and post-processing environment that renders visual interpretation of design results easier for further due process of optimization, modification, and fabrication as well.



Structural Connection: The Multi-Flange Connector (MFC) Advantage:



Multi-Flange Connector (MFC), is a proprietary of the ME-SSP system that permit realization of structurally positive connection between members incident at a joint. As a Joint Concept, the MFC advantage has been conceived to convey joint performance akin to that obtained in Gusseted structural steel structures.

That is why unlike Single-Nodus Connector (SNC) of the MERO space frame system, where one bolt per

member is in-charge of any force transfer, the MFC connection embodies an active use of up to four pairs of flange and four bolts per member end.

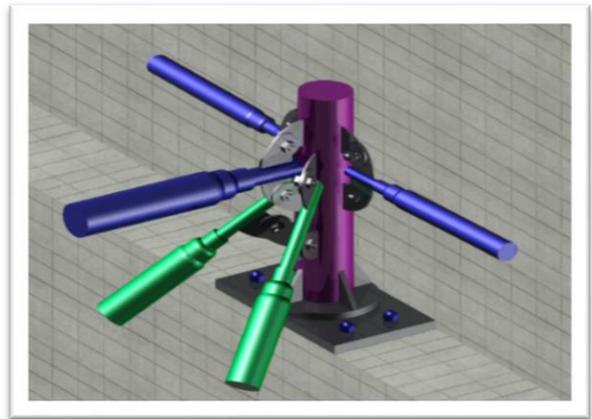
Also unlike the tension-compression mode of load transfer in SNC system, the MFC mode of load transfer by shear resistance action of its group of flange-bolt pairs is rather more reliable.

In this regard, the performance of the ME-SSP system by way of the MFC advantage is consistent with that of conventional structural steel connection that are used for members carrying heavy loads and loads accompanied by moments. The impact of the MFC joint concept is underscored by ability of the ME-SSP system to meet requirements of the most difficult space frame applications that are seen to be well beyond the capability of other peer systems.



Structural Support: The Coupled Support Shaft (CSS) Advantage:

Analogous to joint concept extended by the MFC system, a member concept is called upon to permit seamless integration of support shafts is yet another unique facet of ME-SSP capability. Thus similar in terms to the MFC (Multi-Flanged Connector) extension, a so called Coupled Support Shaft (CSS) extension is embraced to permit for seamless assimilation of structural support conditions into the of analysis and design of the ME-SSP system.



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ME-SSP support modeling, analysis, design, fabrication, and installation is seamlessly achieved in a manner no longer different from that of other ME-SSP members. The implication for ME-SSP system achieving not only an efficient superstructure-substructure design consideration, but also achieving an elastic support system that cannot be overemphasized.

More specifically, the inherent capability of the CSS member concept to safely safeguard the ME-SSP system against distressing effect of temperature, displacement, and support movement.

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No other space frame system in the market is known to possess such degree of self-attenuation or gap-bridging capability at the face of high load and long span applications inherently characterized by the ME-SSP system. Absorb the lateral displacements of the support bases by the flexure moment capability of the support shaft.

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