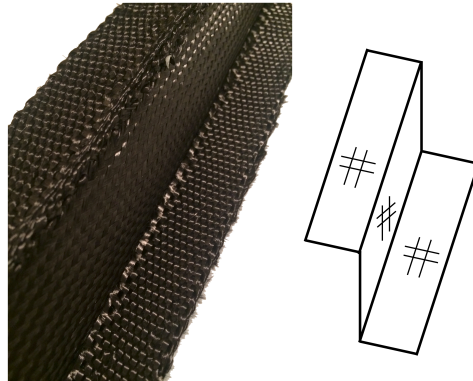


Press Release

Novel Z-Stringers with Combination Architectures



For constructions requiring structural beams to bear relatively higher and different types of loads while resisting delamination, Biteam has pioneered now the Combination Architecture Z-Stringers.

The novel Z-Stringers combine two architectures, $\pm 45^\circ$ in web and $0/90^\circ$ in flanges, for bearing loads efficiently. Importantly, each of the web-flange junctions have a mutual through-thickness integration which renders the Z-Stringer highly resistant to delamination and thereby the construction with increased functional reliability. Such delamination resistant combination architecture results in relatively higher energy absorption and damage tolerance.

Interest for Biteam's integrated Combination Architecture Z-stringers came from the aircraft industry. Mr. Fredrik Winberg, Co-founder and Chairman of Biteam, believes that the availability of such Combination Architecture Z-Stringers will also benefit other industries like automotive, marine, energy, and sports.

Advanced Z-Stringers combining different architectures are producible in a range of dimensions. The technology, invented by Dr. Nandan Khokar, enables direct production of customized Z-stringers according to load-bearing requirements. Z-Stringers with fibres in its web oriented in either $\pm 45^\circ$ or both $0/90^\circ$ and $\pm 45^\circ$ directions, and a web with desired wall thickness are producible.

A Combination Architecture Z-Stringer with $\pm 45^\circ$ oriented fibres in web and $0/90^\circ$ oriented fibres in its flanges will be presented at the forthcoming JEC Show 2017 in Paris.