

Constructional Elements C-Flex Steel Cord Belt

Steel Cord

The cord used in C FLEX is made of specially developed High Carbon Steel. While manufacturing the belt, this high tensile strength cord is held longitudinally in a single layer under pre-determined tension to ensure proper alignment. The standard constructions of steel cord used are 7x7, 7x19. The cords are coated suitably with zinc to protect the same from corrosion as well as to ensure superior bonding between cord and rubber. C-Flex has high strength to cross section ratio which ensures higher modulus.

Filaments constituting the cord have lower elongation and higher flexibility.

Ratio of diameter of core to outer strand are so designed that penetration of Rubber into the Cord interstices is maximised.

The penetration has multifold effect e.g. notching effect of the wire against one another is prevented, corrosion resistance is increased, strength is increased, elongation is reduced.

Alternate application of S & Z lay cord eliminates the accumulation of residual torsion.

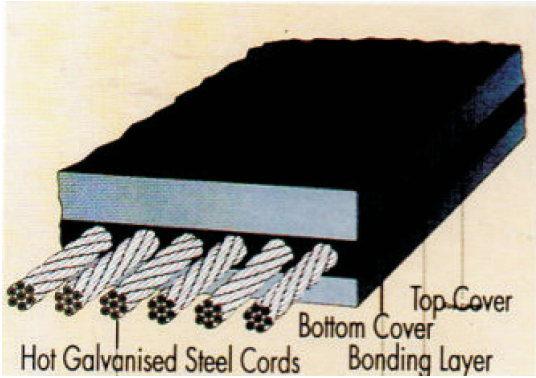
Bonder Rubber

Bonder Rubber ensures permanent bond between rubber and cord. It is designed to ensure adequate penetration inside the cord, to prevent corrosion, to impart greater pull out strength and elevated dynamic efficiency. Also, it has inherent resistance to thermal degradation, a feature which facilitates splicing.

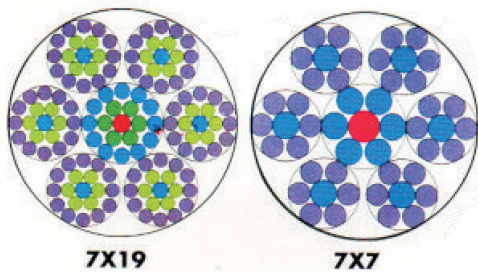
The bonder compound is designed to help synchronised fusion.

Rubber Cover

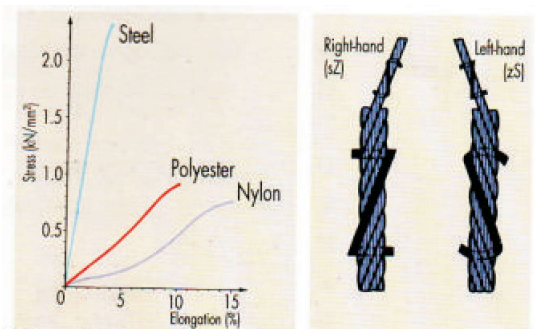
The premium quality rubber cover of C-Flex has high tensile strength, high elongation, high resistance to abrasion and may conform to any national/international standard as desired by the customer. In addition, C-Flex also available with Oil, Heat and Fire Resistant grades to meet specific service requirements.



Structural elements of C-Flex Belt



Typical Configurations of Steel Cord



Stress vs Elongation Curves

Regular lay cord design