

Belt Splices *Cont.*

VULCANIZED SPLICE ADVANTAGES

1. Strength. It has the highest practical strength.
2. Long service life. Correctly applied on the appropriate conveyor equipment and properly cared for, a vulcanized splice can last for years. However, with the exception of steel cord belts, a vulcanized splice normally will not last for the life of the belt.
3. Cleanliness. A vulcanized splice is smooth and continuous. Thus, conveyed material cannot seep through it. Also, a vulcanized splice does not damage or interfere with belt cleaners, as can be the case with mechanically-fastened splices.

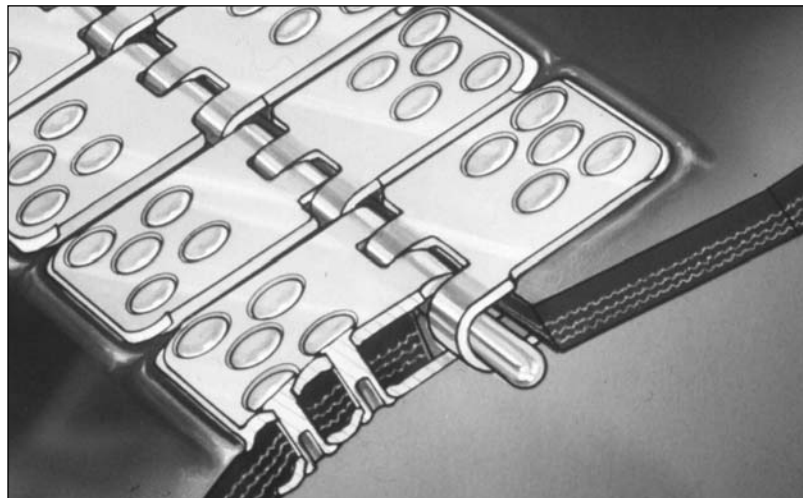
VULCANIZED SPLICE DISADVANTAGES

1. Greater initial expense. The initial cost of a vulcanized splice is many times greater than that of a mechanically fastened splice.
2. To insure sufficient takeup travel for accommodating both elastic and permanent variation in belt length, longer takeup travel must be provided.
3. Replacing or renewing a vulcanized splice can be time consuming and costly, especially in emergency repair situations.
4. Greater complexity. A vulcanized splice is affected by splice materials quality and age as well as splice operator errors. Only trained, experienced splicers should be used. Vulcanized splice materials have limited shelf lives which can be extended with refrigerated storage. Over-age materials should be replaced with fresh materials and should not be used.

MECHANICALLY FASTENED SPLICE ADVANTAGES

1. Quick to make. A mechanically fastened splice can be installed by experienced personnel in a very short time, whereas it takes hours to complete a vulcanized splice.
2. Low initial expense. The cost of labor and fasteners for a mechanically fastened splice will be a fraction of the cost of a vulcanized splice. Usually, only hand tools are required.
3. Takeup travel problems are minimized. If belt length variations exceed the amount which the takeup is capable of accommodating, the belt can be shortened and re-spliced quickly at relatively small cost.

4. ~~Greater complexity. A vulcanized splice is affected by splice materials quality and age as well as splice operator errors. Only trained, experienced splicers should be used. Vulcanized splice materials have limited shelf lives which can be extended with refrigerated storage. Over-age materials should be replaced with fresh materials and should not be used.~~



Delete

Figure 7.21
Hinged-plate type of
mechanical splice