

VAR INSTALLATION INSTRUCTIONS

1. Release adjustable tensioning Pulley to its middle position.
2. String up Belt on conveyor. Remove all slack by slightly pulling ends of belt. Be sure the belt is mounted on all the pulleys. Cut the belt so its ends just meet.
3. Remove the Belt from at least one pulley. Weld the ends together, using the appropriate Volta Tools.
4. Determine the desired belt tension (F_t) by the Volta Belt Formulas, the Volta Computerized Belt Selection Program, or past experience. Recommended pretension of Non Reinforced Volta VAR is 3% to 5%. Recommended pretension of Reinforced VAR is 0.3% to 1%.
5. Mark the top of the belts with two straight lines across the width of the belt at a known distance (i.e. 100 cm or 40"). These two lines will be the reference length (l_0) for belt tensioning.
6. Calculate the Belt tension length (l_t) by multiplying the reference length (l_0) by the pretension.

$$l_t = l_0 (1 + F_t / 100)$$

Example: Reference Length : 40"
Pretension : 3%

Calculation:

$$40'' \times \frac{(1 + 3\% \text{ Pretension})}{100} = 41.2'' = \text{Belt Tension Length}$$

7. Release the tensioning pulley to its minimum position. Place the belt on all the pulleys in the system.
8. Tension the belt by moving the tensioning pulley. Rotate the belt at intervals, while tensioning, either manually or by the conveyor motor. Increase tension, till the length between reference lines of step 5 is equal to the belt - tension length (l_t) calculated in step 6.
9. The Volta VAR conveyor belt is now ready for operation.