Method of obtaining Grown Tyre Dimensions - Diagonal Ply

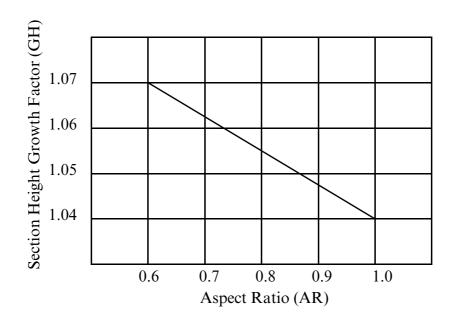
Grown tyre dimensions take account of the allowance required over maximum inflated new tyre dimensions to allow for the growth or stretch of the tyre structure during service. For all new designs, or new applications of existing sizes, these dimensions should be determined as follows:

Firstly obtain the maximum new tyre dimensions D_O , D_S , W and W_S and then apply the following equation using the appropriate growth factor from the following graph:

$$\begin{aligned} \mathbf{W}_{\mathbf{G}} &= \mathbf{G}_{\mathbf{W}}. \ \mathbf{W} \\ \mathbf{D}_{\mathbf{G}} &= \mathbf{D} + 2\mathbf{G}_{\mathbf{H}}\mathbf{H} \\ \mathbf{W}_{\mathbf{SG}} &= \mathbf{G}_{\mathbf{W}}\mathbf{W}_{\mathbf{S}} \\ \mathbf{D}_{\mathbf{SG}} &= \mathbf{D} + 2\mathbf{G}_{\mathbf{H}}\mathbf{H}_{\mathbf{S}} \end{aligned}$$

$$H = \frac{D_O - D}{2}$$

$$H = \frac{D_S - D}{2}$$



Section Height growth factor $G_H = 1.115 - (0.075 \text{ x AR})$ Section Width growth factor $G_W = 1.04$