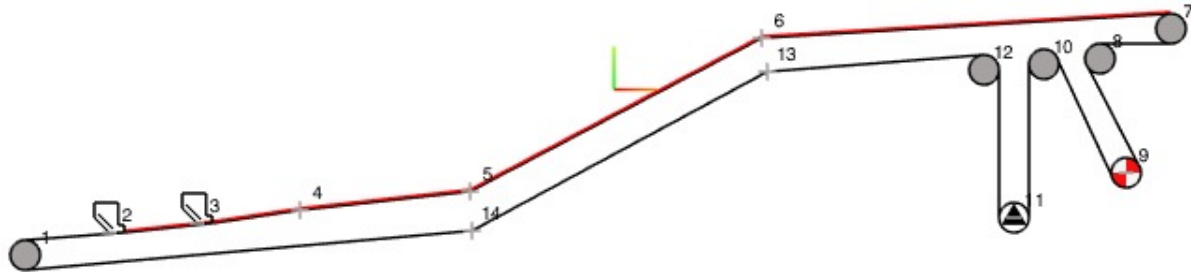


Project	Demo 02 Conveyor High Lift	Client	ABC Iron
Project No.	P9823	Prepared By	Peter Burrow
Conveyor No.	C223	Design Date	01 Oct 2019



C223



Drive Torque Start-up Factor Loaded	<b>122.00 %</b>	Takeup Pulley Belt Tension	<b>130.92 kN</b>
Drive Torque Start-up Factor Empty	<b>122.00 %</b>	Takeup Mass	<b>26700 kg</b>

Drive / Brake Number	Running		Starting		Braking	
	Fully Loaded	Empty Belt	Fully Loaded	Empty Belt	Fully Loaded	Empty Belt
Drive No. <b>1</b> Type: <b>Drive</b>	Drive					
Pulley No. <b>9</b> Lagging Type:	Ceramic					
Wrap Angle	180	180	180	180	180	180
Co-efficient of Friction	0.35	0.35	0.45	0.45	0.45	0.45
Drive Factor Cw	0.499	0.499	0.321	0.321	0.321	0.321
Calculated Belt Tension T1	<b>kN 421.64</b>	<b>150.93</b>	<b>451.75</b>	<b>276.46</b>	<b>176.78</b>	<b>120.45</b>
Calculated Belt Tension T2	<b>kN 127.82</b>	<b>127.81</b>	<b>127.45</b>	<b>122.32</b>	<b>133.19</b>	<b>128.75</b>
Minimum Required T2	<b>kN 146.62</b>	<b>11.54</b>	<b>104.10</b>	<b>49.48</b>	<b>13.99</b>	<b>2.66</b>
Surplus T2 Tension (T1-T2)	<b>kN -18.80</b>	<b>116.27</b>	<b>23.35</b>	<b>72.84</b>	<b>119.20</b>	<b>117.79</b>
Additional Takeup Mass Required	<b>3834 kg</b>		Limiting Case: <b>Running Full</b>			
Required Friction Factor	<b>0.380</b>		<b>Warning: Insufficient Drive Traction</b>			
Required Wrap Angle	<b>195.4 °</b>					