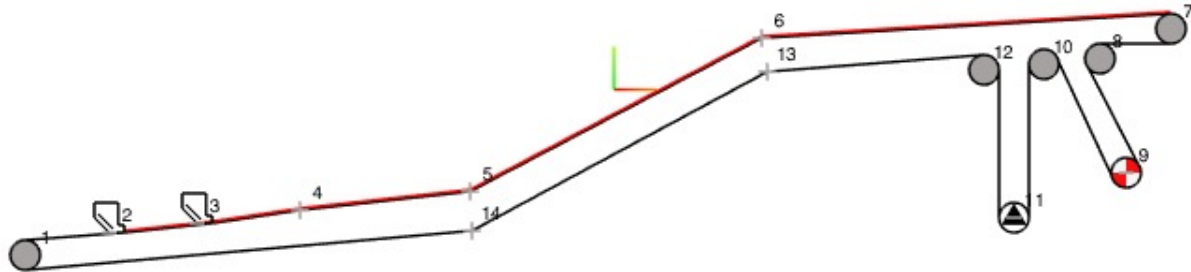


**Helix Technologies Pty Ltd**

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



Allowable Belt Sag % Running	<b>1.1 %</b>	Takeup Pulley Belt Tension	<b>130.92 kN</b>
Allowable Belt Sag % Start / Stop	<b>5 %</b>	Takeup Mass	<b>26700 kg</b>

Station No	Running				Starting		Braking		Coasting	
	Fully Loaded Tension kN	Empty Tension kN	Inclines Loaded Tension kN	Declines Loaded Tension kN	Fully Loaded Tension kN	Empty Tension kN	Fully Loaded Tension kN	Empty Tension kN	Fully Loaded Tension kN	Empty Tension kN
1 Tail	119.62	119.62	119.62	119.62	122.85	167.55	93.39	107.99	97.29	115.87
Idler Spacing m	1.00									
Belt Sag %	0.08	0.08	0.08	0.08	0.08	0.06	0.11	0.09	0.10	0.09
2 Hopper	121.40	121.40	121.40	121.40	124.87	172.91	93.20	108.89	97.39	117.36
Idler Spacing m	0.45									
Belt Sag %	0.31	0.04	0.31	0.04	0.30	0.03	0.41	0.04	0.39	0.04
3 Hopper	142.78	121.88	142.78	139.75	147.02	175.76	108.29	108.80	113.41	117.65
Idler Spacing m	0.45									
Belt Sag %	0.27	0.04	0.27	0.03	0.26	0.03	0.35	0.04	0.34	0.04
4 Int. Pt	155.17	122.39	155.17	149.09	160.44	179.42	112.27	108.54	118.64	117.92
Idler Spacing m	1.50									
Belt Sag %	0.82	0.12	0.82	0.10	0.79	0.08	1.13	0.14	1.07	0.13
5 Int. Pt	169.73	123.86	169.73	152.10	177.98	187.36	102.62	108.44	112.59	118.88
Idler Spacing m	1.50									
Belt Sag %	0.75	0.12	0.75	0.10	0.71	0.08	1.23	0.14	1.13	0.13
6 Int. Pt	371.50	147.48	371.50	175.72	394.26	242.65	186.42	124.37	213.90	140.01
Idler Spacing m	1.20									
Belt Sag %	0.27	0.08	0.27	0.07	0.26	0.05	0.54	0.10	0.47	0.09
7 Head	418.40	153.10	418.40	181.34	447.43	262.60	182.32	126.51	217.38	144.51
Idler Spacing m	3.00									
Belt Sag %	0.07	0.20	0.07	0.17	0.07	0.11	0.16	0.24	0.14	0.21
8 Bend	422.63	154.64	422.63	183.17	452.36	274.62	180.81	125.51	216.72	145.23
Idler Spacing m	3.00									
Belt Sag %	0.07	0.19	0.07	0.16	0.07	0.11	0.17	0.24	0.14	0.21

## Helix Technologies Pty Ltd

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

Station No	Running				Starting		Braking		Coasting	
	Fully Loaded Tension kN	Empty Tension kN	Inclines Loaded Tension kN	Declines Loaded Tension kN	Fully Loaded Tension kN	Empty Tension kN	Fully Loaded Tension kN	Empty Tension kN	Fully Loaded Tension kN	Empty Tension kN
9 Drive	421.64	150.93	421.64	179.76	451.75	276.46	176.78	120.45	213.15	141.09
Idler Spacing m	3.00									
Belt Sag %	0.07	0.20	0.07	0.17	0.07	0.11	0.17	0.25	0.14	0.21
10 Bend	134.48	134.47	134.68	134.46	134.27	131.31	138.57	134.84	140.17	135.43
Idler Spacing m	3.00									
Belt Sag %	0.22	0.22	0.22	0.22	0.22	0.23	0.22	0.22	0.21	0.22
11 Takeup	130.92	130.92	130.92	130.92	130.92	130.92	130.92	130.92	130.92	130.92
Idler Spacing m	3.00									
Belt Sag %	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
12 Bend	137.58	137.58	137.58	137.58	137.79	140.77	135.83	136.80	136.09	137.33
Idler Spacing m	2.40									
Belt Sag %	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18
13 Int. Pt	137.89	137.89	137.89	137.89	138.56	147.74	132.51	135.51	133.31	137.12
Idler Spacing m	3.00									
Belt Sag %	0.22	0.22	0.22	0.22	0.22	0.20	0.23	0.22	0.23	0.22
14 Int. Pt	119.29	119.29	119.29	119.29	121.84	157.08	98.61	110.12	101.69	116.33
Idler Spacing m	3.00									
Belt Sag %	0.25	0.25	0.25	0.25	0.25	0.19	0.30	0.27	0.30	0.26
Minimum Tension	<b>119.29</b>	<b>119.29</b>	<b>119.29</b>	<b>119.29</b>	<b>121.84</b>	<b>130.92</b>	<b>93.20</b>	<b>107.99</b>	<b>97.29</b>	<b>115.87</b>
Maximum Sag %	<b>0.82</b>	<b>0.25</b>	<b>0.82</b>	<b>0.25</b>	<b>0.79</b>	<b>0.23</b>	<b>1.23</b>	<b>0.27</b>	<b>1.13</b>	<b>0.26</b>