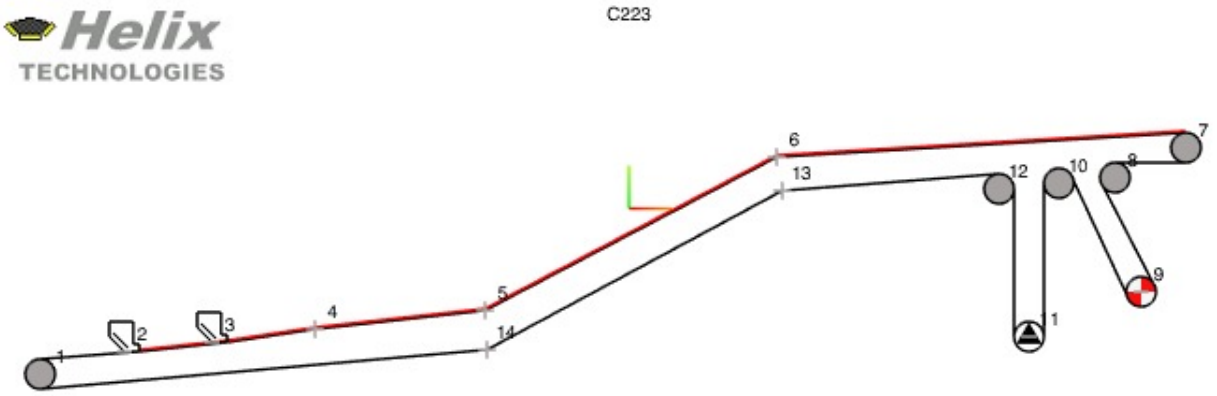
Helix Technologies Pty Ltd

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



Run Fully Loaded

Takeup Mass **26700** kg Takeup Pulley Belt Tension **130.92** kN

Station	Section Length m	Section Lift m	Tensions T1 Run kN	Tensions T2 Run kN	CEMA-5(1) Tp Pulley kN	Drive Te kN	Tension Adj. kN	Material Accel. kN	Skirt Friction kN	Scraper Friction kN	Section Effective Tension kN	ISO Friction Factor
1 Tail	6.84	0.33	119.62	121.01	1.39						0.39	0.0160
2 Hopper	8.16	0.35	121.40	121.40				11.23	6.64		3.51	0.0192
3 Hopper	10.91	0.30	142.78	142.78					8.83		3.56	0.0189
4 Int. Pt	33.74	1.15	155.17	155.17					1.54		13.02	0.0224
5 Int. Pt	164.30	26.16	169.73	169.73							201.77	0.0221
6 Int. Pt	70.46	5.50	371.50	371.50							46.90	0.0197
7 Head	39.32	-2.70	418.40	422.81	4.41					1.42	-1.60	0.0160
8 Bend	10.55	-6.95	422.63	427.08	4.45						-5.44	0.0160
9 Drive	12.33	8.12	421.64	127.82	2.94	293.82					6.66	0.0160
10 Bend	6.45	-6.45	134.48	136.02	1.53						-5.10	0.0160
11 Takeup	6.35	6.35	130.92	132.42	1.50						5.16	0.0160
12 Bend	26.55	-2.06	137.58	139.14	1.57						-1.25	0.0160
13 Int. Pt	164.30	-26.16	137.89	137.89							-18.60	0.0160
14 Int. Pt	59.64	-2.44	119.29	119.29						1.42	-1.09	0.0160
Totals					17.79	293.82	0.00	11.23	17.01	2.84	247.89	

Maximum Tension	**427.08**	kN	Total Effective Tension	**296.76**	kN
Minimum Tension	**119.29**	kN	Total Belt Power	**1276.07**	kW
Average Tension Fully Loaded	**222.07**	kN	Belt Modulus	**129600**	kN/m
Average Tension Belt Stationary	**125.02**	kN	Total Belt Length	**628.80**	m
Average Tension Difference	**97.05**	kN	Belt Elastic Elongation	**0.262**	m
			Takeup Movement	**0.131**	m