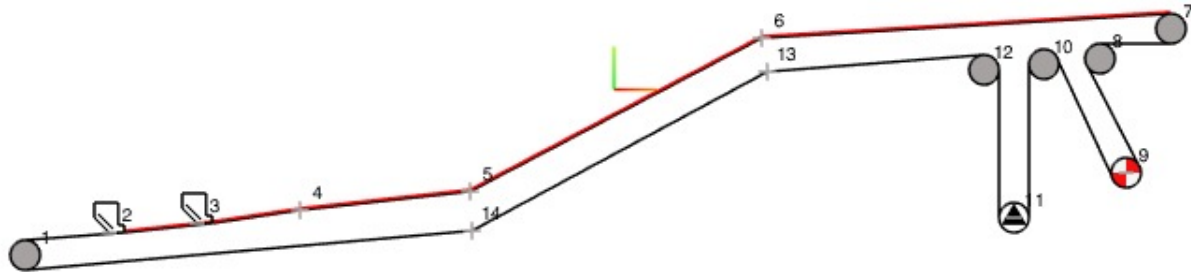


Project	Demo 02 Conveyor High Lift	Client	ABC Iron
Project No.	P9823	Prepared By	Peter Burrow
Conveyor No.	C223	Design Date	01 Oct 2019



C223



Viscoelastic Calculations Input Data

Belt Rubber Description	Low Loss Rubber	Carry Idler Centre Roll Dia	152 mm
Top Cover Dynamic Modulus E'	4.41 N/mm2	Carry Idler Centre Roll Drag	1.7 N
Top Cover Dynamic Loss Factor Tan(delta)	0.1	Carry Idler Wing Roller Dia	152 mm
Belt Top Cover Temperature	40 deg C	Carry Idler Wing Roller Dia	1.7 N
Rolling Resistance Factor Top: 0.072 Bottom: 0.072		Return Idler Centre Roll Dia	152 mm
Bottom Cover Dynamic Modulus E	4.41 N/mm2	Return Idler Centre Roll Drag	1.7 N
Bottom Cover Dynamic Loss Factor Tan(delta)	0.1	Return Idler Wing Roll Dia	152 mm
Belt Bottom Cover Temperature	40 deg C	Return Idler Wing Roll Drag	1.7 N
Belt & Material Flexure Adjustment Factor	1	Idlerset Skew Angle	0.1 deg
Belt has Turnover on return run	No	Idlerset Forward Tilt Angle	0.1 deg

Station	Section Length m	Idler Spacing m	Loaded										Empty friction factor f
			Total Loaded friction factor f	Indent factor fi	Indent factor %	Freq- uency rad/s	Matl. & Belt Flexure friction fm	Flexure friction %	Idler Drag factor fr	Drag factor %	Idler Skew & Tilt friction ft	Tilt friction %	
1 Tail	6.84	1.00	0.0160	0.00723	46.2	1530	0.00074	4.7	0.00637	40.7	0.00131	8.4	0.0160
2 Hopper	8.16	0.45	0.0192	0.00874	39.4	820	0.01076	48.5	0.00168	7.6	0.00102	4.6	0.0160
3 Hopper	10.91	0.45	0.0189	0.00874	40.9	820	0.00996	46.5	0.00168	7.8	0.00102	4.8	0.0160
4 Int. Pt	33.74	1.50	0.0224	0.01306	55.4	549	0.00899	38.1	0.00050	2.1	0.00102	4.3	0.0160
5 Int. Pt	164.30	1.50	0.0221	0.01306	56.9	549	0.00835	36.4	0.00050	2.2	0.00102	4.4	0.0160
6 Int. Pt	70.46	1.20	0.0197	0.01212	63.1	591	0.00545	28.3	0.00063	3.3	0.00102	5.3	0.0160
7 Head *	39.32	3.00	0.0160	0.00721	82.8	770	0.00018	2.1	0.00071	8.1	0.00061	7.0	0.0160
8 Bend *	10.55	3.00	0.0160	0.00721	82.9	770	0.00017	2.0	0.00071	8.1	0.00061	7.0	0.0160
9 Drive *	12.33	3.00	0.0160	0.00721	82.9	770	0.00017	2.0	0.00071	8.1	0.00061	7.0	0.0160
10 Bend *	6.45	3.00	0.0160	0.00721	80.3	770	0.00045	5.1	0.00071	7.9	0.00061	6.8	0.0160
11 Takeup*	6.35	3.00	0.0160	0.00721	80.3	770	0.00045	5.0	0.00071	7.9	0.00061	6.8	0.0160
12 Bend *	26.55	2.40	0.0160	0.00669	77.6	829	0.00044	5.1	0.00088	10.2	0.00061	7.1	0.0160
13 Int. Pt *	164.30	3.00	0.0160	0.00721	80.5	770	0.00043	4.8	0.00071	7.9	0.00061	6.8	0.0160
14 Int. Pt *	59.64	3.00	0.0160	0.00721	80.2	770	0.00046	5.1	0.00071	7.9	0.00061	6.8	0.0160

* Indicates Return conveyor section