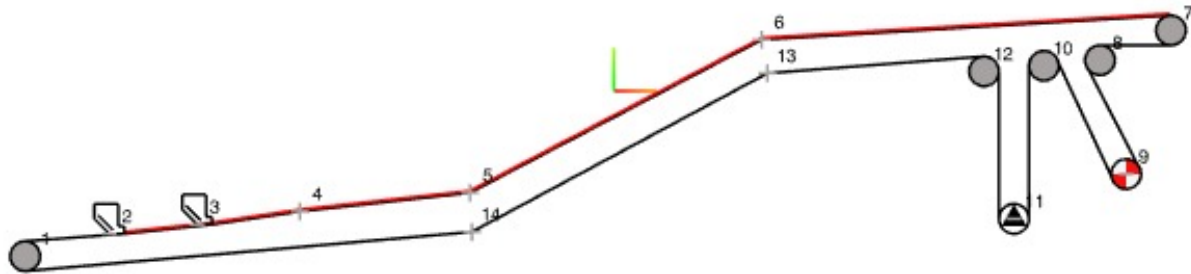


Project	Demo 02 Conveyor High Lift	Client	ABC Iron
Project No.	P9823	Prepared By	Peter Burrow
Conveyor No.	C223_Copy	Design Date	01 Oct 2019



C223_Copy



Carry Side Idlers		Return Side Idlers	
Idler Category	Prok Carry	Prok Flat Return	
Idler Description	Series 55 3 Roll Carry 152 Plain Inline	Series 45 1 Roll Flat Carry 152 Dia	
Idler Design Belt Width	1800 mm	1800 mm	
Idler Series	55	45	
Drawing Number			
Nominal Idler Spacing	1 m	3 m	
Total Number of Idlers	240	111	
Troughing Angle	35 deg	0 deg	
Idler Shaft Diameter	45 mm	45 mm	
Idler Bearing Diameter	45 mm	35 mm	
Number of Idler Rolls	3	1	
Idler Centre Roll Diameter	152 mm	152 mm	
Idler Wing Roll Diameter	152 mm	152 mm	
Idler Rotation Speed	540 rpm	540 rpm	
Centre Roll Face Width	633 mm	2050 mm	
Wing Roll Face Width	633 mm	2050 mm	
Roll Bearing Centres	535.9 mm	1976.2 mm	
Shaft Support Centres	659.5 mm	2078 mm	
Idler Support Fixing Width	2200 mm	2200 mm	
Idlerset Rotating Mass	34.2 kg	31.6 kg	
Idlerset Total Mass	117.4 kg	67.6 kg	
Idler Vertical Misalignment Allowance	4 mm	36 mm	
Dynamic Load Factor	1.26	1.40	
Belt Deviation Load	667 N	500 N	
Total Load on Centre Roll	6092 N	4680 N	
Type of Bearing	Ball	Ball	
Bearing Designation	6309	6307	
Bearing Dynamic Load Rating C	52,700 N	33,200 N	
Bearing L10h Life	159,750 hrs	88,120 hrs	
Allowable Shaft deflection At Bearing	8 min	10 min	
Actual Shaft deflection At Bearing	4.1 min	9.57 min	

