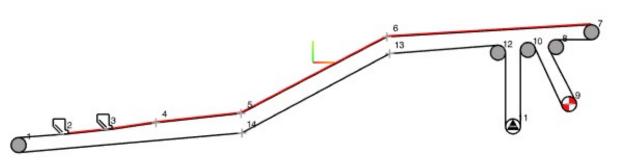
06 Aug 2020	ug 2020 Drive Gearbox Details Report Helix Technologies Pty Ltd					
Project	Demo 02 Conveyor High Lift	Client	ABC Iron			
Project No.	P9823	Prepared By	Peter Burrow			
Conveyor No.	C223_Copy	Design Date	01 Oct 2019			
C223_Copy						





Drive Number	1 Drive		Pulley Number 9	
Drive Description	Hea	ıd	Motor Power Rating	630 kW
Number of Motors on Dri	ve Pulley	2	Motor Full Load Speed	985 rpm
Selection Mode	Manu	al	Motor Torque @ FL Speed	6108 Nm
Gearbox Category	Falk A-Plus		Motor Torque at Pulley Speed	75019 Nm
Description	Falk M505AB2		Gearbox Rated Torque	111500 Nm
Туре	Right Angle Sha	ıft	Service Factor Required	1.5
Size	50)5	Service Factor Calculated	1.49
Code	Α	В		
Ratio	12.2	21	Plus Speed Selection Tolerance	5 %
Number of Stages		2	Minus Speed Selection Tolerance	5 %
			Fluid Coupling Slip	0 %
Design Efficiency (input)	9	95 %	Required Gearbox Ratio	12.282 :1
Gearbox actual Efficienc	y 9	94 %	Selected Gearbox Ratio	12.21 :1
Maximum Input Shaft Sp	eed 180	00 rpm	Required Pulley Speed	80.2 rpm
Minimum Input Shaft Spe	eed 58	30 rpm	Calculated Pulley Speed for Reducer	80.67 rpm
Input Shaft Diameter	95.2	25 mm	Required Belt Speed	4.3 m/s
Output Shaft Diameter	23	35 mm	Calculated Belt Speed	4.33 m/s
Gearbox Inertia	1.77	73 kg/m2	Mass of Gearbox	4500 kg