

CROSSDRIVE™ DESIGN



The **Cross Drive™** is an internally geared belt conveyor head pulley. It has the same gear reducer with the same 96% mechanical efficiency as the drum motor.

The Cross Drive™ has all vital components such as gears, bearings and seals permanently lubricated within the drive shell. The electric motor is mounted externally on the faceplate of the Cross Drive™, which has been designed to **accept any standard C flange mount electric motor** or the exclusive **VDG design Pancake motor** that reduces the overall motor length by up to 50%. Installation and removal of the electric motor is quick and easy, requiring only four bolts.



- ▶ **INCREASE PRODUCTION**
- ▶ **REDUCE OPERATING COSTS**
- ▶ **SAVE ENERGY & MAINTENANCE COSTS**

XD160 CROSS DRIVE (6.5" diameter)			
GEAR RATIO	BELT SPEED (ft/min)		
	@3450 rpm up to 3 hp	@1750 rpm up to 2 hp	@1150 rpm up to 1 hp
17.52 : 1	335	170	12
18.70 : 1	314	159	05
20.15 : 1	291	148	97
21.00 : 1	279	142	93
23.04 : 1	256	129	85
25.72 : 1	228	116	76
27.39 : 1	213	108	71
29.36 : 1	200	101	67
34.63 : 1	169	86	56
38.25 : 1	153	78	51

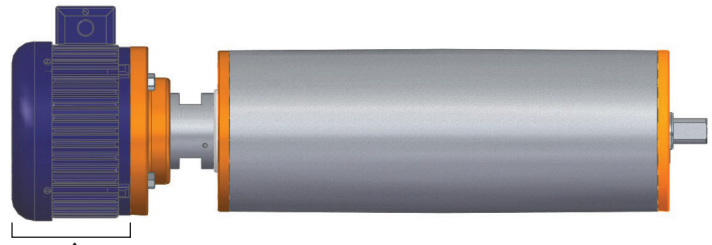
XD215 CROSS DRIVE (8.5" diameter)			
GEAR RATIO	BELT SPEED (ft/min)		
	@3450 rpm up to 7.5 hp	@1750 rpm up to 5 hp	@1150 rpm up to 2 hp
18.66 : 1	410	208	37
21.01 : 1	365	185	22
22.50 : 1	340	173	13
24.29 : 1	315	160	05
26.24 : 1	292	148	97
29.54 : 1	259	132	86
31.64 : 1	242	123	81
34.16 : 1	224	114	75
37.24 : 1	206	104	69
41.08 : 1	186	95	62

▶ INCREASES OPERATIONAL SAFETY

- ▶ Exceeds OSHA safety requirements
- ▶ No exposed rotating shaft
- ▶ No external moving parts

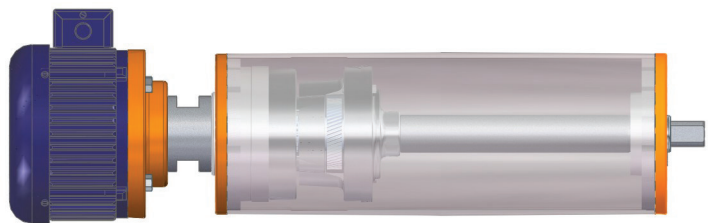
▶ HIGH EFFICIENCY AC PANCAKE MOTOR (SHORT-EGRESS)

- ▶ Reduces motor protrusion
- ▶ Approximately half the length of a standard electric motor
- ▶ Designed for use with variable frequency drives



▶ REDUCES DOWNTIME / INCREASES SYSTEM AVAILABILITY & MAINTAINABILITY

- ▶ Electric motor is quickly and easily released from system (4 bolts)
- ▶ Easy connect Lovejoy coupling between pulley and motor
- ▶ Works with standard NEMA C-face motors or with the VDG PANCAKE motor



▶ REDUCES MAINTENANCE

- ▶ No grease ports
- ▶ Internal oil-bath lubricates bearings and gears

▶ EASILY RETRO-FITTABLE

- ▶ Flange and block mount brackets available with standard bolt pattern
- ▶ Works with standard NEMA C-face motors

▶ NO EXTRA MOTOR / GEARBOX SUPPORT-STRUCTURE NEEDED

- ▶ INCREASE UPTIME & THROUGHPUT
- ▶ REDUCE MOTOR PROTRUSION
- ▶ INCREASE SAFETY