## FLEX-LAG<sup>®</sup> Diamond Ceramic Lagging

# The Reliable and Economical Solution for Belt Slippage

Flex-Lag<sup>®</sup> Diamond Ceramic Lagging has been developed to provide a ceramic lagging option for customers with medium tension belt drive applications and all other non-drive pulley lagging applications who want the added advantages of a ceramic product, at a more affordable cost.

Flex-Lag Diamond Ceramic Lagging is manufactured in the same pattern as the existing Flex-Lag Diamond Rubber Lagging. A large ceramic tile is molded into the diamond section of the lagging, providing an increased coefficient of friction. The diamond pattern drainage grooves allow for excellent dispersement of water and renegade materials.

The product is also suitable for existing rubber pulley lagging applications that experience higher than expected lagging wear.



The tiles in Diamond Ceramic Lagging are surrounded by multiple channels to disperse water and renegade materials allowing for improved water shedding capabilities.



### Easier.

Flex-Lag Diamond Ceramic Lagging is available in both natural rubber and FRAS approved rubber in convenient 21 ft. (6.5M) cut-to-fit rolls with minimal waste. Simply determine the number of continuous-pattern strips needed to cover the pulley (see Strip Selection Guide) and apply. High waste factors encountered with conventional sheet materials are eliminated.

Flex-Lag Diamond Ceramic provides an economical option for increasing conveyor belt life and reducing pulley lagging wear.

#### Faster.

The in situ installation of Flex-Lag Diamond Ceramic Lagging eliminates the need to remove the pulley from the conveyor system.

#### Smarter.



### **Industry Examples**

#### **Coal Handling**

Application: Snub Pulley Belt Width: 48" (1200mm) Belt Speed: 11.5 feet/second (3.5M/second) Pulley Diameter: 32" (800mm)



**Performance:** Standard rubber lagging shown in photo 1 lasted a maximum of 3 months before needing replacement. Diamond Ceramic lagging has been running for over 12 months and shows little signs of visible wear as in photo 2.

#### Lignite

Application: Drive Pulley Belt Width: 72" (1800mm) Belt Speed: 20 feet/second (6.5M/second) Pulley Diameter: 14" (350mm)



**Performance:** Standard rubber pulley lagging needed complete replacement at approximately 4,000 hours. The Diamond Ceramic lagging shown in photo 3 has passed the 4,000 hour mark with little or no signs of visible wear.

### FLEX-LAG<sup>®</sup> Diamond Ceramic Lagging

Flex-Lag Diamond Ceramic Lagging provides increased wear over standard rubber lagging and greater versatility in a variety of applications. The increased tile dimensions in Diamond Ceramic allow for a higher coefficient of friction and help keep belt slippage under control. At 40% less cost than full tile ceramic lagging, Flex-Lag Diamond Ceramic is an economical choice for increased pulley lagging life, improved water and renegade material shedding characteristics, as well as enhanced conveyor productivity.

Coefficients of Friction						
Condition	Flex-Lag Grooved Rubber	Flex-Lag Diamond Ceramic	Flex-Lag Ceramic			
Dry	0.4 to 0.5	0.46 to 0.56	0.74 to 0.83			
Wet	0.23 to 0.26	0.28 to 0.36	0.48 to 0.78			
Wet with Mud	0.18 to 0.22	0.23 to 0.27	0.42 to 0.51			

Pressure on surface 3 kg/CM (2) V=0M/Min.

Note: A dry, bare steel or iron pulley has a coefficient of friction of approximately 0.25

Note: When specifying Diamond Ceramic for a drive application, care should be taken not to exceed relevant coefficient of friction ranges.

Strip Selection							
Pully Diameter		Strips	Pully Diameter		Strips		
in.	mm	Required	in.	mm	Required		
12.0 to 12.5	305 to 319	5	42.7 to 45.1	1083 to 1145	18		
12.6 to 15.0	320 to 381	6	45.2 to 47.6	1146 to 1210	19		
15.1 to 17.5	382 to 445	7	47.7 to 50.1	1212 to 1273	20		
17.6 to 20.0	446 to 510	8	50.2 to 52.6	1275 to 1336	21		
20.1 to 22.5	511 to 573	9	52.7 to 55.1	1339 to 1400	22		
22.6 to 25.0	574 to 636	10	55.2 to 57.6	1403 to 1463	23		
25.1 to 27.5	637 to 700	11	57.7 to 60.1	1466 to 1527	24		
27.6 to 30.0	701 to 764	12	60.2 to 62.6	1529 to 1590	25		
30.1 to 32.5	765 to 826	13	62.7 to 65.1	1593 to 1654	26		
32.6 to 35.1	827 to 891	14	65.2 to 67.6	1656 to 1717	27		
35.2 to 37.6	892 to 955	15	67.7 to 70.1	1720 to 1781	28		
37.7 to 40.1	956 to 1018	16	70.2 to 72.7	1783 to 1847	29		
40.2 to 42.6	1019 to 1082	17					

#### Ordering Information

Diamond Ceramic Lagging					
Rubber Grade	Ordering Number	ltem Code			
Natural	71155	12NDC			
FRAS	71159	12FRDC			

\* All material is 8 inches (200mm) wide in 21 foot (6.5M) rolls



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