

# OILFIELD FRICTION PRODUCTS



Woven Drawworks Sets



Rigid Clutch Facings

**A FIRM GRIP  
ON THE FINEST  
NON-ASBESTOS  
FRICTION  
MATERIALS**



## NON-ASBESTOS FRICTION MATERIAL FOR OILFIELD APPLICATIONS

### **Drawworks Brake Blocks Drilling and Workover**

Main Drum  
Sand Line  
Neutral Brake  
(special combinations and/or applications available)

### **Gear Tooth Clutch Facings**

Twin Disc  
Wichita  
Rockford  
(many more)

### **Clutch Block Replacements**

Eaton Airflex  
National Dy-a-Flex  
Pneu-Grip  
(more)

### **Plain Rings/Catheads**

Foster  
Continental Emsco  
(others)

### **Insulator Plates**

Twin Disc  
National Oilwell

### **Disc Pads**

Kobelt  
Johnson  
National

### **other friction products:**

Anchor Winch Blocks  
Pump Jack blocks and lining  
Grooved/Keylocks (various applications)

### **hardware**

brass screws for block sets  
brass keepers and t-head bolts  
cad plated kep-lock nuts  
nylock nuts  
woven plugs

### **woven brake linings**

1/8" thru 1-1/4"  
3/4" thru 27" widths  
(all rolls are 25' unless special request)

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## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>BAYLOR-WINDLASS</b>				
72"	WL2485	10	1 1/4 x 12 x 21	170-3/8 x 1 1/2 FHS
<b>BDW</b>				
<b>MAIN DRUM</b>				
450 T; 650 M	WL2196	18	1 x 8 x 12	64-3/8 x 1 1/4 BFH 8-3/8 x 1 1/2 BFH
800 MI; 800 MX	WL2295	22	1 x 9 x 12	84-3/8 x 1 1/4 BFH 4-3/8 x 1 1/2 BFH
1350 M	WL2370	24	1 1/8 x 10 x 12	104-3/8 x 1 1/2 FHS 16-3/8 x 2 FHS
1800 M	WL2379	26	1 1/4 x 10 x 12	114-3/8 x 1 1/2 FHS 16-3/8 x 2 FHS
<b>BETHLEHEM</b>				
<b>CONTINENTAL EMSCO PRODUCTS</b>				
<b>MAIN DRUM</b>				
S45A	WL2100	20	1 x 7 x 11 7/8	100-5/16 x 1 1/4 BFH
S-36; S-40; S-45; S-45-E	WL2100	18	1 x 7 x 11 7/8	90-5/16 x 1 1/4 BFH
S-50	WL2103	20	1 x 7 x 12	100-5/16 x 1 1/4 BFH
C-50	WL2184	20	1 1/8 x 8 x 12	120-3/8 x 1 1/2 FHS
S-55; S-60; M-58	WL2181	20	1 1/8 x 8 x 13 21/32	120-5/16 x 1 1/2 BFH
M-810	WL2187	22	1 1/8 x 8 1/2 x 13 3/4	132-3/8 x 1 1/2 FHS
B-3661 Or CE3000	WL2457	30	1 1/4 x 12 x 12	180-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
S-45-E; C-50; M-58; S-55; S-60; M-810; 1013; B-3661	WL2100	16	1 x 7 x 11 7/8	80-5/16 x 1 1/4 BFH
<b>BISSINGER &amp; STIEN</b>				
32"	WL2397	28	1 x 10 x 12	168-3/8 x 1 1/4 BFH
<b>BREWSTER - (SKYTOP/BREWSTER)</b>				
<b>MAIN DRUM</b>				
Lower Drum F/N2, N-3, 70B, F-100;				
N-75 Upper Drum	WL2040	18	3/4 x 6 x 12	72-3/8 x 1 1/4 BFH
N-4-16	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
N-4; N-35; N-4-W	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH 64-3/8 x 1 1/4 BFH
N-55; N-45; N-4-A; D-4	WL2196	18	1 x 8 x 12	8-3/8 x 1 1/2 BFH
N-5	WL2196	22	1 x 8 x 12	88-3/8 x 1 1/4 BFH 84-3/8 x 1 1/4 BFH
N-7; N-75; N75-A; NE-75	WL2295	22	1 x 9 x 12	4-3/8 x 1 1/2 BFH
C-7	WL2247	20	1 1/8 x 8 x 12	80-3/8 x 1 1/2 FHS 94-3/8 x 1 1/2 FHS
N10; N-85	WL2370 (5)	22	1 1/8 x 10 x 12	16-3/8 x 2 FHS

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DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>BREWSTER-(SKYTOP/BREWSTER)</b>				104-3/8 x 1 1/2 FHS
N-95; N-95-A; SB-1500; SB-1500-E	WL2370 (5)	24	1 1/8 x 10 x 12	16-3/8 x 2 FHS
N-12; N-12A; NE-12	WL2379 (5)	26	1 1/4 x 10 x 12	114-3/8 x 1 1/2 FHS 16-3/8 x 2 FHS
N-20; N-20-A	WL2460 (5)	28	1 1/4 x 12 x 12	124-3/8 x 1 1/2 FHS
SB-3000-E	WL2379 (5)	28	1 1/4 x 10 x 12	16-3/8 x 2 FHS 140-3/8 x 1 1/2 FHS
<b>*SAND REEL</b>				
D-70; N-3; N-4; N-7; 70-B	WL2040	14	3/4 x 6 x 12	56-3/8 x 1 1/4 BFH

**BREWSTER-(SKYTOP/BREWSTER)  
MAIN DRUM**

(Mobile or Trailer Mounted Equipment)

H-32-38; H-32; Sand Line NE-12	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
HE-3808; H-38; S/N H-1135 & Up	WL2247	18	1 1/8 x 8 x 12	72-3/8 x 1 1/2 FHS
H-42; S/N H-1135 & Up	WL2247	20	1 1/8 x 8 x 12	80-3/8 x 1 1/2 FHS
DH-4210; DH1-4210; H1-4210A; N-42	WL2370	20	1 1/8 x 10 x 12	100-3/8 x 1 1/2 FHS
DH-4610; DH1-4610; H1-4610; N-46; N-46-A; NE-46; SB-1000; SB-1000-E	WL2370	22	1 1/8 x 10 x 12	110-3/8 x 1 1/2 FHS
H-42; H-42-42; Thru S/N 1135; B-28 Swab Unit; and some older sand reels	WL2228	18	1 1/8 x 8 x 11 3/4	72-3/8 x 1 1/2 FHS

**SAND REEL**

DH-4610; DH1-4610; H1-4610; DH-4210; DH1-4210; H1-4210; B1-3808	WL2247	18	1 1/8 x 8 x 12	72-3/8 x 1 1/2 FHS
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**BU CYRUS ERIE** - Scan Pac does not supply hardware for Bucyrus Sets

24 L Bull Reel	WL2046	7	1/2 x 6 x 11 1/16
28 L Sand Reel	WL2012	12	1/2 x 3 x 12
28 L Casing Reel	WL2014	8	1/2 x 5 x 11
28 L Bull Reel	WL2025	14	3/4 x 5 x 11 1/2
36 L Sand Reel (Old Style)	WL2015	16	5/8 x 4 x 11 1/2
36 L Casing Reel (Old Style)	WL2046	7	1/2 x 6 x 11 1/16
36 L Bull Reel (Old Style)	WL2049	18	3/4 x 6 x 11 1/2
36 L Sand Reel (New Style)	WL2016	16	5/8 x 5 x 12
36 L Casing Reel (New Style)	WL2052	8	1/2 x 6 x 11 3/4
36 L Bull Reel (New Style)	WL2095	18	3/4 x 7 x 12
48 L Sand Reel	WL2055	16	5/8 x 6 x 10
48 L Casing Reel	WL2019	16	5/8 x 5 x 11 3/4
48 L Bull Reel	WL2202	18	1 x 8 x 12 11/16



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DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>BUCYRUS ERIE</b>				
60 L Sand Reel	WL2011	12	1/2 x 3 x 12	
60 L Bull Reel	WL2046	7	1/2 x 6 x 11 1/16	
<b>CAMERON MFG</b>				
400	WL2463	20	1 1/8 x 12 x 12	120-3/8 x 1 1/2 FHS
<b>SWAB RIG</b>				
38-8	WL2199	18	1 x 8 x 12	108-3/8 x 1 1/4 BFS
<b>CARDWELL</b>				
<b>MAIN DRUM</b>				
MA; MH Small Drum				
QS; QST; Q-100; Q-101 Both drums	WL2058	14	5/8 x 6 x 9 13/16	70-1/4 x 1 BFH
AH; AL; HL; HS; C-32; AHZ; A-150; A-151	WL2106	18	5/8 x 7 x 10 1/2	90-5/16 x 1 1/8 BFH
A-100; AB-100; K-100; Both drums	WL2109	18	3/4 x 7 x 10	90-5/16 x 1 1/4 BFH
KL; KS; L; LA; K; K-200; K-201; K-202; M-200; A-150-A; SKYHORSE; C-36; L-129	WL2205	18	3/4 x 8 x 10 29/32	90-5/16 x 1 1/4 BFH
K-150; KB-150; Main Drum & Sand Line	WL2261	18	1 x 8 x 10 29/32	90-5/16 x 1 1/4 BFH
RL; S; SS; SU; RS	WL2298	24	3/4 x 9 x 10	120-5/16 x 1 1/4-BFH
L-350; M-250; K-200A; KM200A; KB-200A; C-HORSE; K-201-A	WL2208	20	1 x 8 x 10 15/16	100-5/16 x 1 1/4 BFH
D; D-66; DS; DT; J-450;				
K-210; K210-A; K-210-B; K-211; KB-210; KB210-A; KM-210; K-250; K-250-A; KB-250;	WL2301	24	1 x 9 x 10 1/4	120-5/16 x 1 1/4 BFH
KM250; O; OA; R; S-350; T; TR	WL2304	24	1 x 9 x 10 3/4	120-5/16 x 1 1/4 BFH
J-700 (Specify Width of Flanae)	WL2304	24	1 x 9 x 10 3/4	120-5/16 x 1 1/4 BFH
K-500; K500-SD; KB-500; KH-500;	WL2382	24	1 x 10 x 10 3/4	120-5/16 x 1 1/4 BFH
K-600; K-700; KB-700	WL2385	20	1 x 10 x 10 15/16	100-5/16 x 1 1/4 BFH
K-200-B; C; KB-200-B; C; KM200B	WL2463	24	1 1/8 x 12 x 12	144-3/8 x 1 1/2 FHS
K-1000; KB-1000; KH-1000	WL2463	24	1 1/8 x 12 x 12	144-3/8 x 1 1/2 FHS
<b>SAND REELS</b>				
AH; AL; HL; KL; RL; A-150; A-151	WL2106	18	5/8 x 7 x 10 1/2	90-5/16 x 1 1/8 BFH
DS; DT; K-200; K-201; K-210; K-211;				
KB-210; M-200-A; KM-210; LA; L-350; M-200; MA; MH; O; OA; OC	WL2112	18	3/4 x 7 x 10 29/32	90-5/16 x 1 1/4 BFH
K-200-A; K-200-B; K-201-A; KB-200-B; KM-200-B; K-210; K-210-A; K-250; KM-250; M-250- J-450; J-700; S-350; KM-210	WL2121	20	1 x 7 x 10 15/16	100-5/16 x 1 1/4 BFH
C-HORSE; SKYHORSE; A-150-A; TR;	WL2205	18	3/4 x 8 x 10 29/32	90-5/16 x 1 1/4 BFH
K-210-B; K-250-A	WL2301	24	1 x 9 x 10 1/4	120-5/16 x 1 1/4 BFH
K-600; K-700; KB-700; KB-1000	WL2388	24	1 x 10 x 10 1/4	120-5/16 x 1 1/4 BFH
K-500; KB-500	WL2385	20	1 x 10 x 10 15/16	100-5/16 x 1 1/4 BFH
K-200-C	WL2385	20	1 x 10 x 10 15/16	100-5/16 x 1 1/4 BFH
<b>CHALLENGER RIG/COOPER MFG. CO.</b>				
<b>MAIN DRUM</b>				
280	WL2037	14	3/4 x 6 x 12	56-3/8 x 1 1/4 BFH
320; 320-H; 360	WL2199	16	1 x 8 x 12	96-3/8 x 1 1/4 BFH
<b>CHAMPION</b>				
400	WL2370	20	1-1/8 x 10 x 12	100-3/8 x 1-1/2 FHS
<b>CITATION</b>				
A-1000	WL2346	22	1-1/4 x 9-3/4 x 12	132-3/8 x 1-1/2 FHS

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DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>CONTINENTAL EMSCO</b>				
<b>MAIN DRUM</b>				
GA-250-T; G-36; G-300; GA-350;				
GC-350; GB-350	WL2061	16	1 x 6 1/2 x 13	64-3/8 x 1 1/4 BFH
GA-160-T	WL2124	14	1 x 7 1/2 x 12	56-3/8 x 1 1/4 BFH
GB-160-T; GB-160-TS	WL2124	16	1 x 7 1/2 x 12	64-3/8 x 1 1/4 BFH
GB-250-T; GC-350-T; T-103-250;				
GB-350-T	WL2124	18	1 x 7 1/2 x 12	72-3/8 x 1 1/4 BFH
G-42; G-450; G-500; GA-500; GB-500	WL2124	20	1 x 7 1/2 x 12	80-3/8 x 1 1/4 BFH
GC-500; A-550; WSI; D-1; D-2; D-2E;				
D-2M	WL2211	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
GB-800; A-800; A-800-E	WL2307	20	1 1/8 x 9 x 13	120-3/8 x 1 1/2 FHS
J-750; J-1000; CB-54; H-54; H-54-A;	WL2313 (6)	20	1 1/4 x 9 x 12	106-3/8 x 1 1/2 FHS
UB-54; UH-54-A; UBLS-54; EC-54;				
ECA-54; FRC-54; ED&DEL-54 Series;				
Types A,C,CA,CB,&CC-54; D-3; D-3-11;	WL2310 (4)	20	1 1/4 x 9 x 12	68-3/8 x 1 1/2 FHS
D3-111				12-3/8 x 2 FHS
				120-3/8 x 1 1/2 FHS
J-1100; ED-60; EDA	WL2313	22	1 1/4 x 9 x 12	12-3/8 x 2 FHS
				132-3/8 x 1 1/2 FHS
J-1250; J-1400; J-1600; ECC	WL2313	24	1 1/4 x 9 x 12	12-3/8 x 2 FHS
				144-3/8 x 1 1/2 FHS
J-2000; EDA-60-L	WL2313	26	1 1/4 x 9 x 12	12-3/8 x 2 FHS
EDE; EDES	WL2391	22	1 1/4 x 10 x 12	132-3/8 x 1 1/2 FHS
				140-3/8 x 1 1/2 FHS
A-1100; ElectroHoist 11, S/N 1-15	WL2391	24	1 1/4 x 10 x 12	4-3/8 x 2 FHS
				164-3/8 x 1 1/2 FHS
A-1500; A-1500-E	WL2391	28	1 1/4 x 10 x 12	6-3/8 x 2 FHS
				128-3/8 x 1 1/2 FHS
C-1; C-1-11; C-1-111	WL2427	22	1 1/4 x 10 x 12	4-3/8 x 2 FHS
				140-3/8 x 1 1/2 FHS
C-2; C-2-11; C-2-111; Electro Hoist 11, S/N 16 & Up	WL2427	24	1 1/4 x 10 x 12	4-3/8 x 2 FHS
				162-3/8 x 1 1/2 FHS
C-3; C-3-11; C-3-111	WL2427	28	1 1/4 x 10 x 12	6-3/8 x 2 FHS
Electro Hoist 111; CE-3000 or B-3661	WL2457	30	1 1/4 x 12 x 12	180-3/8 x 1 1/2 FHS
C-1; C-2; C-3; Type SS Disc Brakes		8	Disc Pads	
<b>SAND REEL</b>				
GA-250-T; G-36; G-300; GA-350;				
GB-350; G-42; G-450; G-500; GB-500;				
GB-800	WL2061	14	1 x 6 1/2 x 13	56-3/8 x 1 1/4 BFH
CE-3000 to S/N 117	WL2100	16	1 x 7 x 11 7/8	80-5/16 x 1 1/4 BFH
GB-160-T; GB-160-TS; GB-250-T;				
T-103-250	WL2124	14	1 x 7 1/2 x 12	56-3/8 x 1 1/4 BFH
GC-350-T; GA-500; GC-500; A-550;				
A-800; J-1100; J-1250; J-1400; J-1600;				
WSI; T-103; D-2; D-3	WL2124	16	1 x 7 1/2 x 12	56-3/8 x 1 1/4 BFH
A-1100; A-1500; ECR; ECR-25;				
CE-3000; S/N 117 & Up C-1; C-2; C-3	WL2124	18	1 x 7 1/2 x 12	72-3/8 x 1 1/4 BFH

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DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>COOPER MFG. CO.</b>				
<b>MAIN DRUM</b>				
A-26; A-26-26; TR-26; TR-26-26	WL2040	12	3/4 x 6 x 12	48-3/8 x 1 1/4 BFH
P-32; P-132	WL2040	14	3/4 x 6 x 12	56-3/8 x 1 1/4 BFH
	WL2067 (4)	16	1 x 6 x 12	64-3/8 x 1 1/4 BFH
TR-36; TRP-136; P-136	WL2064 (6)	16	1 x 6 x 12	96-3/8 x 1 1/4 BFH
A-32; A-32-32; TR-32; TR-32-32	WL2199 (6)	16	1 x 8 x 12	96-3/8 x 1 1/4 BFH
A-38; TR-38; LTO-38-38;	WL2199 (6)	18	1 x 8 x 12	108-3/8 x 1 1/4 BFH
A-42; A-142	WL2199 (6)	20	1 x 8 x 12	120-3/8 x 1 1/4 BFH
LTO-150; LTO-250; LTO-3810	WL2394 (6)	18	1 x 10 x 12	108-3/8 x 1 1/4 BFH
A-4210; TR-4210; LTO-4210; LTO-350x10	WL2394 (6)	20	1 x 10 x 12	120-3/8 x 1 1/4 BFH
D-5000; 520; D-50	WL2394 (6)	24	1 x 10 x 12	144-3/8 x 1 1/4 BFH
Oiler 4212-42; LTO-4212; LTO-550; LTO-750; LTO-350 x 12	WL2463	20	1 1/8 x 12 x 12	120-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
TR-42-36; TR-38-36	WL2064 (6)	16	1 x 6 x 12	96-3/8 x 1 1/4 BFH
38-38; 4210-38; 4212-38	WL2199 (6)	18	1 x 8 x 12	108-3/8 x 1 1/4 ~FH
42-42	WL2199 (6)	20	1 x 8 x 12	120-3/8 x 1 1/4 BFH
<b>CRANE CARRIER</b>				
42 x 8; 300	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
42 x 10; 400	WL2397	20	1 x 10 x 12	120-3/8 x 1 1/4 BFH
42 x 12; 500	WL2463	20	1 1/8 x 12 x 12	120-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
42 x 10; 42 x 8	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
<b>CROWN</b>				
500	WL2463	20	1 1/8 x 12 x 12	120-3/8 x 1 1/2 FHS
<b>CYCLE MACHINE</b>				
	WL 2343	20	1 1/4 x 9 3/4 x 12	100-3/8 x 1 1/2 FHS 20-3/8 x 2 FHS
<b>DRECO - See Superior</b>				
<b>DUGAN</b>				
S-5	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
DS-5	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/2 BFH
<b>GEFCO/GEO. E. FAILING CO.</b>				
2000 CF; 2008 LP	WL2133	16	3/4 x 5 x 7	64-3/8 x 1 1/4 BFH
FP-3	WL2134	16	3/4 x 6 x 7	64-3/8 x 1 1/4 BFH
DMX	WL2135	18	3/4 x 7 x 7	72-3/8 x 1 1/4 BFH
2500; 2500-SE	WL2136	16	3/4 x 7 x 8 3/4	64-3/8 x 1 1/4 BFH
90; 95; 3500	WL2316	14	1 x 9 x 12	84-3/8 x 1 1/4 BFH
8000	WL2434	20	1 x 11 x 12	120-3/8 x 1 1/4 BFH
66	WL2214	18	5/8 x 8 x 9 1/2	144-3/16 x 3/4 BFH



## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>GEFCO/GEO. E. FAILING CO.</b>				
SAND REEL-1500	WL2127	14	3/4 x 4 1/2 x 7 1/8	56-3/8 x 1 1/4 BFH
SAND REEL-2500	WL2036	14	3/4 x 4 1/2 x 9	56-3/8 x 1 1/4 BFH
<b>FRANKS-CABOT (Ingersoll Rand; IRI)</b>				
<b>MAIN DRUM</b>				
*PATTERNED SETS WITH MOLDED BLOCKS ARE AVAILABLE. CONSULT YOUR PARTS BOOK FOR MANUFAC- TURERS RECOMMENDATION.				
Super Senior (Old Style)	WL2070	26	3/8 x 6 x 7 1/2	88-1/4 x 3/4 BFH 16-1/4 x 1 BFH
33 (Old 3000) MAIN DRUMS and/or SAND REEL	WL2139	24	1/2 x 7 x 7 1/2	84-1/4 x 3/4 BFH 12-1/4 x 1 BFH
3000 A; Prewar 4000; 4000A; Oversize				112-5/16 x 1 1/8 BFH
East Texas	WL2148	18	1 x 7 x 12	32-5/16 x 1 1/4 BFH
80, 844	WL2217	16	1 x 8 x 12	96-5/16 x 1 1/8 BFH
44 (Old 4000); 44-8	WL2217	16	1 x 8 x 12	32-5/16 x 1 1/4 BFH
	WL2219	2	1 x 8 x 3	100-5/16 x 1 1/8 BFH
SA4500; Prewar 5000; Oversize				112-5/16 x 1 1/8 BFH
Super East Texas	WL2217	18	1 x 8 x 12	32-5/16 x 1 1/4 BFH
65 (Old 5000); 865;	WL2217	18	1 x 8 x 12	120-5/16 x 1 1/8 BFH
65-8;	WL2220	2	1 x 8 x 6	32-5/16 x 1 1/4 BFH
87-8	WL2217	20	1 x 8 x 12	136-5/16 x 1 1/8 BFH
	WL2220	2	1 x 8 x 6	32-5/16 x 1 1/4 BFH
3810; 1058; 65-10	WL2400	18	1 x 10 x 12	120-5/16 x 1 1/8 BFH
	WL2403	2	1 x 10 x 6	32-5/16 x 1 1/4 BFH
658; 87 (Old 7000);	WL2400	20	1 x 10 x 12	136-5/16 x 1 1/8 BFH
Aircooled	WL2403	2	1 x 10 x 6	32-5/16 x 1 1/4 BFH
SA5000; SA6000; SG-101 Water	WL2400	22	1 x 10 x 12	152-5/16 x 1 1/8 BFH
Cooled	WL2403	2	1 x 10 x 6	32-5/16 x 1 1/4 BFH
M5000LT; 137 Water Cooled	WL2400	22	1 x 10 x 12	148-5/16 x 1 1/8 BFH
	WL2406	2	1 x 10 x 3	32-5/16 x 1 1/4 BFH
4212; 2042; 1287; 1287-W; 750; 750-E;	WL2466	20	1 1/8 x 12 x 12	136-5/16 x 1 1/4 BFH
700-E	WL2475	2	1 1/8 x 12 x 6	32-5/16 x 1 1/2 BFH
2346; 1000; 900; 900-E; 2346-SHL	WL2466	22	1 1/8 x 12 x 12	168-5/16 x 1 1/4 BFH
	WL2475	2	1 1/8 x 12 x 6	16-5/16 x 1 1/2 BFH
2550; 2550-HL	WL2466	24	1 1/8 x 12 x 12	180-5/16 x 11/4~ BFH
	WL2475	2	1 1/8 x 12 x 6	20-5/16 x 1 1/2 BFH
<b>SAND REEL</b>				
80; 844	WL2217	16	1 x 8 x 12	96-5/16 x 1 1/8 BFH 32-5/16 x 1 1/4 BFH
	WL2217	18	1 x 8 x 12	120-5/16 x 1 1/8 BFH
65 (Old 5000); 120	WL2220	2	1 x 8 x 6	32-5/16 x 1 1/4 BFH
	WL2217	20	1 x 8 x 12	136-5/16 x 1 1/8 BFH
160; 160-R	WL2220	2	1 x 8 x 6	32-5/16 x 1 1/4 BFH
	WL2400	20	1 x 10 x 12	136-5/16 x 1 1/8 BFH
87 (Old 7000); 658	WL2403	2	1 x 10 x 6	32-5/16 x 1 1/4 BFH

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>GARDNER-DENVER</b>				
<b>MAIN DRUM</b>				
2500 Mayhew	WL2193	14	3/4 x 8 x 12	56-3/8 x 1 1/4 BFH
3000 Mayhew	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
5000 Mayhew	WL2196	22	1 x 8 x 12	88-3/8 x 1 1/4 BFH
500; 500-E; 500-S; 1500-S	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
700; 700-E; 800; 800-E; 800-R; 1000-S	WL2319	20	1 x 9 x 12	120-3/8 x 1 1/4 BFH
1100; 1100E	WL2409	22	1 1/8 x 10 x 12	132-3/8 x 1 1/2 FHS
1500; 1500RE	WL2436	24	1 1/4 x 11 x 12	144-3/8 x 1 1/2 FHS
2100; 2100E; 3000E	WL2484	26	1 1/4 x 12 x 12	156-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
500; 700; 800; 1100; 1500; 1500RE; 2100; 3000	WL2043	14	3/4 x 6 x 12	84-3/8 x 1 1/4 BFH
<b>GOT 29 SPECIAL</b>				
29 x 6	WL2490	12	3/4 x 6 x 11	48-3/8 x 1 1/4 BFH
<b>HOPPER HOIST</b>				
<b>MAIN DRUM</b>				
IG thru S/N 123	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
IG S/N 124 & Up				
Sand Drum for IGS/N 124 & Up; IGX	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
	WL2296	2	1 x 9 x 5 1/4	
G thru S/N 127; IGX	WL2295	16	1 x 9 x 12	68-3/8 x 1 1/4 BFH
G S/N 128 & Up	WL2295	20	1 x 9 x 12	80-3/8 x 1 1/4 BFH
GXXTA; GX10;	WL2418	2	1 x 10 x 6	
Sand Drum for GXH; GX; RTA	WL2415	20	1 x 10 x 12	104-3/8 x 1 1/4 BFH
	WL2468	2	1 1/8 x 12 x 6	
GXHTA; GXH; GX12 Wide	WL2469	20	1 1/8 x 12 x 12	168-3/8 x 1 1/2 FHS
	WL2415	16	1 x 10 x 12	104-3/8 x 1 1/4 BFH
GX10 with 10-6" Blocks	WL2418	10	1 x 10 x 6	
	WL2469	6	1 1/8 x 12 x 12	
	WL2478	20	1 1/8 x 6 x 12	
	ML2478	8	1 1/8 x 6 x 12	
GX SPECIAL 12" SPLIT	ML2481	4	1 1/8 x 6 x 6	168-3/8 x 1 1/2 FHS
	WL2368	2	1 1/8 x 10 x 2 1/2	
RTA	WL2370	20	1 1/8 x 10 x 12	114-3/8 x 1 1/2 FHS
M	WL2379	18 or 24	1 1/4 x 10 x 12	90 or 120-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
IG thru S/N 123	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
G thru S/N 145				
M thru S/N 107				
G S/N 146 & Up	WL2193	20	3/4 x 8 x 12	80-3/8 x 1 1/4 BFH
M S/N 107 & Up				
<b>HOUSTON SYSTEMS</b>				
1500 E	WL2346	18	1 1/4 x 9 3/4 x 12	108-3/8 x 1 1/2 FHS
<b>HYCALOG</b>				
HH 6000	WL2211	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>IDECO</b>				
<b>Ingersoll Rand IRI</b>				
H-20; M-20; H-20-C	WL2115	16	3/4 x 7 x 12	64-3/8 x 1 1/4 BFH
4050; 5060; S.W.700; S.W.7000-A; Service Winches, & SU-7000 SWAB Unit	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
SW10000; SW10000-A; Service Winch; SWAB Unit; PR-150-B; PR-600; TC-600; H-25; M-25; H-30	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
6070; 7080SW; 15000SW; 15000-A Service Winch SU 15000 SWAB Unit; PR150A; H-35 & M-35; S/N 51-263	WL2193	20	3/4 x 8 x 12	80-3/8 x 1 1/4 BFH
H-25; H-25-C; M-25 S/N 518, 524 & Up; H-30-C S/N 80, 82 & Up	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
H-35-C, S/N 192 & Up; H-40; H-525 H-725; H, M & Super 750	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
H-35-C Air Cooled; H-35 S/N 304 & Up, H-35-K; H-37-E; H-35-D: BIR 3085	WL2421	20	1 x 10 x 12	80-3/8 x 1 1/4 BFH
LUCKY 7-11; 900; ED-900; E-900; H; M PR-800; M-10000; H-700; H-7-11	WL2223	22	1 1/4 x 8 x 12	132-3/8 x 1 1/2 FHS
LITTLE GIANT	WL2424	18	1 1/4 x 10 x 12	72-3/8 x 1 1/2 FHS
PR-1050; Jr. Giant 10263 Super Duty; 7-11; 1200; Super 7-11 to S/N 178	WL2424	20	1 1/4 x 10 x 12	80-3/8 x 1 1/2 FHS
H-1000; PR-1350; 1350-S; 1350-ST; Big Giant H; M; E-2500, S/N 153-156, 161-163; BIR-800	WL2424	22	1 1/4 x 10 x 12	88-3/8 x 1 1/2 FHS
PR-1000	WL2424	24	1 1/4 x 10 x 12	96-3/8 x 1 1/2 FHS
Super 7-11 S/N 179 & Up; H-1700; E-1700	WL2427	24	1 1/4 x 10 x 12	144-3/8 x 1 1/2 FHS
H, M & E-2100; H, M & E-2500 S/N 151, 152, 156, 160, 164 & Up	WL2427	26	1 1/4 x 10 x 12	156-3/8 x 1 1/2 FHS
H-44-C	WL2439	20	1 1/8 x 11 x 12	120-3/8 x 1 1/2 FHS
E-3000	WL2487	30	1 1/4 x 12 x 12	180-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
H-20 (Optional)	WL2022	16	3/4 x 5 x 12	64-3/8 x 1 1/4 BFH
H-30-C; D & F H-35-F; Lucky 7-11; Jr. Super 7-11; 900; 1200	WL2115	16	3/4 x 7 x 12	64-3/8 x 1 1/4 BFH
H-25-A; M-25; H-25-C 38" Brakes; H-30-A; H-30-C 38" Brakes; H-35; H-35-C 38" Brakes; H-35-K; H-37-E; H-40; H-40-C; H-44-C; H-525; H, M, Super 750; H-700; H-711; Super 7-11 H; E-1700	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
H-35-DD; H, M & E-2100; H, M & E-2500	WL2193	20	3/4 x 8 x 12	80-3/8 x 1 1/4 BFH
E-3000	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
<b>KIN RIG</b>				
26 x 8	WL2194	16	3/4 x 8 x 12	96-3/8 x 1 1/4 BFH
32 x 8	WL2256	16	1 x 8 x 12	96-3/8 x 1 1/4 BFH
38 x 10	WL2397	18	1 x 10 x 12	108-3/8 x 1 1/4 BFH

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>KREMCO</b>				
MAIN DRUM				
K-200	WL2142	16	3/4 x 7 x 103/4	64-3/8 x 1 1/4 BFH
K-300	WL2115	16	3/4 x 7 x 12	64-3/8 x 1 1/4 BFH
K-400	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
K-600; K-600-D; K-600-H; K-600-T; K-650; K-650-T	WL2398	20	1 x 10 x 12	80-3/8 x 1 1/4 BFH
K-750; K-750-T	WL2439	20	1 1/8 x 11 x 12	120-3/8 x 1 1/2 FHS
K-1000	WL2439	18	1 1/8 x 11 x 12	108-3/8 x 1 1/2 FHS
SAND REEL				
K-200	WL2142	16	3/4 x 7 x 10 3/4	64-3/8 x 1 1/4 BFH
K-300; K-400	WL2115	16	3/4 x 7 x 12	64-3/8 x 1 1/4 BFH
K-600; K-600-D; K-600-H; K-600- T; K-650; K-650-T;	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
K-750; K-750- T	WL2193	20	3/4 x 8 x 12	80-3/8 x 1 1/4 BFH
<b>KSM</b>				
KSM-350	WL2115	16	3/4 x 7 x 12	64-3/8 x 1 1/4 BFH
KSM-450	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
KSM-550	WL2398	20	1 x 10 x 12	80-3/8 x 1 1/4 BFH
<b>LEE ENGINEERING</b>				
MAIN DRUM				
38 x 8	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
48 x 8	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
42 x 10	WL2397	20	1 x 10 x 12	120-3/8 x 1 1/4 BFH
<b>MAC</b>				
300,400	WL2142	20	3/4 x 7 x 10 3/4	80-3/8 x 1 1/4 BFH
<b>MAINLAND</b>				
M-320	WL2106A	18	3/4 x 7 x 10 1/2	90-5/16 x 1 1/4 BFH
M-360	WL2261	18	1 x 8 x 10 29/32	90-5/16 x 1 1/4 BFH
M-400	WL2385	20	1 x 10 x 10 15/16	100-5/16 x 1 1/4 BFA
<b>MESA MFG.</b>				
MAIN DRUM				
	WL2400	20	1 x 10 x 12	164-5/16 x 1 1/4 BFH
350	WL2406	2	1 x 10 x 3	
	WL2217	20	1 x 8 x 12	164-5/16 x 1 1/4 BFH
SWAB UNIT	WL2493	2	1 x 8 x 3	
1500	WL2349	20	1 1/4 x 9 3/4 x 12	120-3/8 x 1 1/2 FHS
SAND REEL				
	WL2217	20	1 x 8 x 12	164-5/16 x 1 1/4 BFH
350	WL2493	2	1 x 8 x 3	
NOTE	WL2400	10	1 x 10 x 12	82-5/16 x 1 1/4 BFH
SAND REELS with (1) One Band	WL2406	1	1 x 10 x 3	
<b>MID-CONTINENT/UNIT RIG</b>				
MAIN DRUM				
U-34; U-34-D; U-34-E; U-24	WL2142	20	3/4 x 7 x 10 3/4	80-3/8 x 1 1/4 BFH
U-40	WL2334	18	1 1/8 x 10 x 12	72-3/8 x 1 1/2 FHS
(1) U-15; U-35; U-36; U-22; U-10	WL2334 (4)	20	1 1/8 x 10 x 12	80-3/8 x 1 1/2 FHS
S/N 80 & Up; U-36-A; U-36-EA (4 Hole)				
(1) U-15; U-35; U-36; U-22; U-10; S/N 80 & Up; U-36-A; U-36-EA (6 Hole)	WL2412 (6)	20	1 1/8 x 10 x 12	120-3/8 x 1 1/2 FHS
U-20	WL2340 (6)	20	1 1/4 x 10 x 12 3/4	120-3/8 x 1 1/2 FHS
U-712-A; U-712-EA	WL2433 (6)	22	1 1/4 x 10 x 11 1/2	132-3/8 x 1 1/2 FHS

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>MID-CONTINENT/UNIT RIG</b>				
<b>MAIN DRUM</b>				
U-914-A,B,C, U-914-EC	WL2340 (6)	22	1 1/4 x 10 x 12 3/4	132-3/8 x 1 1/2 FHS
U-30; U-1220-A; U-1220-B; U-1220-EB	WL2430 (6)	28	1 1/4 x 10 x 12	168-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
U-34	WL2142	20	3/4 x 7 x 10 3/4	80-3/8 x 1 1/4 BFH
U-15; U-36; U-40	WL2142	10	3/4 x 7 x 10 3/4	40-3/8 x 1 1/4 BFH
U-20; U-35	WL2334	10	1 1/8 x 10 x 12	40-3/8 x 1 1/2 FHS
U-712-A; U-914-A	WL2142	18	3/4 x 7 x 10 3/4	72-3/8 x 1 1/4 BFH
U-1220-A	WL2334	18	1 1/8 x 10 x 12	72-3/8 x 1 1/2 FHS
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<b>MID-WAY MFG.</b>				
<b>MAIN DRUM</b>				
46 x 12	WL2463	22	1 1/8 x 12 x 12	132-3/8 x 1 1/2 FHS
42 x 8	WL2247	20	1 1/8 x 8 x 12	120-3/8 x 1 1/2 FHS
M-210-D; M-280-D; 42 x 10	WL2409	20	1 1/8 x 10 x 12	120-3/8 x 1 1/2 FHS
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<b>MOLLER MFG.</b>				
<b>MAIN DRUM</b>				
D-322	WL2256	18	1 x 8 x 12	96-3/8 x 1 1/4 BFH
D-401; D-402; S-400; D-402-H (42")	WL2409	20	1 1/8 x 10 x 12	120-3/8 x 1 1/2 FHS
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<b>MOUNTAIN RIG</b>				
<b>MAIN DRUM</b>				
150	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
250 (38" NEW RIG)	WL2394 (6)	18	1 x 10 x 12	108-3/8 x 1 1/4 BFH
350 (42" NEW RIG)	WL2394 (6)	20	1 x 10 x 12	120-3/8 x 1 1/4 BFH
550, 750, 1250	WL2463	20	1 1/8 x 12 x 12	120-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
250, 350	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
550, 750	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/4 BFH
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<b>NATIONAL OILWELL</b>				
<b>MAIN DRUM</b>				
T-8, T-8-S	WL2076	14	3/4 x 6 1/2 x 11 1/2	56-3/8 x 1 1/4 BFH
T-12; T-16; T-20; T-20-S: 200; 250	WL2154	16	3/4 x 7 1/2 x 11	64-3/8 x 1 1/4 BFH
T-12 S/N 1513 & Up; T-12-S	WL2154	18	3/4 x 7 1/2 x 11	72-3/8 x 1 1/4 BFH
Type 30 & 40	WL2226	18	3/4 x 8 x 11 1/2	72-3/8 x 1 1/4 BFH
300; 300-B	WL2160	20	1 x 7 1/2 x 11 1/4	80-3/8 x 1 1/4 BFH
6 Hole Drill T-25; T-32; T-45; H-4-10; 50; 50-A;	WL2232 (6)			
370; 55; 55-P; 610; 610-E; K-42 Brake		18	1 1/8 x 8 x 11 1/2	108-3/8 x 1 1/2 FHS
75; 75-CA; 75-CB; 80; 80-B; 80-E; 80-UE				
K-46 Brake; 1000-UE	WL2346 (6)	18	1 1/4 x 9 3/4 x 12	108-3/8 x 1 1/2 FHS
110; 110-UE; K-50 Brake; 1500-UE	WL2349	20	1 1/4 x 9 3/4 x 12	120-3/8 x 1 1/2 FHS
100; 125; 130; 1320-DE; 1320-M; 1320-UE	WL2355 (6)	20	1 1/4 x 9 3/4 x 13	120-3/8 x 1 1/2 FHS
34-10-FE; K-54 Brake	WL2367	2	1 1/4 x 9 3/4 x 2 1/2	(124 with wiper block)
160; 1625; 1625-M; 1625-DE; 33-62-FE;				
34-62FE; K-62 Brake	WL2355	24	1 1/4 x 9 3/4 x 13	144-38 x 1 1/2 FHS

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

<b>DRAWWORKS MANUFACTURER &amp; MODEL</b>	<b>TFM/SP PART NO.</b>	<b>NO PCS</b>	<b>SIZE</b>	<b>QTY.-SIZE &amp; TYPE SCREWS</b>
<b>NATIONAL OILWELL</b>				
<b>MAIN DRUM</b>				
Mobile Rig SCR 600	WL2409	20	1 1/8 x 10 x 12	120-3/8 x 1 1/2 FHS
400	WL2409	16	1 1/8 x 10 x 12	96-3/8 x 1 1/2 FHS
1625 DBE (Disc Brake)	MD103-425	8	Disc Pad	Service Caliper
	MD103-425	4	Disc Pad	Emergency Caliper
<b>SAND REEL</b>				
T-20-S; T-32-S; T-45; H-4-10	WL2154	16	3/4 x 7 1/2 x 11	64-3/8 x 1 1/4 BFH
T-8-S; T-12-S; 200; 250	WL2076	14	3/4 x 6 1/2 x 11 1/2	56-3/8 x 1 1/4 BFH
T-16; T-20; T-25; T-32	WL2159	16	3/4 x 7 1/2 x 11 1/4	64-3/8 x 1 1/4 BFH
Type 40 & 50	WL2163	14	3/4 x 7 1/2 x 11 1/2	56-3/8 x 1 1/4 BFH
125; 130; 1320-DE; 1625-M; 1625-DE	WL2226	18	3/4 x 8 x 11 1/2	72-3/8 x 1 1/4 BFH
50-A; 55; C-75; 75-CA; 75-CB; 80;				
80-B; 100; 110-UE; 610; 370 A 38; 610-E	WL2166	16	3/4 x 7 1/2 x 12	64-3/8 x 1 1/4 BFH
300; 300-B	WL2160	20	1 x 7 1/2 x 11 1/4	80-3/8 x 1 1/4 BFH
<b>O.I.L.</b>				
OIL-1200	WL2334	22	1 1/8 x 10 x 12	110-3/8 x 1 1/2 FHS
<b>OILWELL</b>				
<b>NATIONAL OILWELL</b>				
<b>MAIN DRUM</b>				
500	WL2196	16	1 x 8 x 12	64-3/8 x 1 1/4 BFH
				56-3/8 x 1 1/4 BFH
52-T	WL2235	16	1 x 8 x 12 1/2	8-3/8 x 2 BFH
660, 700; 660-E	WL2248	18	1 1/8 x 8 x 12	108-3/8 x 1 1/2 FHS
				68-3/8 x 1 1/2 FHS
66; 63-T	WL2241	20	1 1/8 x 8 x 12 1/2	12-3/8 x 2 FHS
				60-3/8 x 1 1/2 FHS
76; 760	WL2424	20	1 1/4 x 10 x 12	20-3/8 x 2 FHS
				60-3/8 x 1 1/2 FHS
740E (4 Hole)	WL2424	20	1 1/4 x 10 x 12	20-3/8 x 2 FHS
				100-3/8 x 1 1/2 FHS
740E (6 Hole)	WL2430	20	1 1/4 x 10 x 12	20-3/8 x 2 FHS
E-1400	WL2427	22	1 1/4 x 10 x 12	132-3/8 x 1 1/2 FHS
				136-3/8 x 1 1/2 FHS
E-2000; M-2000	WL2427	26	1 1/4 x 10 x 12	20-3/8 x 2 FHS
				112-3/8 x 1 1/2 FHS
840, 860-E, 840E	WL2358	22	1 1/4 x 10 x 12	20-3/8 x 2 FHS
				94-3/8 x 1 1/2 FHS
940-E; 96	WL2442	24	1 1/4 x 11 x 12	26-3/8 x 2 FHS
E-3000; M-3000	WL2487	28	1 1/4 x 12 x 12	168-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
52-T; 63-T; 66; 660; 860; E-2000;				60-3/8 x 1 1/4 BFH
ME-2000; 3000	WL2172	16	3/4 x 7 x 11 1/2	4-3/8 x 1 1/2 BFH
76	WL2118	14	3/4 x 7 x 12	56-3/8 x 1 1/4 BFH
96	WL2193	14	3/4 x 8 x 12	56-3/8 x 1 1/4 BFH

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>OILFIELD INDUSTRIES MFG. &amp; ENGRG.</b>				
<b>OIME - Parker Technology - "Partech"</b>				
<b>MAIN DRUM</b>				
500	WL2247	20	1 1/8 x 8 x 12	80-3/8 x 1 1/2 FHS
SL-750; SL-5	WL2379	16	1 1/4 x 10 x 12	80-3/8 x 1 1/2 FHS
SL-1000; 950; SL-7	WL2379	18	1 1/4 x 10 x 12	90-3/8 x 1 1/2 FHS
SL-1500; SL-1250; 1250; 2000	WL2460	18	1 1/4 x 12 x 12	90-3/8 x 1 1/2 FHS
2500 Hercules; 3000 Hercules	WL2460	22	1 1/4 x 12 x 12	110-3/8 x 1 1/2 FHS
<b>PARKER</b>				
IBA-2000	WL2457	20	1 1/4 x 12 x 12	100-3/8 x 1 1/2 FHS
<b>PEMCO "HOSS"</b>				
<b>MAIN DRUM</b>				
	WL2403	2	1 x 10 x 6	16-5/16 x 1 1/4 BFH
1015	WL2400	20	1 x 10 x 12	152-5/16 x 1 1/8 BFH
	WL2475	2	1 1/8 x 12 x 6	16-5/16 x 1 1/2 BFH
1220	WL2466	20	1 1/8 x 12 x 12	152-5/16 x 1 1/4 BFH
<b>SAND REEL</b>				
	WL2475	1	1 1/8 x 12 x 6	8-5/16 x 1 1/2 BFH
1015; 1220	WL2466	10	1 1/8 x 12 x 12	76-5/16 x 1 1/4 BFH
<b>POOL</b>				
<b>MAIN DRUM</b>				
750	WL2379	16	1 1/4 x 10 x 12	80-3/8 x 1 1/2 FHS
1500	WL2460	18	1 1/4 x 12 x 12	90-3/8 x 1 1/2 FHS
300; 400	WL2511	20	1 1/8 x 10 x 12	180-3/8 x 1 1/2 BFH
<b>SAND REEL</b>				
750	WL2398	8	1 x 10 x 12	32-3/8 x 1 1/4 BFH
				84-3/8 x 1 1/4 BFH
300; 400	WL2289	22	1 x 8 x 10 1/8	48-3/8 x 2 BFH
<b>RIG EQUIPMENT MFG.</b>				
RMI 4210	WL2370	20	1 1/8 x 10 x 12	100-3/8 x 1 1/2 FHS
RMI 1000; 4610	WL2370	22	1 1/8 x 10 x 12	110-3/8 x 1 1/2 FHS
<b>SANDLINE</b>				
38 x 8	WL2247	18	1 1/8 x 8 x 12	72-3/8 x 1 1/2 FHS
<b>SEA COAST</b>				
<b>MAIN DRUM</b>				
750-2-S; 750-4-S; 1000	WL2433	18	1 1/4 x 10 x 11 1/2	108-3/8 x 1 1/2 FHS
<b>SHAFFER</b>				
SO 6000-5	WL2154	24	3/4 x 7 1/2 x 11	96-3/8 x 1 1/4 BFH
SC 8000	WL2370	22	1 1/8 x 10 x 12	110-3/8 x 1 1/2 FHS
<b>SKYTOP - See BREWSTER-SKYTOP</b>				

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>SPENCER-HARRIS</b>				
3500	WL2037	16	3/4 x 6 x 12	64-3/8 x 1 1/4 BFH
5000; 6000	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
7000	WL2193	20	3/4 x 8 x 12	80-3/8 x 1 1/4 BFH
<b>SULLIVAN</b>				
200	WL2004	48	3/8 x 4 x 3 1/8	96-1/4 x 3/4 BFH
300	WL2250	14	5/8 x 8 x 11	56-3/8 x 1 1/4 BFH
<b>SUPERIOR OILFIELD SERVICE - DRECO</b>				
200 PSD	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
300 PSD, 400 PSD, 500 PSD, 700 PSD, 700 M, 700 UE	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
1000 E, 1000 M, 1000 UE	WL2346	18	1 1/4 x 9 3/4 x 12	108-3/8 x 1 1/2 FHS
2000 E, 2000 M	WL2355	20	1 1/4 x 9 3/4 x 13	120-3/8 x 1 1/2 FHS
<b>SAND REEL</b>				
200 PSD, 300 PSD, 400 PSD	WL2193	16	3/4 x 8 x 12	64-3/8 x 1 1/4 BFH
500 PSD, 700 PSD, 700 M, 700 UE, 1000 E, 1000 M, 1000 UE	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
<b>TAYLOR RIGS</b>				
38 x 8	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
38 x 10	WL2397	18	1 x 10 x 12	108-3/8 x 1 1/4 BFH
42 x 12	WL2463	20	1 1/8 x 12 x 12	120-3/8 x 1 1/2 FHS
<b>TEXAS FLANGE INC.</b>				
<b>MAIN DRUM</b>				
T-500	WL2232	18	1 1/8 x 8 x 11 1/2	108-3/8 x 1 1/2 FHS
T-1000	WL2346	18	1 1/4 x 9 3/4 x 12	108-3/8 x 1 1/2 FHS
<b>TRI SERVICE MACHINE</b>				
TSM-6000	WL2193	18	3/4 x 8 x 12	72-3/8 x 1 1/4 BFH
TSM-7000	WL2389	20	1 x 10 x 12	80-3/8 x 1 1/4 BFH
<b>TROY</b>				
400	WL2196	18	1 x 8 x 12	72-3/8 x 1 1/4 BFH
500, 600	WL2196	20	1 x 8 x 12	80-3/8 x 1 1/2 BFH
<b>UNIFLEX</b>				
32 x 8	WL2256	16	1 x 8 x 12	
<b>WAGNER-MOREHOUSE</b>				
L-1; L-2	WL2514	14	1/2 x 6 x 9	56-3/8 x 1 1/4 BFH
D-1; D-2; T-2-34	WL2517	14	3/4 x 6 x 11 1/2	56-3/8 x 1 1/4 BFH
D-2 (Optional Size)	WL2520	22	1/2 x 6 x 11 1/2	88-3/8 x 1 1/4 BFH
WM-2-Prod. Hoist; B-1; A-2-A	WL2523	14	3/4 x 7 x 12	56-3/8 x 1 1/4 BFH
M-41-B; M-41-A-2 Part No. 1461	WL2528	16	1 x 8 x 12	64-3/8 x 1 1/4 BFH
D-15-40-B	WL2531	22	1 x 8 x 11 1/2	88-3/8 x 1 1/4 BFH
	WL2528	18	1 x 8 x 12	
D-15-38-B	WL2537	2	1 x 8 x 6	76-3/8 x 1 1/4 BFH
T-3-44	WL2531	18	1 x 8 x 11 1/2	72-3/8 x 1 1/4 BFH
SAND REEL for WM-2 Prod. Hoist	WL2523	8	3/4 x 7 x 12	32-3/8 x 1 1/4 BFH
<b>WALKER-NEER</b>				
Some drawworks with the same model number require different size and number of brake blocks than those listed in this catalog. Please specify size when possible.				
S-32 Standard				92-3/16 x 3/4 BFH
S-32 Bull Reel	WL2013	16	1/2 x 4 x 9	4-3/16 x 1 1/4 BFH



## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>WALKER-NEER</b>				
S-32 Calf Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
S-32 Sand Reel	WL2010	12	3/8 x 4 x 9	72-3/16 x 3/4 BFH
S-32 Special	WL2013	20	1/2 x 4 x 9	116-3/16 x 3/4 BFH
S-32 Bull Reel				4-3/16 x 1 1/4 BFH
S-32 Calf Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
S-32 Sand Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
S-33 Standard; C-34 Bull Reel	WL2028	24	5/8 x 6 x 9	172-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
				108-3/16 x 3/4 BFH
Calf Reel	WL2028	16	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				108-3/16 x 3/4 BFH
Sand Reel	WL2028	16	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
S-33 Super Bull Reel	WL2028	30	5/8 x 6 x 9	220-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
				108-3/16 x 3/4 BFH
Calf Reel	WL2028	16	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				124-3/16 x 3/4 BFH
Sand Reel	WL2028	16	5/8 x 6 x 9	4-3/16 x 1 1/4 BFH
S-43; S-43-A Bull Reel	WL2013	20	1/2 x 4 x 9	116-3/16 x 3/4 BFH 4-3/16 x 1 1/4 BFH
				76-3/16 x 3/4 BFH
Calf Reel	WL2027	12	3/8 x 6 x 9	20-3/16 x 1 1/4 BFH
Sand Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
S-43 (57 Model) Bull Reel	WL2013	20	1/2 x 4 x 9	116-3/16 x 3/4 BFH 4-3/16 x 1 1/4 BFH
				76-3/16 x 3/4 BFH
Calf Reel	WL2027	12	3/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				92-3/16 x 3/4 BFH
Sand Reel	WL2013	16	1/2 x 4 x 9	4-3/16 x 1 1/4 BFH
S-46-A Bull Reel	WL2028	30	5/8 x 6 x 9	220-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
				124-3/16 x 3/4 BFH
Calf Reel	WL2028	18	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				124-3/16 x 3/4 BFH
Sand Reel	WL2028	18	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
S-410; S-410-A Bull Reel	WL2028	30	5/8 x 6 x 9	220-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
				132-3/16 x 3/4 BFH
Calf Reel	WL2180	18	1/2 x 8 x 9	30-3/16 x 1 1/4 BFH
				124-3/16 x 3/4 BFH
Sand Reel	WL2028	18	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
C & P-22 Bull Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
Sand Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
C & P-23 Bull Reel	WL2028	16	5/8 x 6 x 9	98-3/16 x 3/4 BFH 30-3/16 x 1 1/4 BFH
				98-3/16 x 3/4 BFH
Sand Reel	WL2028	16	5/8 x 6 x 9	30-3/16 x 1 1/4 BFH
C & P-25-A Bull Reel	WL2180	18	1/2 x 8 x 9	132-3/16 x 3/4 BFH 30-3/16 x 1 1/4 BFH
				132-3/16 x 3/4 BFH
Sand Reel	WL2180	18	1/2 x 8 x 9	30-3/16 x 1 1/4 BFH

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

<b>DRAWWORKS MANUFACTURER &amp; MODEL</b>	<b>TFM/SP PART NO.</b>	<b>NO PCS</b>	<b>SIZE</b>	<b>QTY.-SIZE &amp; TYPE SCREWS</b>
<b>WALKER-NEER</b>				
C & P-28-A				172-3/16 x 3/4 BFH
Bull Reel	WL2028	24	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				186-3/16 x 3/4 BFH
Sand Reel	WL2253	24	3/4 x 8 x 9	30-3/16 x 1 1/4 BFH
C-31				80-3/16 x 3/4 BFH
Bull Reel	WL2013	16	1/2 x 4 x 9	16-3/16 x 1 1/4 BFH
Calf Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
	Undrilled			
Sand Reel	Lining	2	1/4 x 3 x 51	64-3/16 x 3/4 BFH
C-32				76-3/16 x 3/4 BFH
Bull Reel	WL2027	12	3/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				76-3/16 x 3/4 BFH
Calf Reel	WL2027	12	3/8 x 6 x 9	20-3/16 x 1 1/4 BFH
Sand Reel	WL2010	12	3/8 x 4 x 9	72-3/16 x 3/4 BFH
C-33				124-3/16 x 3/4 BFH
Bull Reel	WL2028	18	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				76-3/16 x 3/4 BFH
Calf Reel	WL2027	12	3/8 x 6 x 9	20-3/16 x 1 1/4 BFH
Sand Reel	WL2010	14	3/8 x 4 x 9	84-3/16 x 3/4 BFH
C-34 same as S-33 (see S-33)				
C-37 Special				210-3/16 x 3/4 BFH
Bull Reel	WL2028	30	5/8 x 6 x 9	30-3/16 x 1 1/4 BFH
				132-3/16 x 3/4 BFH
Calf Reel	WL2180	18	1/2 x 8 x 9	30-3/16 x 1 1/4 BFH
				124-3/16 x 3/4 BFH
Sand Reel	WL2028	18	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				108-3/16 x 3/4 BFH
2000	WL2028	16	5/8 x 6 x 9	20-3/16 x 1 1/4 BFH
				132-3/16 x 1 BFH
P-5000; R-3-A	WL2253	18	3/4 x 8 x 9	30-3/16 x 1 1/4 BFH
250-40; 4210	WL2397	20	1 x 10 x 12	120-3/8 x 1 1/4 BFH

### WICHTEX

Some drawworks with the same model number require different size and number of brake blocks than those listed in this catalog. Please specify size when possible.

Model E-90 Bull Reel	WL2175	28	3/4 x 7 x 8 1/4	112-3/8 x 1 1/4 BFH
Model E-75 Bull Reel	WL2271	20	3/4 x 8 x 10	80-3/8 x 1 1/4 BFH
	Undrilled			
Rod & Tube Reel	Lining	2	3/8 x 8 x 7'10"	100-3/16 x 3/4 BFH
E-90 Rod & Tube Machine: Rod & Tube Drum	WL2325	24	3/4 x 9 x 10	96-3/8 x 1 1/4 BFH
E-75 Rod & Tube Drum	WL2271	24	3/4 x 8 x 10	96-3/8 x 1 1/4 BFH
C-65 Std & Hvy Duty:	Undrilled			
Rod & Tube Drum	Lining	2	3/8 x 8 x 7'10"	100-3/16 x 3/4 BFH
R-3 Rotary	WL2271	16	3/4 x 8 x 10	64-3/8 x 1 1/4 BFH
R-4 Rotary	WL2271	18	3/4 x 8 x 10	72-3/8 x 1 1/4 BFH
R-5 Rotary	WL2325	20	3/4 x 9 x 10	80-3/8 x 1 1/4 BFH
R-6 Rotary	WL2325	24	3/4 x 9 x 10	96-3/8 x 1 1/4 BFH
Sand Reel C-60	WL2088	20	5/8 x 6 x 8 1/4	72-3/8 x 1 1/4 BFH, 8-3/8 x 1 1/2 BFH
Sand Reel C-65	WL2274	18	5/8 x 8 x 10	64-3/8 x 1 1/4 BFH, 8-3/8 x 1 1/2 BFH
Sand Reel C-75	WL2274	22	5/8 x 8 x 10	80-3/8 x 1 1/4 BFH

## WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

DRAWWORKS MANUFACTURER & MODEL	TFM/SP PART NO.	NO PCS	SIZE	QTY.-SIZE & TYPE SCREWS
<b>WILSON PRODUCTS</b>				
<b>MOBILE RIG - NATIONAL OILWELL</b>				
<b>MAIN DRUM</b>				
Master BW-30-3 (Senior uses 16 pieces)	WL2091	18	3/8 x 6 x 9 1/2	124-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
Master BW-30-5 (Senior uses 16 pieces)	WL2094	18	5/8 x 6 x 9 1/4	124-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
Super 32 & Sand Line				124-3/16 x 3/4 BFH
Super BW 32-3	WL2283	18	3/8 x 8 x 10 1/8	20-3/16 x 1 1/4 BFH
MOGUL CORE REEL	WL2286	11	5/8 x 8 x 9 5/8	78-3/16 x 3/4 BFH 10-3/16 x 1 1/4 BFH
SUPER BW-38-5	WL2286	18	5/8 x 8 x 9 5/8	124-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
MOGUL BW-38-5	WL2286	22	5/8 x 8 x 9 5/8	156-3/16 x 3/4 BFH 20-3/16 x 1 1/4 BFH
SUPER BW 38-5 (Special Blocks)	WL2508	18	1 x 8 x 9 5/8	126-3/8 x 1 1/4 BFH 18-3/8 x 1 1/2 BFH
MOGUL BW-38-8, SUPER 38 (Model 30)	WL2289	22	1 x 8 x 10 1/8	84-3/8 x 1 1/4 BFH 48-3/8 x 2 BFH
Super 42 Mogul (Model 75), 75-P, 65-P				100-3/8 x 1 1/4 BFH
Torc-Air, 190-38-9, Mogul 42 (Model 65)	WL2289	24	1 x 8 x 10 1/8	44-3/8 x 2 BFH
Atlas; Super Atlas (Model 120),				122-3/8 x 1 1/2 BFH
Super Giant 90, BW-56	WL2511	22	1 1/8 x 10 x 12	76-3/8 x 2 BFH
42 B-300; 400 BI; 400 DI; 500				104-3/8 x 1 1/2 BFH
Giant BW-56; Mogul 42-10; 700	WL2511	20	1 1/8 x 10 x 12	76-3/8 x 2 BFH
Titan BW-56 (Model 150,) Torc-Air; Road				158-3/8 x 1 1/2 BFH
Air, Super Titan BW-56 (Model 150A)	WL2511	26	1 1/8 x 10 x 12	76-3/8 x 2 BFH
Super Titan 66 (Model 250)	WL2511A	30	1 1/4 x 10 x 12	194-3/8 x 1 1/2 BFH 76-3/8 x 2 BFH
<b>SAND REEL</b>				
Super Titan 66, Super Titan 56, Titan,				100-3/8 x 1 1/4 BFH
Super Atlas, Super Giant 90, 120,	WL2289	24	1 x 8 x 10 1/8	44-3/8 x 2 BFH
150, 150A, 250; 75; 75-P; 700; 42B-300;				
400 BI; 500				
Super Mogul 42, Mogul 42, 65, 65-P, 75, 75-P	WL2289	22	1 x 8 x 10 1/8	84-3/8 x 1 1/4 BFH
190-38-9; Super 38; 42-B, 400 DI				48-3/8 x 2 BFH

## SCAN-PAC MFG., INC. CATHEAD & DRAWWORKS CLUTCH FACINGS

Part #	Thk x ID x OD	Holes /seg	Mat'l	OEM Part #	OEM	# of Seg's Req'd to Reline Plate
<b>CONTINENTAL EMSCO</b>						
PR2204	3/8 X 15 X 22	16	RF38	6919-0005-00	Continental Emsco	1
PR2704	3/8 X 17 X 27	24	RF38	6919-0114-00	Continental Emsco	1
<b>IRI INTERNATIONAL</b>						
PR2604	1/4 X 20 X 26-3/4		RF38	114	Cabot-IRI	1
PR2802	1/4 X 20 X 28-3/4		RF38	S5114	Cabot-IRI	1
PR3202	1/4 X 20 X 32-1/8		RF38	E114	Cabot-IRI	1
PR3644	1/4 X 20-3/8 X 36-3/8		RF38	G114	Cabot-IRI	1
<b>NATIONAL OILWELL - VARCO</b>						
PR1603	1/4 X 10X 16	8	RF38	627686	National	4
PR1605	3/8 X 10 X 16	6	RF38	627685	National	4
PR1806	3/8 X 12 X 18	6	RF38	627688	National	4
PR2104	1/4 X 14 X 21	8	RF38	618796	National	4
R3604	3/8 X 21-1/2 X 36	25	RF38	610627	National	8
PR4202	3/8 X 26 X 42	18	RF38	619284	National	12
<b>SHAFFER, A VARCO CO. (JOY)</b>						
PR1052	3/16 X 5 X 10	18	RF38	280-000-1200	Joy	1
PR1054	3/8 X 5 X 10	16	RF38	362-800-0012	Joy	1
PR1252	3/16 X 5-3/8 X 12	16	RF38	282-000-1200	Joy	1
PR1254	3/8 X 5-3/8 X 12	16	RF38	362-820-0012	Joy	1
PR1274	3/8 X 7 X 12	17	RF38	35-19	Foster	1
PR1582	3/16 X 8-3/4 X 15-3/4	24	RF38	286-000-1200	Joy	1
PR1584	3/8 X 5-3/4 X 15-3/4	24	RF38	362-860-0012	Joy	1
PR1602	1/4 X 10X 15-3/32	33	RF38	245-011-1100	Foster	2
PR1604	3/8 X 10 X 16	24	RF38	24-19	Foster	1
PR1606	3/8 X 11 X 16		RF38	245-011-1	Joy	1
PR1704	3/8 X 11 X 17		RF38	245-021-11	Joy	1
PR1705	3/8 X 11 X 17		RF38	362-450-2111	Joy	1
PR1804	3/8 X 10 X 18	24	RF38	15-19	Foster	1
PR1805	3/8 X 11X 18		RF38	243-000-40	Joy	1
PR1954	3/8 X 13-1/2 X 19-1/2	21	RF38	29-19	Foster	1
PR2205	3/8 X 16 X 22		RF38	18-19	Foster	1
<b>FAIRBANKS MORSE</b>						
PR0602	3/16 X 3,335 X 6-1/4		RF38	E6	Fairbanks Morse	1
PR9002	187 X 4-5/16 X 9		RF38	E10-9	Fairbanks Morse	1
PR1042	195X4-5/16 X 10		RF38	E10A-10	Fairbanks Morse	1
<b>TWIN DISC</b>						
PR1138	1/8 X 5-1/2 X 11-3/8	22	RF38	5373	Twin Disc	1
PR4203	390 X 28 X 42	28	RF38	A6835	Twin Disc	8
PR9003	1/8 X 5-1/2 X 9-7/8	20	RF38	5570	Twin Disc	1

## DRAWWORKS CLUTCH DATA

DRAWWORKS MANUFACTURER BREWSTER (SKYTOP/BREWSTER)	SP PART NO.	OEM NUMBER	MODEL NO.	NO PCS.	HARDWARE NO. & SIZE
– LOW DRUM –					
N42; N46; N46E; N75; NE75	GT-30		TD-P0230	2	none required
SB1000; SB1000E	GT-30		TD-P0330	3	none required
– HIGH DRUM –					
N42	GT-24		TD-P0224	2	none required
N46; N46E; N75; NE75; SB1000; SB1000E	GT-24		TD-P0324	3	none required
SB1500; SB1500E	GT-30		TD-P0230	2	none required
N12A; NE12	GT-30		TD-P0330	3	none required
– ROTARY –					
N42; N46; N46E; N75; NE75; SB1000; SB1000E; SB1500; SB1500E	GT-18		TD-P0218	2	none required
N12A; NE12	GT-18		TD-P0318	3	none required
– SAND REEL –					
N42; N46; N46E; N75; NE75; SB1000; SB1000E; SB1500; SB1500E; N12A; NE12	GT-24		TD-P0224	2	none required
– DRUM CLUTCH –					
RR400; RR550; RR600; RR650; RR750	GT-24		TD-P0324	3	none required
RR850; R800	GT-30		TD-P0230	2	none required
– SAND DRUM –					
RR400; RR550; RR600; RR650; RR750; RR850; R800	GT-24		TD-P0224	2	none required

### CARDWELL INTL.

– MAIN DRUM –					
K100	GT-18		TD-P0218	2	none required
K150	GT-24		TD-P0124	1	none required
K200C	GT-24		TD-P0224	2	none required
K210B; K250A	CS2865L	414583	28VC650	14	150-1/4 x 17/32 dr. rivets
K500; K600; KH500	CS3365L	414585	33VC650	16	170-1/4 x 19/32 dr. rivets
K700	CS3765L	414585	37VC650	18	190-1/4 x 19/32 dr. rivets
K1000	GT-24		TD-P0324	3	none required
KH1000	GT-30		TD-P0230	2	none required
– SAND DRUM –					
K100	GT-18		TD-P0118	1	none required
K150	GT-18		TD-P0218	2	none required
K200C	GT-24		TD-P0124	1	none required
– MAIN DRUM - H –					
K250A	CS2060L	307358	20VC600	10	110-1/4 x 17/32 dr. rivets

Note: Where GT is shown in SP Part No. Column  
Refer to Gear Tooth data following this section

## DRAWWORKS CLUTCH DATA

DRAWWORKS MANUFACTURER	SP PART NO.	OEM NUMBER	MODEL NO.	NO PCS.	HARDWARE NO. & SIZE
<b>COOPER/LOADCRAFT</b>					
– MAIN DRUM –					
LT0750; LT0650	CS2810L	414599	28VC1000	10	110-1/4 x 17/32 dr. rivets
LT0550; LT0350; LT0250; LT0150	GT-25106	230-25-8	Wichita 224	2	none required
– SANDLINE –					
LT0550; LT0350; LT0250	GT-25106	230-25-8	Wichita 224	2	none required
LT0150	GT-25106	230-25-8	Wichita 124	1	none required
– 3RD CLUTCH –					
LT0750; LT0650	CS2810L	414599	28VC1000	10	110-1/4 x 17/32 dr. rivets
LT0550	GT-25106	230-25-8	Wichita 224	2	none required
LT0350; LT0250; LT0150	GT-25106	230-25-8	Wichita 124	1	none required
– ROTARY DRIVE –					
LT0550; LT0350; LT0250	GT-19104	234-25-1	Wichita 218	2	none required
<b>CONTINENTAL EMSCO LTV ENERGY</b>					
– LOW DRUM –					
Electrohoist 2D; Electric & Mechanical					
C1; C2; C3	CS4212L	511641	42VC1200	14	140-3/8 x 1 screw & nuts
Electric & Mechanical D3-2; D3-3	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
Electric & Mechanical D2	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
Electric & Mechanical D1	CS2810L	414599	28VC1000	10	110-1/4 x 17/32 dr. rivets
– HIGH DRUM –					
Electric & Mechanical C3-2; C3-3	CS4612L	414438	42VC1200	32	192-3/8 x 1 screws & nuts
Electric & Mechanical C2-2; C2-3; C1-2; C1-3	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
Electric & Mechanical D3-2; D3-3	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
Electric & Mechanical D2	CS2010L	414595	20VC1000	8	90-1/4 x 17/32 dr. rivets
– CATHEAD - SPINNING –					
Electric & Mechanical C3-2; C3-3; C2-2; C2-3; C1-2; C1-2; C1-3; D3-2; D3-3; D2; D1	PR2204	6919-0005-00	G-B	1	16-1/4 x 3/4 screws
– CATHEAD - BREAKOUT –					
Electric & Mechanical C3-2; C3-3; C2-2; C2-111	PR2704	6919-0114-00	GBH	1	24-1/4 x 3/4 screws
– CATHEAD - BREAKOUT –					
C1-2; C1-3; D3-2; D3-3; D2; D1	PR2204	6919-0005-00	GB	1	16-1/4 x 3/4 screws
<b>GEO. E. FAILING</b>					
– MAIN DRUM –					
8000	CS2810L	414599	28VC1000	10	110-1/4 x 17/32 dr. rivets
– ROTARY TABLE –					
2500	GT-14		TD-E214	2	none required
<b>HOPPER</b>					
– MAIN DRUM –					
IG; IGX	WL1750	H-IGT736	24 3/4	12	keepers, bolts & nuts
G; GX; GXH	WL1751	H-GT736	30	12	keepers, bolts & nuts
M; R	WL 1752	H-M-236A	34	12	keepers, bolts & nuts
– SAND REEL –					
IG; G; GX	WL1750	H-IGT736	24 3/4	12	keepers, bolts & nuts
GXH; M; R; GX(H.D.)	WL1751	H-GT736	30	12	keepers, bolts & nuts

Note: Where GT is shown in SP Part No. Column  
Refer to Gear Tooth data following this section

## DRAWWORKS CLUTCH DATA

DRAWWORKS MANUFACTURER	SP PART NO.	OEM NUMBER	MODEL NO.	NO PCS.	HARDWARE NO. & SIZE
<b>IDECO - IRI</b>					
– LOW DRUM –					
E3000; ES3000; H3000	CS5212L	414438	52VC1200	36	216-3/8 x 1 BFHS nuts
E2100; ES2100	CS4212L or CS4612L	511641 414438	42VC1200 or 46VC1200	14 32	140-3/8 x 1 BFHS nuts 192-3/8 x 1 BFHS nuts
E1700	CS3810L	403525	38VC1000	12	120-3/8 x 1 BFHS nuts
ED900; H900; ED1200; H1200	CS3210L	414601	32VC1000	12	120-3/8 x 1 BFHS nuts
H1700	CS3812L	511639	38VC1200	12	120-3/8 x 1 BFHS nuts
– HIGH DRUM –					
E3000; ES3000; H3000	CS4612L or CS5212L	414438 414438	46VC1200 or 52VC1200	32 36	192-3/8 x 1 BFHS nuts 216-3/8 x 1 BFHS nuts
E2100; ES2100	CS4212L or CS4612L	511641 414438	42VC1200 or 46VC1200	14 32	140-3/8 x 1 BFHS nuts 192-3/8 x 1 BFHS nuts
H1700	CS3210L or CS3812L	414601 511639	32VC1000 or 38VC1200	12 12	120-3/8 x 1 BFHS nuts 120-3/8 x 1 BFHS nuts
ED1200	CS3210L	414601	32VC1000	12	120-3/8 x 1 BFHS nuts
ED900	CS2810L	414599	28VC1000	10	110-1/4 x 17/32 dr. rivets
– ROTARY DRIVE –					
E3000; ES3000; E2100; ES2100; H3000	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
ED1200; H1200	CS2060L	307358	20VC600	10	110-1/4 x 17/32 dr. rivets
ED900	CS1610L	414593	16VC1000	8	90-1/4 x 17/32 dr. rivets
H900; H725; H1000	CS1660L	414579	16VC600	8	90-1/4 x 15/32 dr. rivets

### IRI-INGERSOLL-RAND (Drilling)

– DRUM CLUTCH –					
2346	GT-31101	8461-C	TD-P0230	2	none required
2042; 1287W	GT-25104	5667-C	TD-P0224	2	none required
– ROTARY CLUTCH –					
2550HL; 2346SHL	GT-19101	5658-G	TD-P0318	3	none required
2550; 2346; 2042; 1287W	GT-19101	5658-G	TD-P0218	2	none required

### IRI - FRANKS (Workover)

– DRUM CLUTCH –					
2042; 1287W; 1287; 1058	GT-25104	5667-C	TD-P0224	2	none required
– SAND DRUM – (Drum Clutch)					
160; 120	GT-19101	5658-G	TD-P0218	2	none required

### KREMCO

– MAIN DRUM –					
K100	GT-18		TD-P0218	2	none required
K750; K750T	CS3365L	414585	33VC650	16	170-1/4 x 19/32 dr. rivets
K1000; K1000T; K1000TE	CS3765L	414585	37VC650	18	190-1/4 x 19/32 dr. rivets
– SANDLINE –					
K100	GT-18		TD-P0218	2	none required

Note: Where GT is shown in SP Part No. Column  
Refer to Gear Tooth data following this section

## DRAWWORKS CLUTCH DATA

DRAWWORKS MANUFACTURER	SP PART NO.	OEM NUMBER	MODEL NO.	NO PCS.	HARDWARE NO. & SIZE
<b>MID-CONTINENT</b>					
<b>LOW DRUM</b>					
U-34B-Mechanical & Electric	CS2410L	414597	24VC1000	10	110-1/4 x 17/32 dr. rivets
U-36A-Mechanical & Electric	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
U-712A; U712 EA; U-914C; U-914EC	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
U1220, U1220EB	CS4212L	511641	42VC1200	14	140-3/8 x 1 screws & nuts
<b>– HIGH DRUM –</b>					
U-34B Mechanical & Electric; U-36A;					
U-36EA	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
U-712A; U-712EA; U-914EC	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
U-914C	CS3810L	403525	38VC1000	12	120-3/8 x 1 screws & nuts
U-1220; U1220EB	CS4212L	511641	42VC1200	14	140-3/8 x 1 screws & nuts
<b>– SAND REEL –</b>					
U-712A; U-712EA; U-914C; U-914EC	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
<b>– ROTARY –</b>					
U-712EA - Electric	CS1660L	414579	16VC600	8	90-1/4 x 17/32 dr. rivets
U-712A; U-712EA; U-914C; U-914EC;					
U-1220; U-1220EB	CS2060L	307358	20VC600	10	110-1/4 x 17/32 dr. rivets
<b>NATIONAL - OILWELL</b>					
<b>– LOW DRUM –</b>					
1625DE; 1625M	PR4202	619284	2 Plate 42"	24 seg	216-10-16 rivets
1320UE; 1320M	PR3604	610627	2 Plate 36"	16 seg	200-10-16 rivets
110UE; 110M	AB4610	626163	46 x 10	16	keepers, bolts & nuts
80UE; 80B	AB4010	622836	40 x 10	14	keepers, bolts & nuts
610, 610E, 370; 370E	CS2810L	414599	28VC1000	10	110-1/4 x 17/32 dr. rivets
<b>– HIGH DRUM –</b>					
1625DE; 1625M	AB4610	626163	46 x 10	16	keepers, bolts & nuts
1320UE; 1320M; 110UE; 110M	AB4010	622836	40 x 10	14	keepers, bolts & nuts
80UE; 80B	AB3210	621660	32 x 10	12	keepers, bolts & nuts
610; 610E	CS2865L	414583	28VC650	14	150-1/4 x 17/32 dr. rivets
<b>– ROTARY DRIVE –</b>					
1625DE; 1625M; 1320UE; 1320M;					
110UE; 110M; 80UE; 80B	AB28525	625298	28x5 1/4	12	keepers, bolts & nuts
610; 610E	CS2447L	307452	24E475	16	70-1/4 x 17/32 dr. rivets
370; 370E	CS2147L	307450	21.5E475	14	62-1/4 x 17/32 dr. rivets
<b>– CORING REEL –</b>					
1625DE; 1625M; 1320UE; 1320M	AB28525	625298	28 x 5 1/4	12	keepers, bolts & nuts
110UE; 110M; 80UE; 80B	AB24525	625290	24 x 5 1/4	10	keepers, bolts & nuts
<b>– CATHEAD FACINGS –</b>					
Break-out Spool	PR1605	627685	B1; B2	4 seg	24-1/4 x 3/4 BFHS & nuts
Break-out Plate	PR1603	627686	B1; B2	8 seg	64-#7-10 rivets
Make-up Spool	PR1806	627688	B1; B2	4 seg	24-1/4 x 3/4 BFHS & nuts
Break-out Plate	PR2104	618796	A1	8 seg	64-#7-12 rivets
Make-up Spool	PR2104	618796	A1	4 seg	32-#7-12 rivets

Note: Where GT is shown in SP Part No. Column  
Refer to Gear Tooth data following this section



## DRAWWORKS CLUTCH DATA

DRAWWORKS MANUFACTURER	SP STOCK NO.	OEM NUMBER	MODEL NO.	NO PCS.	HARDWARE NO. & SIZE
<b>OILWELL</b>					
– HIGH DRUM –					
E2000; M2000	CS4212L	511641	42VC1200	14	140-3/8 x 1 screws & nuts
860; 840E	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
760; 760E	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
700; 700E	CS2865L	414583	28VC650	14	150 - 1/4 x 17/32 dr. rivets
660; 660E	GT-30		TD-P0230	2	none required
– LOW DRUM –					
E2000; 840E	CS4212L	511641	42VC1200	14	140-3/8 x 1 screws & nuts
860; 840E	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
760; 760E	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
700; 700E; 660; 660E	GT-30		TD-P0230	2	none required
500	CS3365L	414585	33VC650	16	170-1/4 x 19/32 dr. rivets
– ROTARY –					
E3000; M3000; E2000; M2000	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
500	CS1660L	414579	16VC600	8	90-1/4 x 15/32 dr. rivets
<b>OIME</b>					
– LOW DRUM –					
SD5E; SD5M	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
SD7E; SD7M	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
SD9E; SD9M	CS4212L	511641	42VC1200	14	120-3/8 x 1 screws & nuts
– HIGH DRUM –					
SD5E	CS2010L	414595	20VC1000	8	90-1/4 x 17/32 dr. rivets
SD7E; SD7M	CS3210L	414601	32VC1000	12	120-3/8 x 1 screws & nuts
SD9E; SD9M	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
– ROTARY DRIVE –					
SD7E; SD7M	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
SD9E; SD9M; SD11E	GT-18		TD-P0318	3	none required
– LOW DRUM –					
SL5	GT-30		TD-P0230	2	none required
SL7	GT-30		TD-P0330	3	none required
SL-9P	CS4212L	511641	42VC1200	14	140-3/8 x 1 screws & nuts
– HIGH DRUM –					
SL-5	GT-30		TD-P0230	2	none required
SL-7	GT-30		TD-P0330	3	none required
SL-9P	CS3812L	511639	38VC1200	12	120-3/8 x 1 screws & nuts
– ROTARY DRIVE –					
SL-5	GT-30		TD-P0230	2	none required
SL-7	GT-18		TD-P0218	2	none required
SL-9P	CS2465L	414581	24VC650	12	130-1/4 x 17/32 dr. rivets
– CATWORKS –					
C-7	GT-18		TD-P0218	2	none required

Note: Where GT is shown in SP Part No. Column  
Refer to Gear Tooth data following this section

## RF 38 & RF52 GEAR TOOTH FACINGS

SPM #	MAT'L	THK.	I.D.	O.D.	NO. TEETH	NO. SEGS	CLUTCH SIZE	MFG.	MFG./P/N
GT67501	RF38	0.438	2.38	6.75	15	1	5	RUELAND	97006-2105
GT72501	RF38	0.438	3.63	7.25	42	1	6	TWIN DISC	A3507
GT72502	RF38	0.375	3.63	7.25	42	1	6	TWIN DISC	A3507A
GT72503	RF38	0.438	3.63	7.25	42	3	6	TWIN DISC	A3507S
GT72504	RF38	0.438	4.75	7.25	42	3	6	TWIN DISC	4596S
GT72505	RF38	0.375	4.00	7.25	42	3	6.5	ROCKFORD	CL8645
GT72506	RF38	0.438	4.19	7.23	42	1	6	WICHITA	397-11-1
GT72506	RF52	0.438	4.19	7.23	42	1	6	WICHITA	397-11-1
GT72507	RF38	0.438	4.00	7.25	42	1	6	TWIN DISC	A3507D
GT72508	RF38	0.375	4.38	7.25	42	1	6	TWIN DISC	
GT72509	RF38	0.250	3.72	7.25	24	1	7.25	STEARNS	8-004-707-00
GT80801	RF38	0.438	4.50	8.08	47	1	7	TWIN DISC	A5436
GT80802	RF38	0.438	4.50	8.08	47	2	7	TWIN DISC	A5436A
GT80803	RF38	0.438	4.50	8.08	47	3	7	TWIN DISC	A5436S
GT80804	RF38	0.438	4.50	8.08	47	3	7.5	ROCKFORD	CL8786
GT87501	RF38	0.438	5.50	8.75	51	1	8	TWIN DISC	6479
GT87502	RF38	0.438	5.50	8.75	51	2	8	TWIN DISC	6479C
GT87503	RF38	0.438	5.50	8.75	51	3	8	TWIN DISC	6479S
GT87504	RF38	0.375	5.50	8.75	51	3	8	ROCKFORD	CL7039
GT87505	RF38	0.438	5.40	8.70	51	1	8	WICHITA	275-25
GT87505	RF52	0.438	5.40	8.70	51	1	8	WICHITA	275-25
GT87506	RF52	0.438	3.75	8.70	51	1	8	WICHITA	
GT87508	RF38	0.438	5.50	8.75	51	1	8	WICHITA	
GT92201	RF38	0.250	3.72	9.25	24	1	9		
GT10701	RF38	0.438	5.50	10.75	63	1	10	TWIN DISC	5878
GT10702	RF38	0.438	5.50	10.75	63	2	10	TWIN DISC	5878D
GT10703	RF38	0.438	5.50	10.75	63	3	10	TWIN DISC	5878S
GT10705	RF38	0.203	7.44	10.75	63	1	10	TWIN DISC	5904
GT10706	RF38	0.203	7.44	10.75	63	2	10	TWIN DISC	5904S
GT10707	RF38	0.438	6.25	10.75	63	3	10	ROCKFORD	CL6952
GT10708	RF38	0.438	6.50	10.75	63	1	10	TWIN DISC	5878B
GT10709	RF38	0.438	6.50	10.75	63	3	10	TWIN DISC	5878B
GT10710	RF38	0.438	3.75	10.75	63	1	10	TWIN DISC	5878M
GT10710	RF52	0.438	3.75	10.75	63	1	10	TWIN DISC	5878M
GT10711	RF38	0.375	5.31	10.00	55	1	10	STEARNS	8-004-206-00
GT10713	RF38	0.438	6.25	10.75	63	1	10	STEARNS	
GT12201	RF38	0.438	6.25	12.25	72	1	11	TWIN DISC	A5579
GT12202	RF38	0.438	6.25	12.25	72	2	11	TWIN DISC	A5579C
GT12203	RF38	0.438	6.25	12.25	72	3	11	TWIN DISC	A5579A
GT12204	RF38	0.250	6.25	12.25	72	1	11	TWIN DISC	A5579G
GT12205	RF38	0.438	8.00	12.25	72	1	11	TWIN DISC	6614
GT12206	RF38	0.438	8.00	12.25	72	2	11	TWIN DISC	6614D
GT12207	RF38	0.438	8.00	12.25	72	3	11	TWIN DISC	6614A
GT12208	RF38	0.438	6.25	12.25	72	3	11.5	ROCKFORD	CL10145
GT12209	RF38	0.438	6.25	12.25	72	4	11.5	ROCKFORD	CL10321
GT12210	RF38	0.500	7.00	12.22	72	1	11	WICHITA	265-4
GT12210	RF52	0.500	7.00	12.22	72	1	11	WICHITA	265-4
GT12211	RF52	0.500	4.25	12.25	72	1	11		
GT14204	RF41	0.250	9.25	14.94	44	1	14	UNIT CRANE	202397A-3
GT14801	RF38	0.625	9.25	14.88	44	1	14	UNIT CRANE	201821
GT14802	RF38	0.625	9.25	14.94	88	1	14	UNIT CRANE	22702A

## RF 38 & RF52 GEAR TOOTH FACINGS

SPM #	MAT'L	THK.	I.D.	O.D.	NO. TEETH	NO. SEGS	CLUTCH SIZE	MFG.	MFG./P/N
GT14803	RF38	0.625	9.25	14.88	88	1	14	TWIN DISC	5740
GT14803	RF52	0.625	9.25	14.88	88	1	14	TWIN DISC	5740
GT14804	RF38	0.625	9.50	14.88	88	1	14	WICHITA	4-253-897-000
GT14804	RF52	0.625	9.50	14.88	88	1	14	WICHITA	4-253-897-000
GT14805	RF38	0.438	9.25	14.88	44	1	14	WICHITA	
GT15101	RF38	0.625	9.25	15.13	59	1	14	TWIN DISC	5659M
GT15102	RF38	0.625	9.75	15.13	59	3	14	TWIN DISC	5659A
GT15103	RF38	0.625	9.25	15.13	59	3	14	TWIN DISC	5659B,J
GT15104	RF38	0.625	9.75	15.13	59	1	14	TWIN DISC	5659C,P
GT15104	RF52	0.625	9.75	15.13	59	1	14	TWIN DISC	5659C,P
GT15105	RF38	0.625	7.00	15.13	59	1	14	TWIN DISC	5659K
GT15106	RF38	0.625	7.00	15.13	59	3	14	TWIN DISC	5659L
GT15107	RF38	0.625	8.38	15.13	59	1	14	ROCKFORD	CL6954
GT15108	RF38	0.625	8.38	15.13	59	3	14	ROCKFORD	CL9927
GT15109	RF38	0.625	9.50	15.13	59	1	14	WICHITA	253-25-2
GT15109	RF52	0.625	9.50	15.13	59	1	14	WICHITA	253-25-2
GT15110	RF38	0.625	9.25	15.13	59	1	14	TWIN DISC	5659D
GT15110	RF52	0.625	9.25	15.13	59	1	14	TWIN DISC	5659D
GT15112	RF52	0.500	9.75	15.13	59	1	14	TWIN DISC	
GT16101	RF38	0.625	9.25	17.16	67	3	16	TWIN DISC	6961C
GT16102	RF38	0.625	9.25	17.16	67	1	16	TWIN DISC	6961A,B
GT16103	RF38	0.625	10.00	17.16	67	1	16	TWIN DISC	6961D
GT16104	RF38	0.625	10.53	17.12	67	1	16	WICHITA	404-25
GT16104	RF52	0.625	10.53	17.12	67	1	16	WICHITA	404-25
GT19101	RF38	0.625	12.50	19.13	75	1	18	TWIN DISC	5658
GT19102	RF38	0.625	12.50	19.13	75	2	18	TWIN DISC	5658A
GT19103	RF38	0.625	12.50	19.13	75	3	18	TWIN DISC	5658C
GT19104	RF38	0.625	12.56	19.13	75	1	18	WICHITA	234-25-1
GT19104	RF52	0.625	12.56	19.13	75	1	18	WICHITA	234-25-1
GT19107	RF52	1.005	12.56	19.13	75	1	18	WICHITA	
GT22101	RF38	0.688	12.50	22.16	87	1	21	TWIN DISC	6971A
GT22102	RF38	0.688	12.50	22.16	87	3	21	TWIN DISC	6971B,S
GT22103	RF38	0.750	14.56	22.13	87	1	21	WICHITA	254-10-1
GT22103	RF52	0.750	14.56	22.13	87	1	21	WICHITA	254-10-1
GT25101	RF38	0.875	14.50	25.16	99	1	24	TWIN DISC	5667A
GT25103	RF38	0.875	14.50	25.16	99	3	24	TWIN DISC	5667B
GT25104	RF38	0.875	17.50	25.16	99	1	24	TWIN DISC	5667C
GT25105	RF38	0.875	14.56	25.07	99	1	24	WICHITA	230-25
GT25105	RF52	0.875	14.56	25.07	99	1	24	WICHITA	230-25
GT25106	RF38	0.875	17.50	25.07	99	1	24	WICHITA	230-25-8
GT25106	RF52	0.875	17.50	25.07	99	1	24	WICHITA	230-25-8
GT28101	RF38	0.875	16.25	28.10	111	1	27	WICHITA	4-296-007-000-0
GT28101	RF52	0.875	16.25	28.10	111	1	27	WICHITA	4-296-007-000-0
GT31101	RF38	0.875	21.00	31.16	123	1	30	TWIN DISC	8461C
GT31102	RF38	1.250	21.00	31.16	123	1	30	TWIN DISC	8461A
GT31103	RF38	1.250	21.00	31.16	123	3	30	TWIN DISC	8461B
GT31104	RF38	1.250	19.50	31.03	123	1	30	WICHITA	4-231-007-039
GT31104	RF52	1.250	19.50	31.03	123	1	30	WICHITA	4-231-007-039
GT37101	RF38	1.250	24.00	37.16	147	1	36	TWIN DISC	9802
GT37101	RF52	1.250	24.00	37.16	147	1	36	TWIN DISC	9802



# Product Data Sheet: Woven Brake Lining- “A-Block”

## PRODUCT DESCRIPTION

The woven “A-Block” material is a premium non-asbestos brake lining developed especially for oil field use on draw-works, well servicing and drilling rigs. Extensive field evaluations confirm that this product provides outstanding performance in this demanding application area. It exhibits smooth, long lasting trouble-free service with excellent burnishing or bedding-in properties with reduced abrasion for increased rim life. This premium performance material is available in the form of custom sized slabs or rolls.

## CHARACTERISTICS

- Excellent burnishing property
- Uniform friction
- Non-abrasive
- Premium life characteristics
- High tensile strength

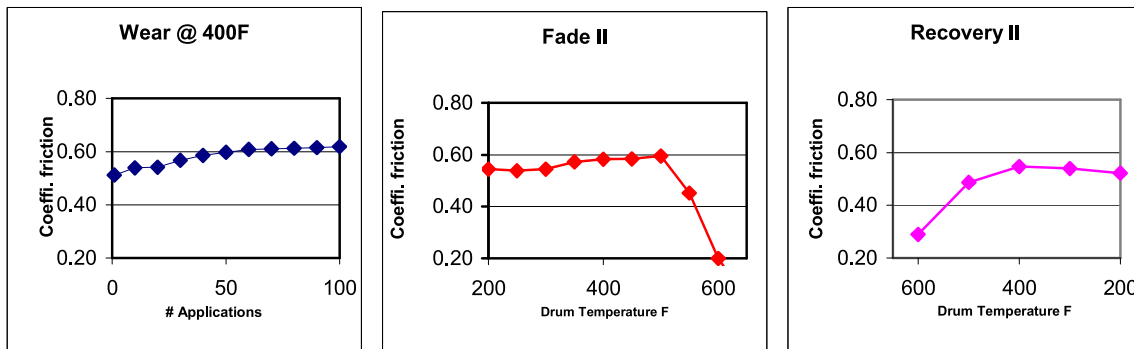
## MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 1.23  
 Tensile Strength, PSI (ASTM D638) : 1500<sub>min</sub>

## FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.50  
 Hot\* : 0.41  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.006<sub>max</sub>  
 Friction Code : GF  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 5000 fpm  
 Pressure\*\* : 200 psi  
 Drum Temperature for  
 Constant Operation\*\* : 550°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



# Product Data Sheet: Gemini Woven Oilfield

## PRODUCT DESCRIPTION

Gemini Woven Oilfield is a *Non-Asbestos* woven product for heavy-duty industrial applications. It exhibits nearly constant friction level up to 500 °F. It also shows full recovery by 400 °F. Gemini Woven Oilfield can be used on wet/ dry band brakes for industrial use where medium to high friction is required.

## CHARACTERISTICS

- High Static friction
- Uniform friction
- Non-ferrous metallic
- Immediate and complete recovery
- Good wear rate

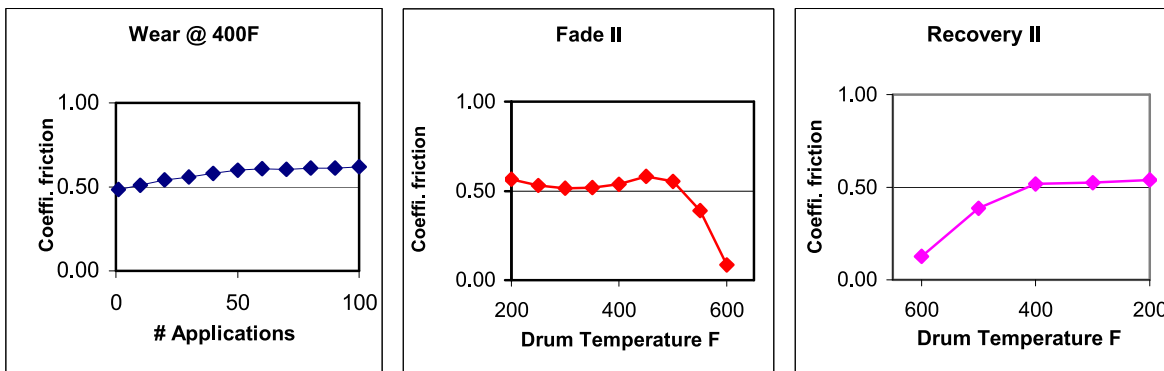
## MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 1.02  
 Tensile Strength, PSI (ASTM D638) : 1500<sub>min</sub>

## FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.54  
 Hot\* : 0.44  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.005  
 Friction Code : GF  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 5000 fpm  
 Pressure\*\* : 200 psi  
 Drum Temperature for  
 Constant Operation\*\* : 500°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



# Product Data Sheet: Green Gripper Woven (GGW)

## PRODUCT DESCRIPTION

GGW is a *Non-Asbestos* woven product for heavy-duty industrial applications. Notable on the test curve are the consistent friction levels and the excellent fade resistance. Recovery is immediate and complete. GGW exhibits high friction under a wide range of temperatures. GGW can be used on wet dry band brakes for industrial use where medium to high friction is required. The product is available in roll form, flat sheet, and custom shapes.

## CHARACTERISTICS

- High Static friction
- Uniform friction
- Non-ferrous metallic
- Immediate and complete recovery
- Good wear rate

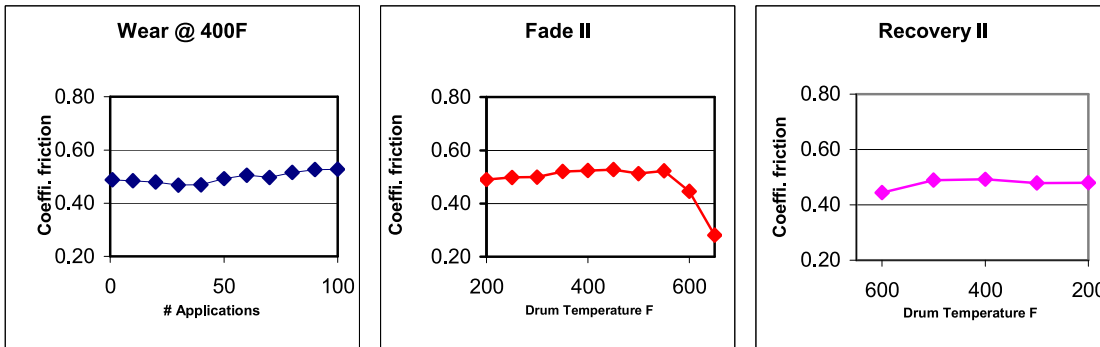
## MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 1.15  
 Tensile Strength, PSI (ASTM D638) : 1500<sub>min</sub>

## FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.50  
 Hot\* : 0.46  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.005  
 Friction Code : GG  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 5000 fpm  
 Pressure\*\* : 200 psi  
 Drum Temperature for  
 Constant Operation\*\* : 550°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



## Product Data Sheet: Gemini Woven

### PRODUCT DESCRIPTION

Gemini woven is a *Non-Asbestos* woven product for heavy-duty industrial applications. It exhibits nearly constant friction level up to 500 °F. It also shows full recovery by 400 °F. Gemini can be used on wet/ dry band brakes for industrial use where medium to high friction is required. The product is available in roll form, flat sheet, and custom shapes.

### CHARACTERISTICS

- High Static friction
- Uniform friction
- Non-ferrous metallic
- Immediate and complete recovery
- Good wear rate

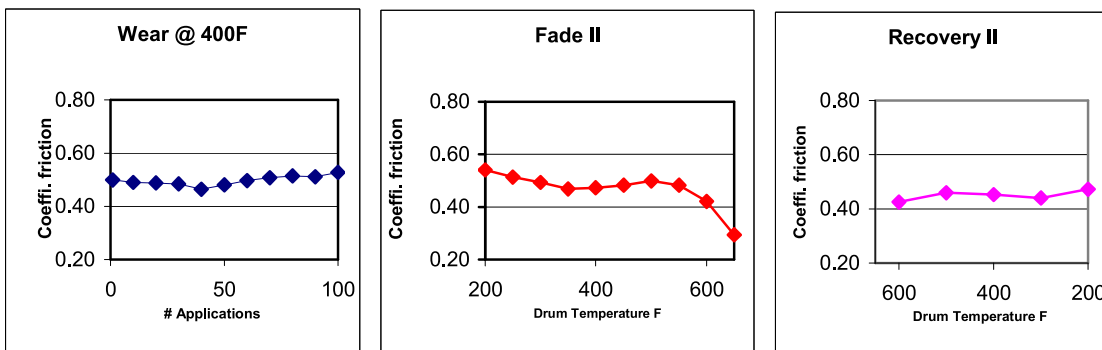
### MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 1.12  
 Tensile Strength, PSI (ASTM D638) : 1500<sub>min</sub>

### FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.51  
 Hot\* : 0.44  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.005  
 Friction Code : GF  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 5000 fpm  
 Pressure\*\* : 200 psi  
 Drum Temperature for  
 Constant Operation\*\* : 550°F

### SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



## Product Data Sheet: RF 425

### PRODUCT DESCRIPTION

RF 425 is a *Non-Asbestos, Non-Metallic, Medium friction* rigid molded material. The product has exceptional dimensional stability and can be molded into many intricate internal, external, and customer specified shapes. RF 425 is an excellent thermal and electrical insulator. It is recommended for use as insulating material or as in any medium friction application, including the most severe.

### CHARACTERISTICS

- Excellent insulator
- Uniform friction
- Non-abrasive
- Premium life characteristics
- High corrosion resistance

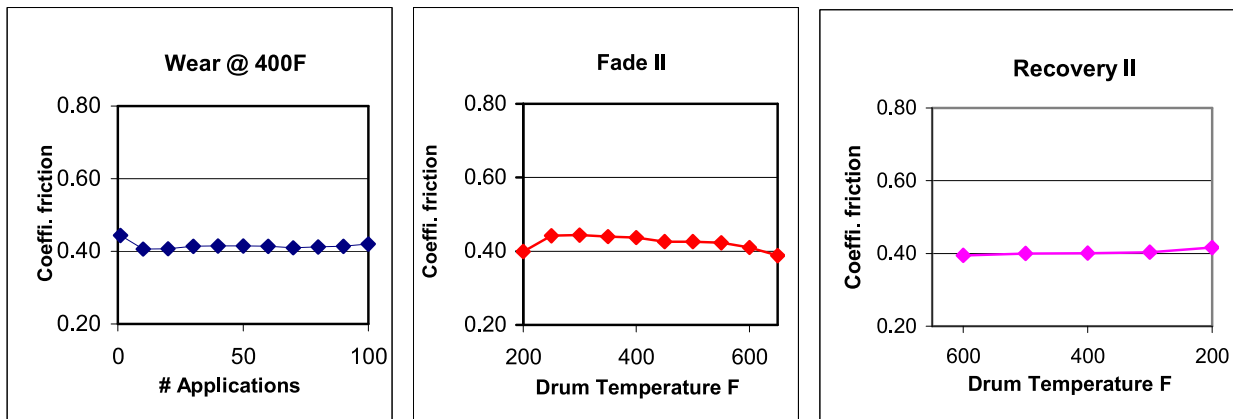
### MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 2.0-2.15  
 Gogan Hardness (SAE J379A) : 15-35  
 Tensile Strength, PSI (ASTM D638) : 2182<sub>min</sub>  
 Compressive Strength , PSI : 8909<sub>min.</sub>

### FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.43  
 Hot\* : 0.41  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.005<sub>max</sub>  
 Friction Code : FF  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 5000 fpm  
 Pressure\*\* : 200 psi  
 Drum Temperature for  
 Constant Operation\*\* : 550°F

### SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.





# Product Data Sheet: RF 38

## GENERAL DESCRIPTION

RF 38 is a rigid molded *Non-Asbestos, Metallic* friction material suitable for use in *Medium Friction* brake/clutch applications in a wide variety of equipments such as agricultural equipment, overhead cranes and heavy duty equipment. RF 38 is non-corrosive, non-abrasive and kind to mating surface. RF 38 can be molded into many intricate internal, external, and customer specified shapes.

## FEATURES

- Exceptional dimensional stability
- High compression strength
- Excellent corrosion resistance
- High Compressibility
- Excellent wear rate.

## PHYSICAL & MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 2.06 -2.15

Gogan Hardness (SAE J379A) : 19-23

Tensile Strength (ASTM D638) : 2800 psi (min)

Compressive Strength : 10369 psi (min)

## FRICITIONAL PROPERTIES

Coefficient of Friction (SAE J661):

Normal\* : 0.44

Hot\* : 0.40

Wear Rate (SAE J661)

(inch<sup>3</sup>/hp-hr) : 0.005<sub>max</sub>

Friction Code : FF

Maximum Operating Limits:

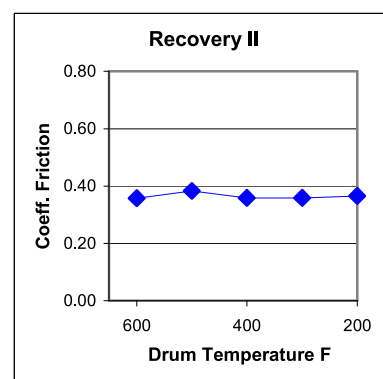
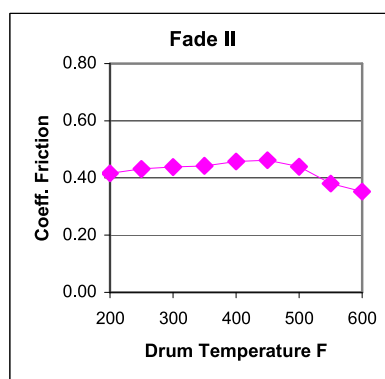
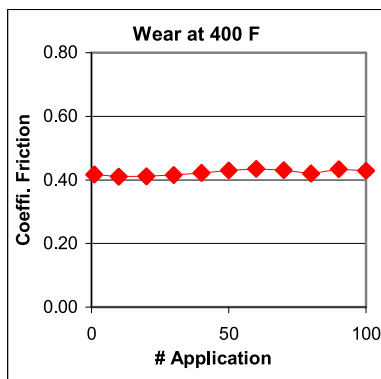
Rubbing Speed\*\* : 7500 fpm

Pressure\*\* : 2000 psi

Drum Temperature for

Constant Operation\*\* : 650°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



# Product Data Sheet: RF 52

## PRODUCT DESCRIPTION

RF 52 is a rigid molded friction material suitable for use in *High Friction* brake/clutch applications. This product features excellent fade resistance and long wear. RF 52 provides outstanding service on off-road drum/disc brakes, and as a holding brake on cranes, shovels, draglines, and winches. The product is remarkably easy on the wear surface. RF 52 can be molded into wide range of shapes and sizes to satisfy virtually all industrial applications.

## CHARACTERISTICS

- Exceptional dimensional stability
- Excellent corrosion resistance
- High Compressibility
- Excellent wear rate.
- Suitable for Dry & Wet applications

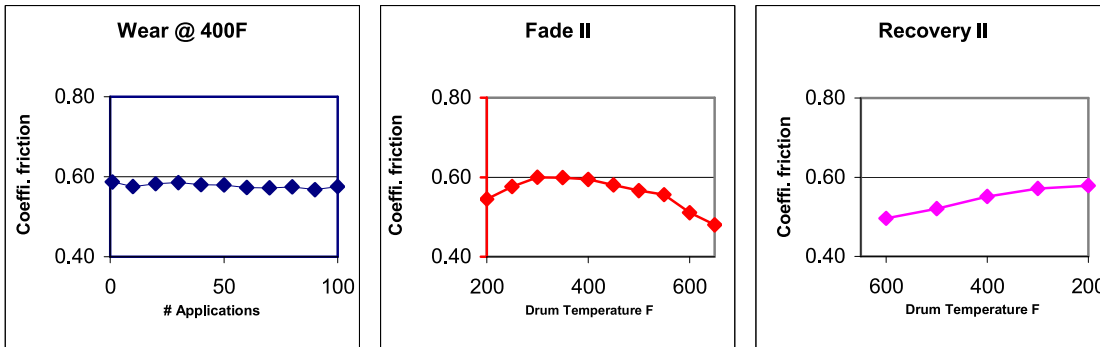
## MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 2.20- 2.40  
 Gogan Hardness (SAE J379A) : 15-35  
 Tensile Strength(ASTM D638) : 3000 psi (min)  
 Compressive Strength, PSI : 10062 <sub>min.</sub>

## FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.58  
 Hot\* : 0.55  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.007<sub>max</sub>  
 Friction Code : HG  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 7500 fpm  
 Pressure\*\* : 2000 psi  
 Drum Temperature for  
 Constant Operation\*\* : 650°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



# Product Data Sheet: RF 72

## PRODUCT DESCRIPTION

RF 72 is a rigid molded *non-asbestos* friction material suitable for use in *high friction* brake/clutch applications. This product features corrosion resistance and excellent recovery. It can be molded into many intricate internal, external, and customer specified shapes.

## CHARACTERISTICS

- Excellent dimensional stability
- Uniform friction at high temperature
- Corrosion resistant
- Excellent wear rate
- Excellent recovery

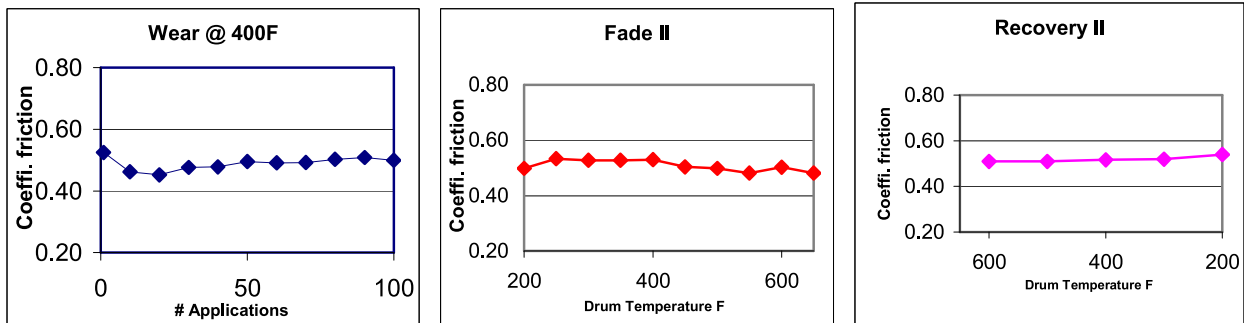
## MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 1.97  
 Gogan Hardness (SAE J379A) : 27  
 Tensile Strength, PSI (ASTM D638) : 3000<sub>min</sub>

## FRICITIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.52  
 Hot\* : 0.50  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.005<sub>max</sub>  
 Friction Code : GG  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 7500 fpm  
 Pressure\*\* : 2000 psi  
 Drum Temperature for  
 Constant Operation\*\* : 650°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



## Product Data Sheet: GMH

### PRODUCT DESCRIPTION

**GMH** is a rigid molded *Non-Asbestos, Metallic* friction material suitable for use in *Medium/High Friction* brake/clutch applications in a wide variety of equipments. It has exceptional dimensional stability. Gemini can be molded or readily machined into wide range of shapes and sizes to satisfy virtually all industrial applications.

### CHARACTERISTICS

- Excellent dimensional stability
- Good fade resistance
- Excellent recovery
- Low wear rate

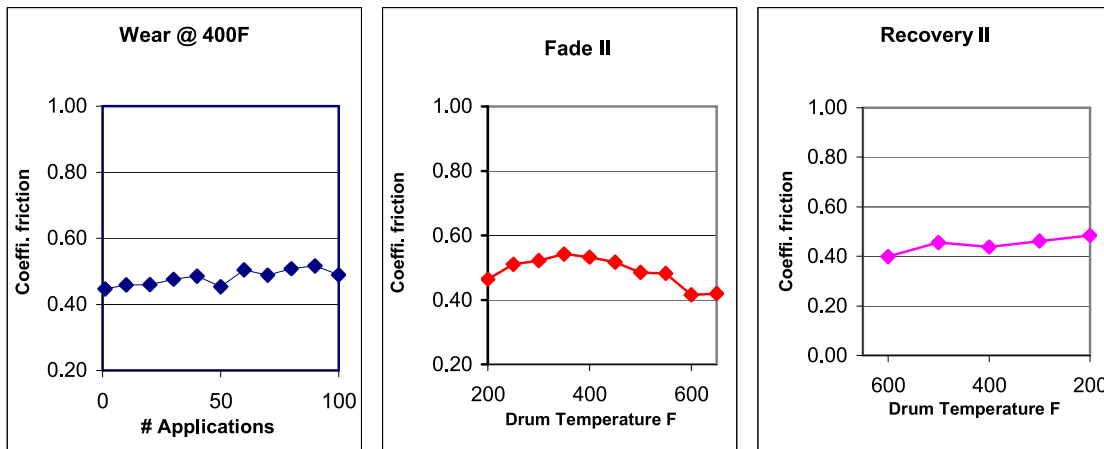
### MECHANICAL PROPERTIES

Specific Gravity (SAE J380) :2.0  
 Gogan Hardness (SAE J379A) :16-19  
 Tensile Strength, PSI (ASTM D638) :3400<sub>min</sub>

### FRICITIONAL PROPERTIES

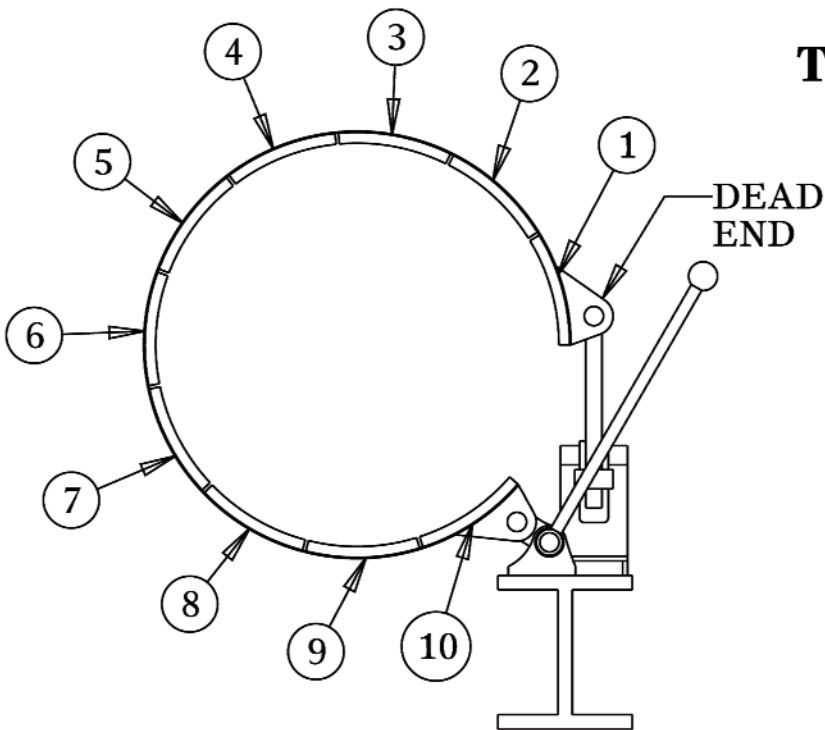
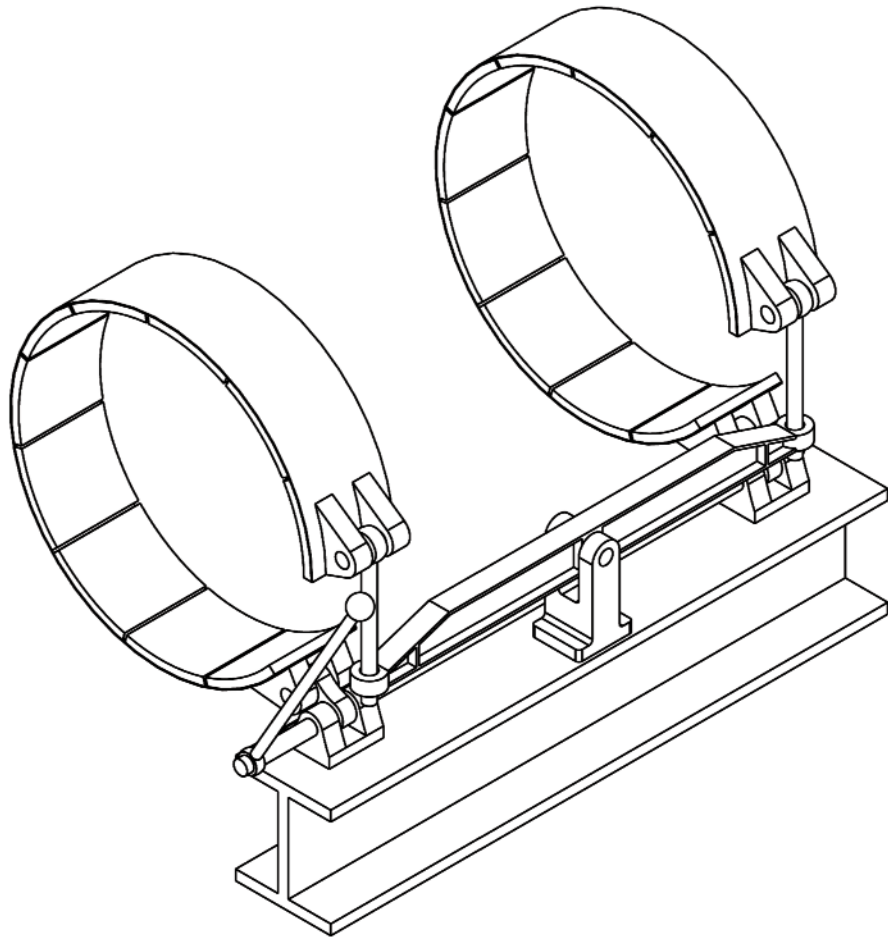
Coefficient of Friction (SAE J661):  
 Normal\* : 0.51  
 Hot\* : 0.45  
 Wear Rate (SAE J661)  
 (inch<sup>3</sup>/hp-hr) : 0.005<sub>max</sub>  
 Friction Code : GG  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 7500 fpm  
 Pressure\*\* : 2000 psi  
 Drum Temperature for  
 Constant Operation\*\* : 650°F

### SAE J661 TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.



## TYPICAL APPLICATIONS

- DEAD END WELL SERVICE  
1= MOLDED
- DEAD END DRILLING ONLY  
2= MOLDED
- DRILL RIG SETUP  
2= MOLDED  
4= MOLDED
- TYPICAL FRANKS KIT  
(1287 MODEL)  
1= MOLDED  
3= MOLDED  
4=1/2 MOLDED



# WOVEN AND MOLDED NON-ASBESTOS BLOCKS FOR DRAWWORKS

## Installation Notes

1. Before removing old blocks, be sure the blocks that were sent will fit your bands. Visually or with tape measure, check blocks to be sure they are the correct size and have the correct number of holes and hole spacing. Count blocks to insure there was no packing error.
2. Be sure bands are correctly prepared before installing blocks. Bands must be clean from rust, oil, scale and any other foreign matter. The static friction between the blocks and band is very important to help keep blocks from displacing from band. Band must not be out of round, bent or kinked. Partial contact between blocks and drum will result in uneven wear and raise the operating temperature of the blocks that are making contact to the extent there could be a reduction in braking and could result in total failure to hold the load.
3. Sometimes the drilled holes of the band and block fail to perfectly align with each other. This can be due to tolerances given the band and block manufacture. Be sure the band is positioned as near possible to the same diameter as the drum when installing the blocks. This can be accomplished by tying the ends of the band with wire or lying on the floor and placing ends of band at the proper distance from each other to achieve the diameter of the drum. The holes of the band and blocks are now in the most perfect relationship to align.
4. When wiper blocks are included with sets, be sure they are installed in the proper location. We recommend they be placed on or near the "dead end" of the band. Since the wiper or molded block has a lower coefficient of friction and is more abrasive than the woven blocks, too many molded blocks could result in reducing the braking ability. Stay with manufacturer's recommendations when possible.
5. Some blocks fit any number of drawworks bands but the band may be a different drum diameter. Woven blocks are flexible enough to conform to most drum diameters. On the other hand molded blocks are more dense and molded to shape by heat and pressure. Sometimes installing a molded block with the wrong drum diameter will cause that block to crack, or going the other way will leave a gap under the block which will collect debris. Since changing the radius of the blocks actually changes the hole centers to a lesser or greater degree depending on the rate of change, we recommend installing the screw in the center hole first then work outward. Tighten in the same manner which should allow blocks to conform against band. Optimum torque of 3/8" screw is 10-15 ft lbs. *(or a comfortable 2-finger pull on 6" wrench). Do not use power impact tools.*
6. **We recommend you do not "burn-in" our blocks.** With our quality, non-asbestos A- blocks there is no need and this could actually change the characteristics of the block. In spite of every precaution in installation of blocks to bands and the bands to the anchoring devices, there can still be braking difficulties. Some causes of poor braking include:
  - a. not removing paint, oil, grease or rust from band;
  - b. thin or worn drums;
  - c. improperly adjusting bands;
  - d. cooling system not functioning properly;
  - e. worn linkage;
  - f. not using or poor functioning assist brake;
  - g. equalizers not adjusted properly.



**SCAN PAC**  
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**Friction  
& Phenolic  
Specialists**

