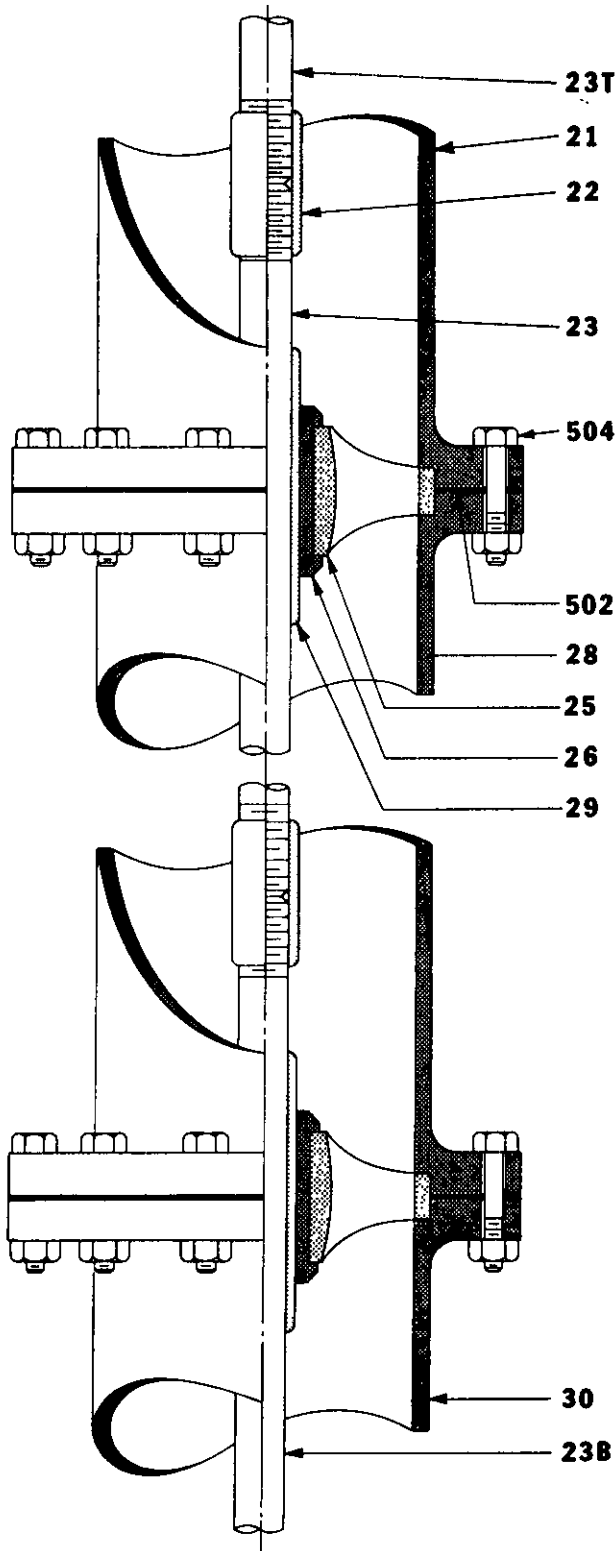


SECTIONAL DRAWING
FABR. FLANGED OPEN LINE SHAFT COLUMN-
4" & LARGER PIPE x 1-15/16" & SMALLER
AND 3-3/16" & LARGER SHAFTS

SECTION 9100
 DRWG. NO. 8511-C03A
 DATE Nov. 1, 1978
 SUPERSEDES C03C

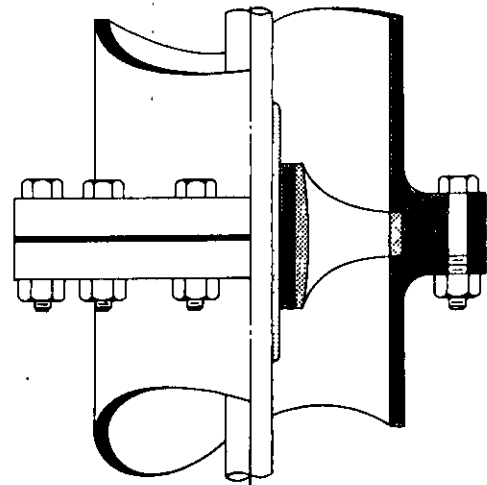


1-15/16 & SMALLER SHAFTS

NO ITFM	PART NAME	MATERIAL	
		STD	OPTIONAL
518	COLUMN ASSY	-	-
21	TOP PC. COL. PIPE	STEEL	
22	LINE SHAFT COUPLING	STEEL	
23	LINE SHAFT	STEEL	
23B	BOT. PC. LINE SHAFT	STEEL	
23T	TOP PC. LINE SHAFT	STEEL	
25	SPIDER	BRONZE	
◇ 26	BEARING, LINE SHAFT	RUBBER	
28	COLUMN PIPE	STEEL	
29	SHAFT SLEEVE	304 SS	
30	BOT. PC. COL. PIPE	STEEL	
* 502	GASKET, COL.	----	
504	MACH. BOLT, COL.	STEEL	

* OPTIONAL - FURNISHED WHEN SPECIFIED OR WHEN PRESSURE EXCEEDS 150 PSI.

◇ BEARING IS BRONZE BACKED RUBBER FOR 3 3/16" & LARGER SHAFTS.



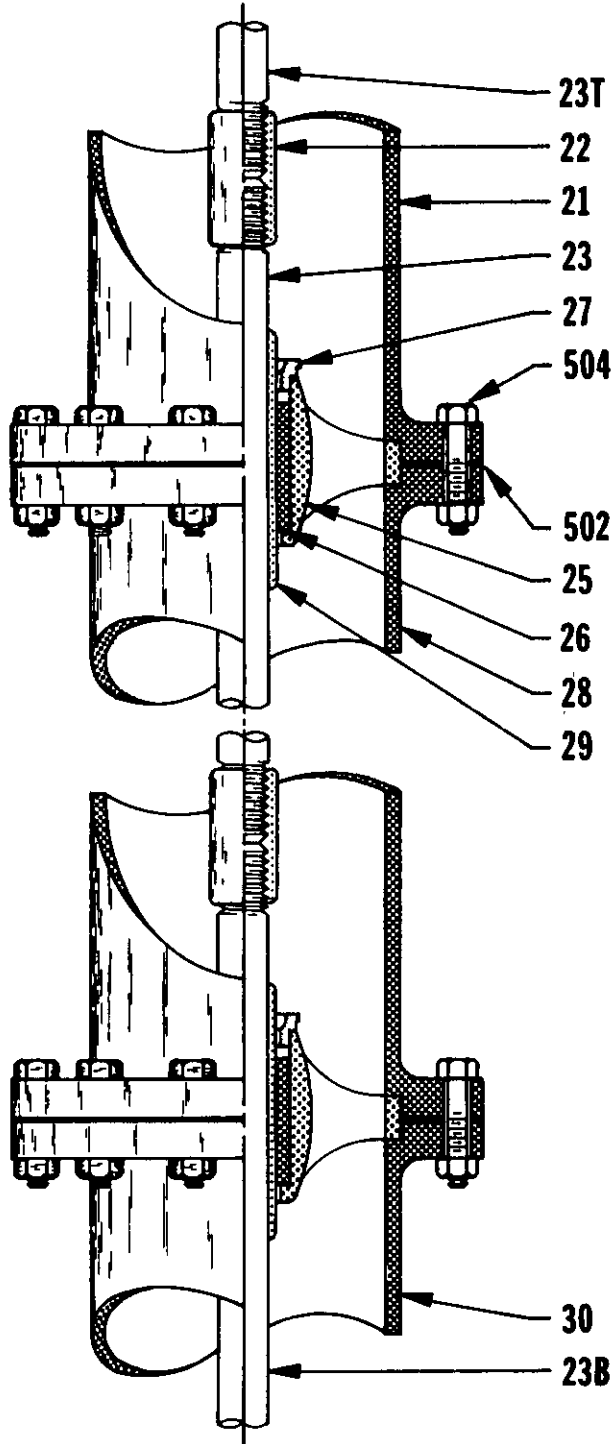
3-3/16" & LARGER SHAFTS



A Matley Company
 LAYNE & BOWLER, INC.
 MEMPHIS, TENN. 38108

**SECTIONAL DRAWING
 FABRICATED FLANGED
 OPEN LINE SHAFT COLUMN
 8" & LARGER PIPE x 2-3/16 AND 2-7/16 SHAFTS
 (ALSO 3 x 7/8)**

**SECTION: 9100
 DWG. NO.: 8511-C03B
 DATE: SEPT. 15, 1981
 SUPERSEDES: MAR. '80**



ITEM NO.	PART NAME	MATERIAL	
		STD.	OPTIONAL
518	COLUMN ASSY	-----	
21	TOP PC COL PIPE	STEEL	
22	LINE SHAFT COUPLING	STEEL	
23	LINE SHAFT	STEEL	
23B	HOT. PC. LINE SHAFT	STEEL	
23T	TOP PC LINE SHAFT	STEEL	
25	SPIDER	BRONZE	
26	BEARING, LINE SHAFT	RUBBER	
27	LOCK RING, BEARING	BRONZE	
28	COLUMN PIPE	STEEL	
29	SHAFT SLEEVE	304 SS	
30	BOT PC COL PIPE	STEEL	
502	GASKET, COL	-----	
504	MACH BOLT, COL	STEEL	

*

* OPTIONAL - FURNISHED WHEN SPECIFIED OR WHEN PRESSURE EXCEEDS 150 PSI.

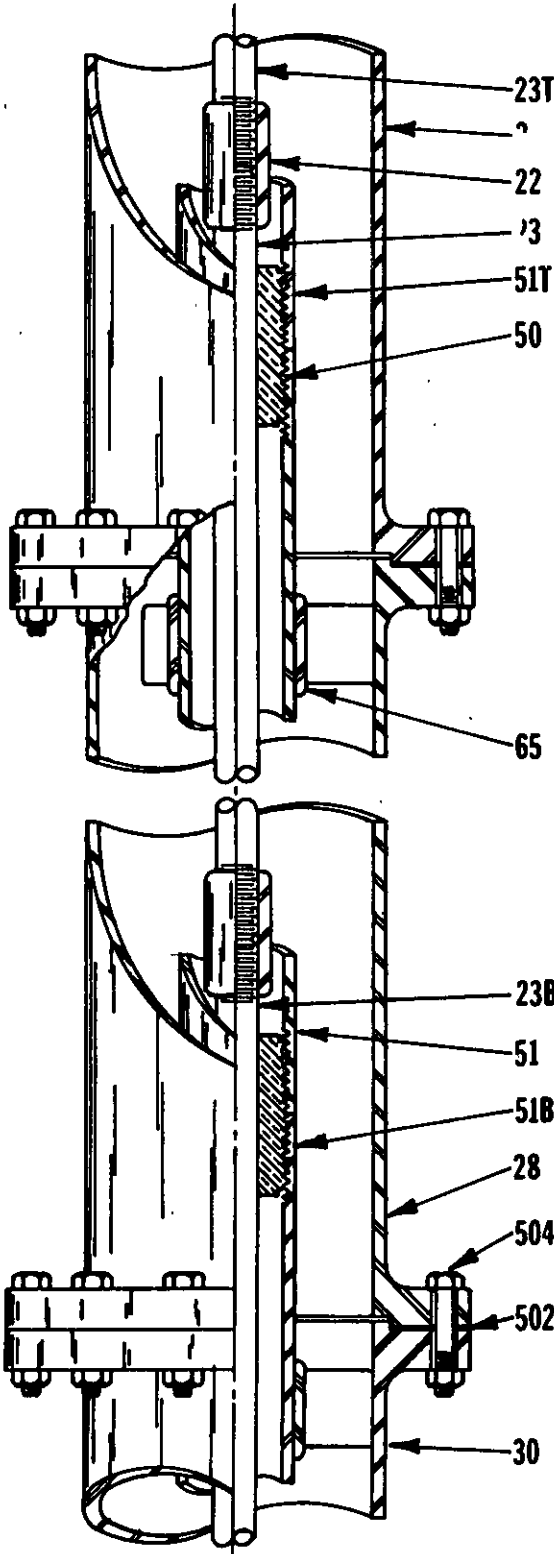
NOTE: THIS DWG. ALSO COVERS INACTIVE CONSTRUCTION ON 4" & LARGER PIPE X 7/8 THRU 1 15/16 AND 2-11/16 & 2-15/16 SHAFTS.



A Marley Company
LAYNE & BOWLER, INC.
 MEMPHIS, TENN. 38108

SECTIONAL DRAWING FABRICATED FLANGED ENCLOSED LINE SHAFT COLUMN

SECTION: 9100
 DWG. NO.: 8511-C07C
 DATE: APRIL 21, 1986
 SUPERSEDES:



ITEM NO.	PART NAME	MATERIAL	
		STD	OPTIONAL
518	COLUMN ASS'Y	----	----
21	TOP PC. COLUMN PIPE	STEEL	
22	LINE SHAFT COUPLING	STEEL	
23	LINE SHAFT	STEEL	
23B	BOT. PC. LINE SHAFT	STEEL	
23T	TOP PC. LINE SHAFT	STEEL	
28	COLUMN PIPE	STEEL	
30	BOT. PC. COLUMN PIPE	STEEL	
50	LINE SHAFT BEARING	BRONZE	
51	ENCLOSING TUBE	STEEL	
51B	BOT. PC. ENCLOSING TUBE	STEEL	
51T	TOP SPECIAL TUBE	STEEL	
65	SPIDER	RUBBER	
502	GASKET, COLUMN	----	----
504	MACHINE BOLT, COLUMN	STEEL	

OPTIONAL - FURNISHED WHEN SPECIFIED OR WHEN PRESSURE EXCEEDS 150 PSI.

NO. OF SPIDERS FURNISHED BASED ON THE FOLLOWING TOTAL COLUMN LENGTH AND SPACING: (NONE FURNISHED WITH 3" COLUMN).

1. 0' TO 40' - NONE FURNISHED EXCEPT WHEN FACTORY ASSEMBLED - THEN ONE FURNISHED WHEN THERE IS AT LEAST TWO TUBE SECTIONS.
2. 40' & BEYOND - ONE 20' FROM BOWL AND:
 - a. LENGTHS EVENLY DIVISIBLE BY 40' - 40' INTERMEDIATE SPAN WHICH PLACES ONE 20' FROM HEAD.
 - b. LENGTHS EVENLY DIVISIBLE BY 20' BUT NOT BY 40' - 40' INTERMEDIATE SPAN. ONE 20' INTERMEDIATE SPAN WHICH PLACES ONE 20' FROM HEAD.
 - c. LENGTHS EVENLY DIVISIBLE BY 10' BUT NOT BY 20' OR 40' - 40' INTERMEDIATE SPAN WHICH LEAVES ONE EITHER 10' OR 30' FROM HEAD.