

SECTION 5

**MILLING & WASHOVER
EQUIPMENT**

BOOT BASKETS (JUNK SUBS) – WELDED									
Hole Size	O.D.	4-1/4 to 4-5/8	4-5/8 to 4-7/8	5-1/8 to 5-7/8	6 to 6-3/8	6-1/2 to 7-1/2	7-1/2 to 8-1/2	8-5/8 to 9-5/8	9-5/8 to 11-3/8
STD API Top Conn		2-3/8 REG	2-7/8 REG	3-1/2 REG	3-1/2 REG	3-1/2 REG	4-1/2 API	4-1/2 API	6-5/8 API
Body (Top Conn)	O.D.	3-1/8"	3-3/4"	4-1/4"	4-1/4"	4-1/4"	5-1/2"	5-1/2"	7-3/4"
Body Od (Under Cup)	O.D.	2"	2-5/8"	3-1/8"	3-1/4"	3-1/4"	4-1/2"	4-1/2"	5-3/4"
Cup	O.D.	3-11/16"	4"	4-1/2"	5"	5-1/2"	6-5/8"	7"	8-5/8"
Cup	I.D.	3-5/16"	3-5/8"	4-1/4"	4-9/16"	4-7/8"	5-15/16"	6-9/32"	7-15/16"
Dia. of Bore	O.D.	3/4"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	2-1/4"	2-1/4"	3-1/2"

STANDARD TYPE									
Length of Cup		10	10	10	10	10	10	10	10
Total Length		29"	29-1/2"	30-1/2"	30-1/2"	30-1/2"	31-1/2"	31-1/2"	33"
Complete Assembly	Part# Price	BB-1 \$2,003	BB-2 \$2,104	BB-3 \$2,288	BB-4 \$2,632	BB-5 \$2,692	BB-6 \$2,944	BB-7 \$3,391	BB-8 \$4,787

LONG TYPE									
Length of Cup		20	20	20	20	20	20	20	20
Total Length		43-1/2"	44"	45"	45"	45"	46	46	48
Complete Assembly	Part# Price	BBL-1 \$2,683	BBL-2 \$2,855	BBL-3 \$3,025	BBL-4 \$3,472	BBL-5 \$3,523	BBL-6 \$3,917	BBL-7 \$4,432	BBL-8 \$6,315

EXTRA LONG TYPE									
Length of Cup		30	30	30	30	30	30	30	30
Total Length		53-1/2"	54"	55"	55"	55"	56	56	58
Complete Assembly	Part# Price	BBXL-1 \$3,299	BBXL-2 \$3,512	BBXL-3 \$3,764	BBXL-4 \$4,392	BBXL-5 \$4,432	BBXL-6 \$4,868	BBXL-7 \$5,465	BBXL-8 \$7,915

WHEN ORDERING, PLEASE SPECIFY:

1. Name and number of assembly
2. Connection type and size

BOOT BASKETS

WELDED



BOOT BASKETS (JUNK SUBS) – WELDED				
Hole Size	O.D.	11-1/2 to 13	14-3/4 to 17-1/2	
STD API Top Conn		6-5/8 API	7-5/8 API	
Body (Top Conn)	O.D.	7-3/4"	8-7/8"	
Body Od (Under Cup)	O.D.	5-3/4"	7-5/8"	
Cup	O.D.	9-5/8"	12-7/8"	
Cup	I.D.	8-17/32"	11-5/8"	
Dia. of Bore	O.D.	3-1/2"	4"	

STANDARD TYPE <i>(continued)</i>				
Length of Cup		10	10	
Total Length		33"	36"	
Complete Assembly	Part# Price	BB-9 \$5,881	BB-10 \$14,341	

LONG TYPE <i>(continued)</i>				
Length of Cup		20	20	
Total Length		48	50	
Complete Assembly	Part# Price	BBL-9 \$7,788	BBL-10 \$15,745	

EXTRA LONG TYPE <i>(continued)</i>				
Length of Cup		30	30	
Total Length		58	60	
Complete Assembly	Part# Price	BBXL-9 \$9,726	BBXL-10 \$22,334	

WHEN ORDERING, PLEASE SPECIFY:

1. Name and number of assembly
2. Connection type and size

BOOT BASKETS (JUNK SUBS) – THREADED TYPE									
Hole Size	O.D.	4-1/4 to 4-5/8	4-5/8 to 4-7/8	5-1/8 to 5-7/8	6 to 6-3/8	6-1/2 to 7-1/2	7-1/2 to 8-1/2	8-5/8 to 9-5/8	9-5/8 to 11-3/8
STD API Top Conn		2-3/8 REG	2-7/8 REG	3-1/2 REG	3-1/2 REG	3-1/2 REG	4-1/2 API	4-1/2 API	6-5/8 API
Body (Top Conn)	O.D.	3-1/8"	3-3/4"	4-1/4"	4-1/4"	4-1/4"	5-1/2"	5-1/2"	7-3/4"
Body Od (Under Cup)	O.D.	2"	2-5/8"	3-1/8"	3-1/4"	3-1/4"	4-1/2"	4-1/2"	5-3/4"
Cup	O.D.	3-11/16"	4"	4-1/2"	5"	5-1/2"	6-5/8"	7"	8-5/8"
Cup	I.D.	3-5/16"	3-5/8"	4-1/4"	4-9/16"	4-7/8"	5-15/16"	6-9/32"	7-15/16"
Dia. of Bore	O.D.	3/4"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	2-1/4"	2-1/4"	3-1/2"

STANDARD TYPE									
Length of Cup		10"	10"	10"	10"	10"	10"	10"	10"
Total Length		29"	29-1/2"	30-1/2"	30-1/2"	30-1/2"	31-1/2"	31-1/2"	33"
Complete Assembly	Part# Price	BB-1-T \$2,457	BB-2-T \$2,692	BB-3-T \$2,774	BB-4-T \$3,396	BB-5-T \$3,441	BB-6-T \$3,588	BB-7-T \$4,063	BB-8-T \$5,827
Mandrel w/ Integral Gusset	Part# Price	BB-1-1-T \$1,720	BB-2-1-T \$1,885	BB-3-1-T \$1,942	BB-4-1-T \$2,377	BB-5-1-T \$2,409	BB-6-1-T \$2,548	BB-7-1-T \$2,885	BB-8-1-T \$4,138
Threaded Cup	Part# Price	BB-1-2-T \$762	BB-2-2-T \$835	BB-3-2-T \$860	BB-4-2-T \$1,053	BB-5-2-T \$1,067	BB-6-2-T \$1,077	BB-7-2-T \$1,219	BB-8-2-T \$1,748

LONG TYPE									
Length of Cup		20"	20"	20"	20"	20"	20"	20"	20"
Total Length		43-1/2"	44"	45"	45"	45"	46"	46"	48"
Complete Assembly	Part# Price	BBL-1-T \$3,071	BBL-2-T \$3,365	BBL-3-T \$3,467	BBL-4-T \$4,244	BBL-5-T \$4,301	BBL-6-T \$4,485	BBL-7-T \$5,079	BBL-8-T \$7,284
Mandrel w/ Integral Gusset	Part# Price	BBL-1-1-T \$2,149	BBL-2-1-T \$2,273	BBL-3-1-T \$2,426	BBL-4-1-T \$2,969	BBL-5-1-T \$3,013	BBL-6-1-T \$3,137	BBL-7-1-T \$3,555	BBL-8-1-T \$5,101
Threaded Cup	Part# Price	BBL-1-2-T \$924	BBL-2-2-T \$983	BBL-3-2-T \$1,042	BBL-4-2-T \$1,276	BBL-5-2-T \$1,291	BBL-6-2-T \$1,348	BBL-7-2-T \$1,525	BBL-8-2-T \$2,185

EXTRA LONG TYPE									
Length of Cup		30	30	30	30	30	30"	30"	30"
Total Length		53-1/2"	54"	55"	55"	55"	56"	56"	58"
Complete Assembly	Part# Price	BBXL-1-T \$3,782	BBXL-2-T \$4,091	BBXL-3-T \$4,308	BBXL-4-T \$5,058	BBXL-5-T \$5,327	BBXL-6-T \$5,576	BBXL-7-T \$6,258	BBXL-8-T \$9,380
Mandrel w/ Integral Gusset	Part# Price	BBXL-1-1-T \$2,646	BBXL-2-1-T \$2,867	BBXL-3-1-T \$3,020	BBXL-4-1-T \$3,540	BBXL-5-1-T \$3,730	BBXL-6-1-T \$3,906	BBXL-7-1-T \$4,383	BBXL-8-1-T \$6,565
Threaded Cup	Part# Price	BBXL-1-2-T \$1,137	BBXL-2-2-T \$1,225	BBXL-3-2-T \$1,291	BBXL-4-2-T \$1,517	BBXL-5-2-T \$1,598	BBXL-6-2-T \$1,877	BBXL-7-2-T \$1,877	BBXL-8-2-T \$2,815

WHEN ORDERING, PLEASE SPECIFY:

1. Name and number of assembly
2. Connection type and size

BOOT BASKETS

THREADED



BOOT BASKETS (JUNK SUBS) – THREADED TYPE				
Hole Size	O.D.	11-1/2 to 13	14-3/4 to 17-1/2	
STD API Top Conn		6-5/8 API	7-5/8 API	
Body (Top Conn)	O.D.	7-3/4"	8-7/8"	
Body Od (Under Cup)	O.D.	5-3/4"	7-5/8"	
Cup	O.D.	9-5/8"	12-7/8"	
Cup	I.D.	8-17/32"	11-5/8"	
Dia. of Bore	O.D.	3-1/2"	4"	

STANDARD TYPE (continued)				
Length of Cup		10"	10"	
Total Length		33"	36"	
Complete Assembly	Part# Price	BB-9-T \$7,211	BB-10-T \$18,783	
Mandrel w/ Integral Gusset	Part# Price	BB-9-1-T \$5,120	BB-10-1-T \$13,336	
Threaded Cup	Part# Price	BB-9-2-T \$2,163	BB-10-2-T \$5,635	

LONG TYPE (continued)				
Length of Cup		20"	20"	
Total Length		48"	50"	
Complete Assembly	Part# Price	BBL-9-T \$9,014	BBL-10-T \$23,479	
Mandrel w/ Integral Gusset	Part# Price	BBL-9-1-T \$6,309	BBL-10-1-T \$16,435	
Threaded Cup	Part# Price	BBL-9-2-T \$2,706	BBL-10-2-T \$7,045	

EXTRA LONG TYPE (continued)				
Length of Cup		30"	30"	
Total Length		58"	60"	
Complete Assembly	Part# Price	BBXL-9-T \$11,541	BBXL-10-T \$30,549	
Mandrel w/ Integral Gusset	Part# Price	BBXL-9-1-T \$8,075	BBXL-10-1-T \$21,384	
Threaded Cup	Part# Price	BBXL-9-2-T \$3,467	BBXL-10-2-T \$9,164	

WHEN ORDERING, PLEASE SPECIFY:

1. Name and number of assembly
2. Connection type and size