

## **PRODUCT BULLETIN**

## Shank Ladles and Ladle Liners

Joy-Mark produces a wide range of ceramic fiber ladle liners for use in all metal types. Our insulating CF300WR rigidized composition is used for all aluminum applications as well as smaller sizes in copper base and ferrous applications. Our insulating CF300WLR rigidized composition is used for larger sizes in copper base and ferrous applications. These thermally efficient ladles offer an economical method of transferring molten metal to production molds. Their durability enables the foundry to use them over and over again with little or no maintenance. Joy-Mark ladle liners and dip ladles feature the following characteristics:

- Lightweight for maneuverability and ease of handling
- Low thermal mass to reduce heat loss from metal to ladle
- · Highly insulating to reduce heat loss to atmosphere
- Strong and durable to allow multiple reuses
- Non-wetting to molten metal
- No preheating necessary after first preparation
- No coating necessary
- Economical compared to metal and full ceramic ladle alternatives

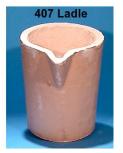


Joy-Mark manufactures ladles with both an ID and OD forming process. The 409 ladle shown at left is an ID formed part, which maximizes density inside the ladle to resist metal penetration and ladle erosion. The 409 also features a double pouring lip configuration. Single lip configurations are also available. The ID formed style is an excellent choice as a ladle liner. They are available in a wide range of capacities (see table on back page). OD formed ladles may also be used as ladle liners.

Joy-Mark also manufactures ladles using an OD forming process such as the 308 ladle shown on the right. These ladles feature excellent control of OD dimensions guaranteeing a good fit in a pouring shank. The higher outside density also improves the resistance to physical damage from a pouring shank. The 308 features a double lip configuration, but single lip styles are also available. A wide variety of sizes is available (see table on back page).



Joy-Mark, Inc. 2121 East Norse Avenue Cudahy, WI 53110 Phone: (414) 769-8155 Fax: (414) 769-1595 www.joy-mark.com



Higher capacity ladles for shank pouring utilize an imbedded support frame to ensure ladle integrity through repeated uses. The 407 ladle (shown at left) is an ID formed part with an imbedded support frame in a single pour lip configuration. The 458 ladle (shown at right) is an ID formed part with an imbedded support frame in a single lip configuration. Double lip configurations are also available.



ID	TID	BID	Ins Ht	Frame	Features	Wall	Alum	Iron	Steel	Copper	Brass
Formed	(in)	(in)	(in)			(in)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
12	5.50	4.50	6.50	NO	Long Spout	0.75	10	27	30	31	33
310	8.00	7.00	9.25	Wire Basket	Double Lip	1.00	33	85	95	98	105
402	7.50	7.50	10.50	NO	Single Lip	1.00	37	96	108	111	119
405	12.00	10.50	11.50	NO	Single Lip	1.00	68	178	199	205	219
409	11.50	9.50	11.75	NO	Double Lip	0.75	82	212	237	245	261
410	8.50	7.50	10.25	NO	Raised Spout	0.50	41	107	120	124	132
411	8.25	7.50	8.00	NO	Single Lip	0.75	31	81	90	94	100
					V Shape Two						
413	9.50	8.50	9.00	NO	Spouts	0.75	46	119	133	138	147
417	9.25	9.00	11.00	Wire Basket	Single Lip	1.00	58	150	167	173	184
450	24.00	20.00	30.00	NO	Double Lip	1.00	915	2379	2653	2744	2927
457	8.50	7.00	10.75	Wire Basket	Double Lip	1.00	41	106	118	122	130
458	8.50	7.00	10.75	Wire Basket	Single Lip	1.00	41	106	118	122	130
601	13.00	11.00	13.50	NO	Single Lip	1.00	122	318	355	367	392
701	13.50	12.00	15.50	NO	Single Lip	1.00	159	412	460	476	507
702	14.50	12.50	16.00	NO	Single Lip	1.00	184	477	532	551	587
703	16.25	14.50	17.75	NO	Single Lip	1.00	264	686	765	792	845
708	16.50	14.50	21.00	NO	Single Lip	1.00	317	825	921	952	1016

Joy-Mark Ladle Liners are available in a wide range of sizes and capacities (at 80% full):

OD	TOD	BOD	Out. Ht	Frame	Features	Wall	Alum	Iron	Steel	Copper	Brass
Formed	(in)	(in)	(in)			(in)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)
301	8.50	5.50	7.00	NO	RND Bottom	0.63	14	35	39	41	43
307	9.25	5.50	8.25	NO	RND Bottom	0.75	17	44	49	50	54
308	9.00	8.00	9.25	NO	Double Lip	0.63	29	74	83	86	91
309	8.25	7.00	8.75	NO	Single Lip	0.75	19	49	55	57	61
404	9.50	8.75	14.40	Wire Basket	L-135	1.00	47	121	135	140	149
407	10.00	8.50	11.38	Wire Basket	Single Lip	0.75	50	135	145	150	193
412	9.25	8.00	9.25	NO	Single Lip	0.63	30	77	86	89	95
415	9.00	8.00	9.00	Wire Basket	L-60	0.75	25	64	72	74	79
416	9.50	8.75	9.50	Wire Basket	L-85	0.75	31	81	91	94	100