

## **Effect of Temperature on Rubber Lining**

For high temperature service, brick sheathing between the rubber lining and commodity will reduce the actual temperature at the lining. The brick sheathing also provides physical and heat protection for the lining. In a pickling tank for example, the brick insulates the lining and protects it from possible gouging by the metal.

Explanation of the table: The table (below) is based on a 3/8" steel tank with 1/4" rubber lining and free circulation of air on the outside and should be used as a general guideline only. Specific recommendations should be obtained from a supplier of brick.

Liquid Temperature		Room Temperature		Brick Thickness		Temperature at Interface					
(°F)	(°C)	(°F)	(°C)	inch	cm	Brick - Rubber		Rubber - Steel			
(°F)	(°C)	(°F)	(°C)	inch	cm	(°F)	(°C)	(°F)	(°C)		
200	93	80	27	4	10	146	63	123	51		
		90	32	4	10	150	66	130	54		
		100	38	4	10	155	68	136	58		
230	110	80	27	4	10	162	72	134	57		
				8	20	139	59	117	47		
		90	32	4	10	167	75	140	60		
				8	20	144	62	124	51		
		100	38	4	10	172	78	147	64		
				8	20	149	65	131	55		
250	121	80	27	4	10	173	78	141	61		
				8	20	146	63	120	49		
				12	31	132	56	112	44		
		90	32	4	10	178	81	148	64		
				8	20	151	66	130	54		
				12	31	136	58	119	48		
		100	38	4	10	182	83	154	68		
				8	20	157	69	137	58		
				12	31	142	61	127	53		
		300	149	80	27	8	20	166	74	136	58
						12	31	143	62	121	49
				90	32	8	20	172	78	144	62
				12	31	150	66	129	54		
		100	38	8	20	178	81	151	66		
				12	31	158	70	137	58		
350	177	90	32	12	31	176	80	152	67		
		100	38	12	31	183	84	159	71		
450	232	90	32	12	31	210	99	176	80		
		100	38	12	31	216	102	186	86		
500	260	90	32	12	31	226	108	188	87		
		100	38	12	31	233	112	196	91		

**\*\* Table is based on using ceramic brick. Not applicable if carbon brick is used.**