

Appendix C: Tables C1 to C4 (Summary of Original Data, Part III)

208/FUMES AND GASES

Table C1
Brazing fume generation by flux covered BAg-1 filler metal

	1200° F (649° C)				
Test number	1	7	15	20	27
Filter type	G	A	A	G	A
Relative humidity, %	43	49	45	48	51
Time molten, min	3	6	5	5	6
Sampling time, min	39	28	23	24	24
Ingot loss, g	0.0037	0.0495	0.0380	0.0412	0.0392
Fume weight, g	0.0069	0.0821	0.0453	0.0043	0.0777
	1350° F (732° C)				
Test number	3	11	18	24	28
Filter type	G	A	A	G	A
Relative humidity, %	---	47	45	---	53
Time molten, min	9	8	9	9	8
Sampling time, min	29	26	26	26	31
Ingot loss, g	0.0900	0.0487	0.0608	0.0529	0.0486
Fume weight, g	0.0183	0.0802	0.0645	0.0090	0.0865
	1500° F (816° C)				
Test number	5	9	17	19	26
Filter type	A	A	G	A	A
Relative humidity, %	48	49	---	47	53
Time molten, min	13	7	13	9	13
Sampling time, min	36	26	35	25	29
Ingot loss, g	0.1125	1.2877	0.1431	0.1236	0.0923
Fume weight, g	0.2809	0.1077	0.0751	0.0831	0.1371

A = membrane filter

G = glass fiber

Table C2
Brazing fume generation by flux covered low cadmium filler metal

1250° F (677° C)						
Test number	36	42	48	52		
Filter type	A	A	A	A		
Relative humidity, %	49	45	38	47		
Time molten, min	7	9	7	7		
Sampling time, min	29	25	27	28		
Ingot loss, g	0.0125	0.0028	0.0004	0.0075		
Fume weight, g	0.1035	0.0366	0.0198	0.0601		
1350° F (732° C)						
Test number	34	40	47	53		
Filter type	A	A	A	A		
Relative humidity, %	53	53	39	48		
Time molten, min	9	6	9	9		
Sampling time, min	22	30	26	26		
Ingot loss, g	0.0062	0.0413	0.0245	0.0287		
Fume weight, g	0.1057	0.0332	0.0365	0.0652		
1500° F (816° C)						
Test number	35	41	41A	46	56	58
Filter type	A	A	A	A	A	A
Relative humidity, %	54	52	42	42	45	45
Time molten, min	14	16	16	17	14	16
Sampling time, min	29	32	31	32	30	33
Ingot loss, g	0.2275	0.1021	0.2255	0.3350	0.1175	0.1298
Fume weight, g	0.1269	0.1354	0.0963	0.0687	0.0679	0.0643

A = membrane filter

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Table C3
Brazing fume generation by CO₂ covered BAg-1 filler metal

1200° F (649° C)								
Test number	4	10	14	25	30			
Filter type	G	A	G	A	A			
Relative humidity, %	49	47	---	51	53			
Time molten, min	7	7	7	6	5			
Sampling time, min	29	28	24	31	25			
Ingot loss, g	0.0136	0.0301	0.0024	0.0061	0.0041			
Fume weight, g	0.0092	0.0639	0.0030	0.1595	0.0871			
1350° F (732° C)								
Test number	6	8	16	23	29			
Filter type	A	G	G	A	A			
Relative humidity, %	49	49	45	---	53			
Time molten, min	9	7	8	7	8			
Sampling time, min	29	26	26	24	27			
Ingot loss, g	0.0495	0.0173	0.0374	0.0408	0.0436			
Fume weight, g	0.0805	0.0027	0.0032	0.1045	0.0923			
1500° F (816° C)								
Test number	2	12	13	21	22	31	32	33
Filter type	A	G	G	G	G	A	A	A
Relative humidity, %	53	46	46	49	52	49	48	48
Time molten, min	11	11	12	13	12	12	11	12
Sampling time, min	43	36	29	35	28	31	27	31
Ingot loss, g	0.0795	0.0806	0.0616	0.1259	0.0631	0.0233	0.0537	0.0940
Fume weight, g	0.5127	0.0033	0.0000	0.0055	0.0014	0.1207	0.1065	0.1108

A = membrane filter

G = glass fiber

Table C4
Brazing fume generation by CO₂ covered low cadmium filler metal

1250° F (677° C)					
Test number	38	44	50	57	39*
Filter type	A	A	A	A	A
Relative humidity, %	46	42	36	45	44
Time molten, min	9	6	7	7	---
Sampling time, min	34	25	36	27	21
Ingot loss, g	0.0011	0.0048	0.0119	0.0138	0.0250
Fume weight, g	0.0696	0.0230	0.0483	0.0330	0.0117
1350° F (732° C)					
Test number	45	39A	49	55	
Filter type	A	A	A	A	
Relative humidity, %	42	42	36	45	
Time molten, min	10	8	8	9	
Sampling time, min	31	30	36	32	
Ingot loss, g	0.0243	0.0027	0.0709	0.0265	
Fume weight, g	0.0177	0.0463	0.0370	0.0416	
1500° F (816° C)					
Test number	37	43	51	54	
Filter type	A	A	A	A	
Relative humidity, %	49	42	42	45	
Time molten, min	13	17	15	14	
Sampling time, min	33	39	35	33	
Ingot loss, g	0.1083	0.1586	0.0496	0.1411	
Fume weight, g	0.1154	0.0876	0.0488	0.0021	

* = Data questionable: furnace failure during test, data not used.

A = membrane filter