

AIST 2010 Blast Furnace Roundup

Roundup data is based on actual 2009 operating data.
AIST Roundup data is intended for reference information only. No warranty is implied.

Company/location	Furnace characteristics								Burden (lb/nthm)			
	Furnace designation	Hearth dia. (ft.)	Working vol. (ft. ³)	Top pressure (psig)	Charging method (skip hoist or belt)	Actual 2009 hours operated	Actual 2009 production (tons)	Actual 2009 specific production rate*	Fluxed pellets	Acid pellets	Sinter	Lump ore
Canada												
ArcelorMittal												
Dofasco	2	24.05	37,521	10.2	Belt	7,996	828,398	6.6	1,311	1,616	0	0
Dofasco	4	28.00	56,320	10.8	Skip	7,737	1,288,682	7.1	1,251	1,668	0	0
Essar												
Algoma	6	27.00	45,030		Skip	0	0					
Algoma	7	35.00	87,458	17.7	Skip	7,127	2,064,722	7.3	3,101	0	0	6
U. S. Steel												
Hamilton	E	31.25	65,030	10.3	Skip	2,584	475,830	6.0	0	2,880	0	0
Lake Erie	1	33.75	85,390	17.0	Belt	1,429	315,362	6.2	0	2,922	0	157
Mexico												
AHMSA												
Monclova	4	21.00	36,515	13.6	Skip	4,709	668,674	9.3	38	1,101	1,940	295
Monclova	5	36.75	77,650	13.2	Belt	7,979	2,331,813	9.0	2,942	133	3	0
ArcelorMittal												
Lazaro Cardenas	1	29.50	60,106	15.3	Belt	7,347	1,480,637	8.1	2,790	20	0	171
United States												
AK Steel												
Ashland	Amanda	33.50	69,075	8.4	Skip	7,240	1,418,540	6.4	3,043	0	0	93
Middletown	3	29.25	51,632	11.1	Skip	5,913	1,337,077	10.5	2,547	0	0	0
ArcelorMittal												
Burns Harbor	C	36.75	86,900	16.2	Belt	8,326	2,218,200	6.8	0	2,416	630	10
Burns Harbor	D	35.75	86,401	16.2	Belt	0	0					
Cleveland	C-5	29.50	56,324	6.0	Skip	2,324	427,607	8.1	0	3,018	0	0
Cleveland	C-6	29.50	56,025	6.6	Skip	1,626	172,910	4.5	0	3,076	0	0
Indiana Harbor	IH-3	29.50	56,025		Skip	0	0					
Indiana Harbor	IH-4	32.75	67,735	9.9	Skip	2,759	474,754	6.2	5	2,945	722	0
Indiana Harbor	IH-5	26.60	46,049	5.2	Skip	3,441	405,973	5.9	2,167	910	10	0
Indiana Harbor	IH-6	26.60	45,935	4.5	Skip	782	71,823	4.8	725	2,403	0	0
Indiana Harbor	IH-7	45.00	147,015	31.7	Belt	8,239	3,725,423	7.4	3,130	0	6	10
Republic Eng. Prod.												
Lorain	4	29.00	50,841		Skip	0	0					
Severstal												
Dearborn	C	30.25	63,472	14.5	Belt	8,093	1,684,072	7.9	2,956	209	0	2
Sparrows Point	L	44.30	132,857	18.1	Belt	6,867	2,143,496	6.7	317	1,271	11,876	129
Warren	1	28.50	54,025		Skip	0	0					
Steubenville	5	23.33	39,176		Skip	0	0					
U. S. Steel												
Fairfield	8	32.00	81,668	21.3	Belt	6,729	1,475,607	6.4	2,733	32	0	0
Gary	4	28.83	52,818	6.4	Skip	8,400	1,394,772	7.5	2,092	675	61	0
Gary	6	28.00	53,198	6.1	Skip	4,451	641,873	6.5	1,557	982	507	0
Gary	8	25.58	45,873	5.3	Skip	5,844	804,402	7.2	320	2,003	845	0
Gary	14	39.33	144,560	24.9	Skip	7,406	1,949,871	5.5	2,436	0	824	0
Granite City	A	27.25	50,659	5.7	Skip	1,965	210,623	5.2	815	1,426	0	0
Granite City	B	27.25	49,518	7.8	Skip	3,735	565,013	7.3	1,559	1,444	0	0
Great Lakes	B	28.25	55,486	5.4	Skip	2,341	291,485	5.1	1,667	1,382	0	0
Great Lakes	D	28.00	53,250	5.1	Skip	966	124,515	5.8	2,568	441	0	0
Mon Valley	1	28.83	57,218	6.0	Skip	6,280	1,007,924	7.1	1,333	1,593	0	0
Mon Valley	3	25.25	43,029	6.0	Skip	7,919	1,090,169	6.8	1,683	1,167	0	0

*Actual specific production rate = nthm/100 cfwv per 24 hours



Burden (lb/nthm)			Blast conditions					Injectant rates (dry lb/nthm)						
Reverts with Fe and Fe oxides	Recycled scrap (>70% Fe)	DRI/HBI new Fe units	Actual wind (scfm)	Temp. (°F)	Oxygen flow (scfm)	Moisture in blast (gr/scfm)	Oxygen (% in blast)	Large coke rate	Small coke rate	Total coke rate	Injectant No. 1 rate	Injectant No. 1 type	Injectant No. 2 rate	Injectant No. 2 type
12	0	0	71,685	1,623	1,208	10	22.2	926	85	1,011	23	Oil	45	Coal
0	0	0	117,022	1,776	1,093	14	21.7	972	62	863	34	Oil	12	Coal
0	0	0	134,586	1,982	11,240	6	26.6	753	104	857	143	Gas		
268	0	0	115,259	1,883	2,797	17	22.8	903	50	953	48	Gas	106	Coal
0	28	0	141,998	2,035	5,569	12	23.9	756	53	809	133	Gas	44	Oil
0	0	0	73,549	2,098	2,553	9	23.3	939	5	944	45	Gas	198	Coal
0	0	0	147,116	2,135	10,277	9	26.2	765	50	815	275	Coal	9	Gas
81	20	16	106,774	2,015	7,149	10	25.9	846	52	898	163	Coal		
118	100	4	126,375	1,974	4,673	13	23.8	685	181	866	46	Gas	155	Coal
0	177	220	103,789	2,007	10,979	9	28.3	672	56	728	196	Gas		
111	30	0	157,183	2,065	5,138	19	23.4	886	46	932	49	Gas	26	Coal
109	121	0	103,600	1,724	8,148	8	26.8	873	7	880	159	Gas		
117	0	0	88,867	1,722	0	4	21.0	1,065	0	1,065	40	Gas		
89	4	0	120,786	1,853	3,738	10	21.5	926	47	973	77	Gas		
81	80	7	77,508	1,808	1,324	12	22.3	848	107	955	4	Gas	163	Coal
44	0	0	68,726	1,690	817	7	21.9	989	21	1,010	84	Gas		
141	0	0	227,610	2,132	17,443	11	26.5	719	55	774	313	Coal		
55	3	0	106,566	1,983	13,440	7	29.7	784	66	850	57	Gas	248	Coal
0	0	0	166,904	2,119	9,510	12	22.7	708	98	806	12	Gas	175	Coal
155	120	56	151,801	2,071	3,256	14	22.6	838	58	896	10	Gas	165	Coal
225	207	0	98,349	1,879	7,643	8	26.7	651	96	747	24	Gas	224	Coal
237	50	0	95,944	1,810	5,414	10	24.7	837	98	935	4	Gas	170	Coal
54	110	0	84,141	1,757	6,634	10	26.8	752	35	787	5	Gas	276	Coal
0	39	0	184,151	1,983	3,450	16	22.3	948	5	953	16	Gas	101	Coal
112	73	0	86,524	1,741	3,686	11	24.2	1,012	51	1,063	66	Gas		
88	142	0	95,838	1,876	5,097	7	25.0	861	65	926	135	Gas		
16	69	0	96,358	1,829	5,973	9	25.5	945	73	1,018	80	Gas		
114	15	0	110,562	1,829	4,911	10	24.1	930	12	942	51	Gas	83	Coal
306	37	0	96,338	1946	2,427	13	22.9	801	37	838	85	Gas		
294	23	0	79,980	2,041	3,102	13	24.0	779	37	816	112	Gas		