



Australasian (iron & steel) Slag Association Inc.

Annual Membership Survey Results

January to December 2008

Prepared by
HBM Group Pty Ltd

Membership Survey Results: 2008

The Australasian (iron & steel) Slag Association (ASA) conducts an annual survey for information regarding iron & steel slag production and sales by members and non-members for each calendar year. This report provides results for the 2008 calendar year.

Information provided by members and non-members is collated and then aggregated into a national set of results and include ISS production levels, and nominated uses for all slag products.

For the calendar period January to December 2008, approximately 80 percent of all ISS produced were utilised within various civil and construction applications throughout Australasia.

The survey results include all generators, (iron & steel plants) marketers, (processing and marketing companies) and users for the total production and resulting sales by each end use. Where required, data is supplemented with importation data¹ and other secondary data² sources for accuracy purposes.

The key results for the calendar period 2008 survey were:

- For the calendar period 2008, approximately 3.4 Mt (million tonnes) of iron and steel slag products were produced within Australasia (Australia and New Zealand).
- From the ISS produced, some 2.71 Mt or 80 percent has been effectively utilised [sold or reused for some beneficial use]
- On per capita basis, this equates to 123 kgs per person recycled or reused
- 20 percent or 0.671 Mt was used in cementitious applications - "high value add" [HVA]³
- 48 percent or 1.64 Mt was used in non-cementitious or road construction applications - medium value add [MVA]⁴
- 12 percent or 0.39 Mt was in general civil or fill applications – low value add [LVA]⁵

In summary the recovery and reuse of ISS provide significant positive environmental impacts, including resource conservation and in this case, the reduction of greenhouse gas emissions from the processing of virgin resources.

¹ Austat's based on import tariff code for Granulated Blast Furnace Slag (GBFS)

² Company annual reports and other published data sources

³ HVA – High Value Add – means where ISS materials are sold for > (more than) \$100/tonne

⁴ MVA – Medium Value Add – means where ISS materials are sold for between \$10-\$100/tonne

⁵ LVA – Low Value Add – means where ISS materials are sold for < (less than) \$10/tonne

The following table provides more detail for individual category sales of ISS for the period 2008.

Table 1 - 2008 Slag Sales and Production Survey

SECTION A Slag Beneficial Use Calculations (mt) (See #2 & #3 'Notes')	BFS	GBFS	SFS	EAFS	KOBM	Other	Combined
A1. Total Produced in 2008 (Jan-Dec)	1,543,366	760,551	864,000	181,200	57,205	0	3,406,322
A2. Total 2008 Production not used [stored]	367,185	27,325	229,346	54,213	17,697	0	695,766
A3. Total 2008 Production not used [disposed]	0	0	0	0	0	0	0
B2. Total of All Beneficially Used in 2008 (Auto calc)	1,176,181	733,226	634,654	126,987	39,508	0	2,710,556
A4. Removed (if any) from storage during 2008	0	0	0	0	0	0	0
SECTION B Auto Calculations							Combined
B1. Total of 2008 Production (Auto calc)	1,543,366	760,551	864,000	181,200	57,205	0	3,406,322
SECTION C Slag Use (mt)	BFS	GBFS	SFS	EAFS	KOBM	Other	Combined
C1. Cement or Binder products	17,620	653,533	0	0	0	0	671,153
C2. Feed stock for Clinker/Glass products	33,787	0	0	0	31,760	0	65,547
C2. Grit Blasting products	0	0	0	0	0	0	0
C2. Structural Fills/Embankments	14,443	0	0	0	0	0	14,443
C2. Road Base/Sub-base	306,438	49,522	150,474	97,987	0	0	604,421
C2. Rockwool products	3,398	8,321	0	0	0	0	11,719
C2. Mineral Fillers (e.g Asphalt)	31,182	0	0	0	0	0	31,182
C2. Agricultural applications	0	0	0	0	611	0	611
C2. Water treatment/filtration products	25,643	150	0	0	0	0	25,793
C2. Asphalt & Concrete Aggregates	650,703	15,207	221,182	0	0	0	887,092
C3. Mining Applications	0	6,493	0	29,000	0	0	35,493
C3. Waste Stabilisation/Solidification	0	0	0	0	7,137	0	7,137
C3. Miscellaneous/Other	92,967	0	262,998	0	0	0	355,965
Total Use (Auto calc)	1,176,181	733,226	634,654	126,987	39,508	0	2,710,556

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