Sector: Foundries

Name or code of company: Company 1

Functional unit: 1 ton of pig iron raw casting – Torque Arm

List of main hot spots			
Relevant Impact Categories	**Contribution to overall normalised and weight impact**	**Relevant Processes**	**Contribution to overall characterized impact**
Climate change, fossil	9%	Pig Iron (Raw Material life cycle phase)	52%
		Iron Scraps (Raw Material life cycle phase)	17%
		Additional Alloying Elements (Raw Material life cycle phase)	4
		Energy, Furnace (Production life cycle phase)	16 %
Particulate Matter	20%	Pig Iron (Raw Material life cycle phase)	48%
		Iron Scraps (Raw Material life cycle phase)	18%
		Additional Alloying Elements (Raw Material life cycle phase)	12%
		Energy, Furnace (Production life cycle phase)	7%
Photochemical Ozone Formation	9%	Pig Iron (Raw Material life cycle phase)	49%
		Iron Scraps (Raw Material life cycle phase)	18%
		Additional Alloying Elements (Raw Material life cycle phase)	10%
		Energy, Furnace (Production life cycle phase)	10%
Acidification	10%	Pig Iron (Raw Material life cycle phase)	37%
		Iron Scraps (Raw Material life cycle phase)	14%
		Additional Alloying Elements (Raw Material life cycle phase)	18%
		Energy, Furnace (Production life cycle phase)	18%
Freshwater Eutrophication	6%	Pig Iron (Raw Material life cycle phase)	16%
		Iron Scraps (Raw Material life cycle phase)	6%

		Additional Alloying Elements (Raw Material life cycle phase)	65%
		Energy, Furnace (Production life cycle phase)	6%
Mineral, fossil & renewable resource depletion	30%	Pig Iron (Raw Material life cycle phase)	8%
		Iron Scraps (Raw Material life cycle phase)	9%
		Additional Alloying Elements (Raw Material life cycle phase)	53%
		Energy, Furnace (Production life cycle phase)	8%
		Consumables, Moulding (Production life cycle phase)	19%

Functional unit: 1 ton of pig iron raw casting – Scatola IR600

List of main hot spots			
Relevant Impact Categories	**Contribution to overall normalised and weight impact**	**Relevant Processes**	**Contribution to overall characterized impact**
Climate change, fossil	13%	Pig Iron (Raw Material life cycle phase)	52%
		Iron Scraps (Raw Material life cycle phase)	17%
		Energy, Furnace (Production life cycle phase)	16 %
Particulate Matter	25%	Pig Iron (Raw Material life cycle phase)	49%
		Iron Scraps (Raw Material life cycle phase)	19%
		Additional Alloying Elements (Raw Material life cycle phase)	9%
		Other, Moulding (Production life cycle phase)	8%
Photochemical Ozone Formation	13%	Pig Iron (Raw Material life cycle phase)	47%
		Iron Scraps (Raw Material life cycle phase)	17%
		Energy, Furnace (Production life cycle phase)	10%
		Other, Moulding (Production life cycle phase)	8%

Acidification	12%	Pig Iron (Raw Material life cycle phase)	43%
		Iron Scraps (Raw Material life cycle phase)	16%
		Energy, Furnace (Production life cycle phase)	20%
Terrestrial Eutrophication	6%	Pig Iron (Raw Material life cycle phase)	42%
		Iron Scraps (Raw Material life cycle phase)	18%
		Energy, Furnace (Production life cycle phase)	19%
Mineral, fossil & renewable resource depletion	14%	Pig Iron (Raw Material life cycle phase)	23%
		Iron Scraps (Raw Material life cycle phase)	27%
		Energy, Furnace (Production life cycle phase)	21%
		Consumables, Moulding (Production life cycle phase)	10%