Specific Taxonomy – Copper

Level 1	Level 2	Level 3
Process Technology	Pre-treatment, preparation and transfer of raw materials	Thawing
		Drying
		Crushing, size reduction and screening
		Blending
		Briquetting, pelletising and other agglomeration methods
		Sintering and calcination
		Fuming
		De-coating and de-oiling
		Leaching and washing procedures
		Separation techniques
		Transfer and charging systems
	Primary copper production (pyrometallurgical route)	Roasting
		Smelting
		Converting
		Refining
		Electrorefining
		Treatment of copper-rich slags
	Primary copper production (hydrometallurgical route)	Crushing of ore
		Leaching
		Solvent extraction
		Stripping
		Electrowinning

Level 1	Level 2	Level 3
Process Technology	Secondary copper production	Secondary copper smelting stage
		Converting
		Fire-refining and anode casting
		Electrolytic refining
		Melting, casting of shapes, wire-rod
	Wire rod production	Southwire process
		Contirod process
		Properzi and Secor processes
		Upcast process
		Dip-forming process
	Production of semi-finished products of copper and copper alloys	Melting
		Casting
		Hot and cold working (extrusion and drawing/rolling)
	Production of copper and copper alloy ingots	Preblending
		Furnace melting
		Fume collection and abatement systems
		Fixed mould casting
		Master alloys
	Pickling operations	Acid treatment
		Non-acid pickling
		Drying and packaging
	Water and waste management	Dry abatement techniques
		Wet air cleaning techniques
		Neutralisation and/or sedimentation
		Weak acid treatment
		Mercury removal
		Granulation of matt, slag and produced metal
		Cooling water

Level 1	Level 2	Level 3
Process Technology	Residue management	Techniques for residues from smelting process
		Techniques for residues from abatement systems
		Techniques for residues from liquid effluent
		Techniques for residues from hydrometallurgical processes
		Techniques for other residues from production of non-ferrous metals

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Alternative Energy	Pre-treatment, preparation and transfer of raw materials	Thawing
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		Blending
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		Fuming
		De-coating and de-oiling
		Leaching and washing procedures
		Separation techniques
		Transfer and charging systems
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		Converting
		Refining
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		Treatment of copper-rich slags
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	Secondary copper production	Secondary copper smelting stage
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