Natural Graphite

Three different types of natural graphite ores are mined which require different processing: crystalline (or flake) graphite, microcrystalline (or amorphous) graphite and vein (or lump) graphite. First processing generally involves mechanical separation and flotation which is done in close vicinity of the mine. Further processing required for higher quality products includes milling, spheroidisation and purification (while the last two steps are only required for anode materials, for expanded graphite and nuclear applications). The main uses of natural graphite as finished products comprise refractory materials, anode materials for Li-ion cells and primary batteries, friction materials and lubricants. Other uses include products based on expanded graphite (gasket / sealing applications, thermal management), as well as applications in nuclear sectors (pebble bed reactors). The figure below presents the value chain of natural graphite with the main uses.



โซ่คุณค่าของ Natural Graphite