

Title (en)

Process and installation for supplying oxygen enriched air to a production unit of non-ferrous metals

Title (de)

Verfahren und Anlage zur Versorgung eines Aggregats für Nichteisenmetallerzeugung mit durch Sauerstoff angereicherter Luft

Title (fr)

Procédé et installation d'alimentation en air enrichi en oxygène d'une unité de production de métal non-ferreux

Publication

**EP 1188843 B1 20040519 (FR)**

Application

**EP 01402174 A 20010814**

Priority

FR 0011878 A 20000918

Abstract (en)

[origin: EP1188843A1] Air compressed in a single compressor (1) is supplied to a mineral melting unit (2), a matte conversion unit (6), and an air separation unit (4), which provides two flows (9, 10) of oxygen-enriched air for the mineral melting unit and conversion unit, respectively. Buffering unit (7) enables variation of the flow rate of oxygen-enriched air to the conversion unit. Process for supplying oxygen-enriched air to a non-ferrous metal production apparatus comprising a unit (2) for melting a mineral concentrate of the metal continuously supplied with oxygen-enriched air, and a unit (6) for conversion of the matte from the melting unit (2) and supplied with a variable flow of oxygen-enriched air comprises: (a) compressing air in a single compressor (1) adapted to supply both the mineral melting unit (2) and the matte conversion unit (6); (b) treating part of the compressed air in an air separation unit (4), in order to obtain two flows of oxygen (9, 10) that are, respectively, injected into the compressed air streams to the mineral melting unit (2) and the matte conversion unit (6); and (c) storing the compressed air or the oxygen-enriched compressed air for the matte conversion unit (6) in a buffering vessel (7) when the consumption of oxygen-enriched air in the matte conversion unit (6) is less than a predetermined threshold and withdrawing compressed air or oxygen-enriched air from the buffering vessel when the consumption of oxygen-enriched air in the conversion unit (6) is greater than the threshold. An Independent claim is given for an installation used for implementation of the above process.

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