

A ROTARY KILN, A SCREENING ASSEMBLY FOR A ROTARY KILN, AND A METHOD FOR SINTERING GRANULES

ABSTRACT

- 5 A rotary kiln for sintering of green granules to produce lightweight aggregates, a screening assembly for a rotary kiln for sintering of green granules to produce lightweight aggregates, and a method of sintering of green granules to produce lightweight aggregates. The rotary kiln comprises an inner surface defining a sintering chamber; and a plurality of screening elements disposed along the sintering chamber; wherein each screening element is configured to define
10 a plurality of gaps at or near respective portions of an outer edge of each screening element adjacent the inner surface of the rotary kiln, with the gaps increasing from one edge portion to another in a direction along the outer edge of each screening element that is opposite to the rotational direction of the rotary kiln; and wherein the plurality of screening elements are configured in an offset manner such that none of the gaps of the same size overlap between
15 directly adjacent pairs of the plurality of screening elements.

Figure 1