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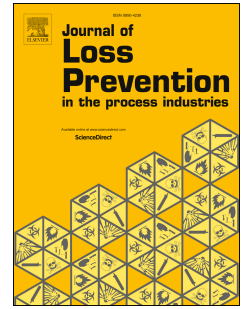
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## Estimation of the deflagration index $K_{St}$ for dust explosions: a review.

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### Abstract

Combustible dust explosions are among the most serious criticalities affecting a broad number of industries around the world. According to a Chemical Safety and Hazard Investigation Board report, more than 50 accidents have occurred only in the U.S. between 2008 and 2012; this datum shows that such a problem requires a relevant attention from both researchers and authorities. The aim of this review is to provide an overview of the currently available techniques able to estimate the severity of a combustible dust explosion. Moreover, the main criticalities arising from these methodologies are discussed, also providing some suggestions for future works.

### Keywords

Combustible Dust Explosion; Deflagration Index; Explosion Severity; Explosion Parameters Estimation

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