

Accepted Manuscript

A concrete constitutive model considering coupled effects of high temperature and high strain rate

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PII: S0734-743X(16)30581-4
DOI: [10.1016/j.ijimpeng.2016.11.009](https://doi.org/10.1016/j.ijimpeng.2016.11.009)
Reference: IE 2775



To appear in: *International Journal of Impact Engineering*

Received date: 29 August 2016
Accepted date: 14 November 2016

Please cite this article as: Xiao Yu , Li Chen , Qin Fang , Zheng Ruan , Jian Hong , Hengbo Xiang , A concrete constitutive model considering coupled effects of high temperature and high strain rate, *International Journal of Impact Engineering* (2016), doi: [10.1016/j.ijimpeng.2016.11.009](https://doi.org/10.1016/j.ijimpeng.2016.11.009)

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2 • A constitutive model considering coupled effects of high temperature and high strain rate for
3 concrete is proposed.

4 • Triaxial test data of concrete after different temperatures were used to define the yield
5 criterion of the proposed model at high temperatures.

6 • Dependent influence of high temperature and high strain rate on mechanical behaviour of
7 concrete was discovered.

8 • The numerical models adopted the proposed model shown good agreement with the test data.

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