

## RECENT DEVELOPMENTS ON DESIGN AND CONSTRUCTION TO STRUCTURAL EUROCODES USING EQUIVALENT STEEL MATERIALS

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**Abstract.** *The Hong Kong Constructional Metal Structures Association was established in July 2010, and one of its primary objectives is to promote effective steel construction in Hong Kong and neighbouring cities in the Pearl River Delta Region. Owing to abundant and steady supply of quality Chinese steel materials in the Region, there is an industrial-wide urge to employ Chinese steel materials and structural steelwork on local construction projects. With recent adoption of the Structural Eurocodes in Hong Kong and a number of Asian countries, it is highly desirable to facilitate design and construction engineers in Asia to work effectively to Structural Eurocodes using Chinese steel materials.*

*With the support of the Chinese National Engineering Research Centre for Steel Construction and other leading industrial and professional organizations in China and overseas, a Professional Guide entitled "Selection of Equivalent Steel Materials to European Steel Materials Specifications" was prepared to provide technical guidance on the use of steel materials manufactured to national materials specifications of Australia / New Zealand, China, Japan and U.S.A..*

*This paper presents an overview on the use of the Structural Eurocodes as well as various opportunities on steel construction offered by steel materials and structural steelwork equivalent to those manufactured to European steel materials specifications. Key features of the document on the equivalence of steel materials and the corresponding material classification system as well as the use of European steel materials and their equivalent in structural design are presented. Asian design and construction engineers are encouraged to take full advantages offered by adoption of the Structural Eurocodes using equivalent Chinese steel materials for construction projects in the Region.*