PLASTIC RESERVE CAPACITY OF HOT-ROLLED STEEL SECTIONS

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Abstract. This paper presents some detailed information about the reserve of the resistance capacity of the various series of I-sections used in steel construction, according to the European, American, British and Japanese standards, when bent about their strong or weak axes. A brief discussion is also presented about the existence of a geometrical configuration that minimises the reserve of the cross-section plastic resistance in bending about the strong axis, with or without a combined axial force.