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256 Quality-conscious coil production of value-added steel grades at Ispat Industries Ltd. India

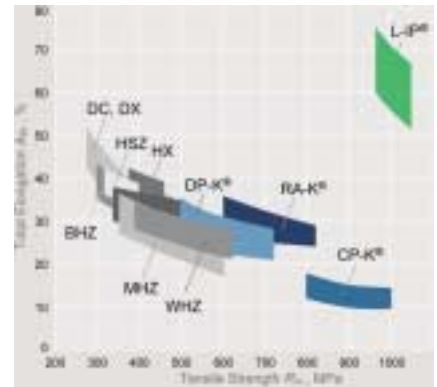
Steelmaking technology, thermomechanical rolling, temperature tracking, evaluation of defined microstructure, product quality, value-added steel grades, dual phase, API X70 and X80
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261 The metallurgy of roller-bearing steels

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Electrical steel, magnetic properties, soft magnetic materials, magnetic materials, energy efficiency



Eastern enlargement of the European Union became effective as of July 1st, 2004. What impact will this have on steel business? Will quality have to be redefined to meet the demands of this new market?



The international steel industry produces value-added steel grades for specific applications. New qualities exhibit tailored properties to suit the



requirements of their customers, no matter whether these are car-builders, bearing-makers, or consumers of electrical sheet.

from R&D Research and Development

Ibrahim M. Ghayad, Taha Mattar, Ayman Fathy, Hassan El-Sentriesy, and Nabil Naseef Girgis:

274 Influence of vanadium on the properties and corrosion behaviour of carbon steel

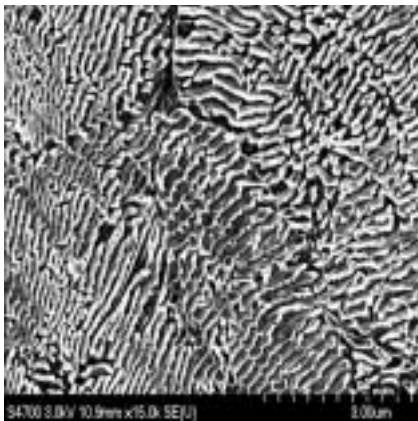
Carbon steel, V, mechanical properties, corrosion behaviour, passivation, pitting corrosion
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Vanadium, microalloyed, steel, tensile, impact, bainite, ferrite, martensite, cleavage
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FEG-SEM; microalloyed hypereutectoid steels, vanadium carbides precipitations



Sophisticated production and alloying techniques are based on the fundamental understanding of microstructural relationships and actions. Speaking in these terms, quality is governed by metallophysical and metallochemical processes.



Implementing the basic results into operational practice is not merely a question of process management, but a challenge for plantmakers. Hydrodynamic bearings support both the rolls and the flats.

Great oaks from little acorns grow - the science activities of the European Union aims at promoting young talents.

You are what you eat? - A young artist serves an elaborate dinner for everybody who likes metal - not only as trace elements.



Taha Mattar, Hoda El-Faramawy, Ayman Fathy, Mamdouh Eissa and Kamal El-Fawakhry:

Improving the cleanliness of tool steels by ESR 287

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