

JAN/FEB

Direct Reduced Iron: An examination of the processes involved and all aspects of the production processes, including the production of DR-grade lump ore, DRI use in processes and environmental issues, including CO2 recovery.

Testing & Analysis: Mechanical testing; non-destructive testing; spectrograph analysis; infra-red imaging; sample preparation; sample tracking.

DIGITAL ISSUE: Innovations: New products on the market

MARCH

Pipe & Tubes: Everything from this important sector of the steel production industry including market trends, industry requirements, production technologies, maintenance, quality testing and environmental considerations.

Continuous casting: Slab, billet and thin slab casters; metal level control; electromagnetic stirrers and brakes; mould powers; water spray cooling; bearings; caster maintenance; cut-off machines; shears.

Industry 4.0: A look at the various facets of 'smart manufacturing' and what they can offer steelmakers. Continuous strip coating; galvanising; priming; painting; strip welding

Conference/Expo report: Alacero

Tube Dusseldorf, 30 March-3 April 2020, Germany

APRIL

Electric Steelmaking: Electric arc furnaces, scrap, DRI and pig charging; burners; control; electrodes; refractories; gunning; flue gas analysis; water panels; power supply; transformers; energy use, CO2 emissions; dust collection; analysis; recycling; water treatment.

Furnaces: Heat treatment; continuous annealing; furnace control; burners; emissions.

Environment: Energy use, CO2 emissions; dust collection; analysis; recycling; water treatment; 'green steelmaking'.

Plant Safety: An examination of health and safety practices in steel plants. How is the industry safeguarding its employees?

Eurocoke 2019, 20-22 April 2020, Amsterdam
AISTech 2019, 4-7 May 2020, Cleveland, USA

Future Steel Forum, 2-3 June 2020, Prague, Czech Republic

MAY/JUNE

Structural steels: Long product rolling: I&H beams, LWT (welded) tube; piling; floor beams; composite flooring. Also a look at the global structural steel marketplace. Reheat; heat treatment; continuous annealing; furnace control; burners; emissions.

Process control: Level 0-4; PLCs; scheduling; software models; hardware.

Automotive steels: Who is winning the battle for the automotive industry - steel or aluminium? Are advanced high strength steels (AHSS) enough to meet stringent emissions reduction limits in the USA and in Europe? We talk to the major players.

Conference/Expo report: EuroCoke 2019, Netherlands

JULY/AUGUST

Steel Processing: Service centre equipment, eg slitters; cut-to-length; pickling; levellers; toll services.

Oxygen steelmaking: Basic oxygen steelmaking plant, on-line analysis; ferro alloys, scrap secondary metallurgy, pre-treatments, eg de-sulphurisation and phosphorus removal.

Reputation management: Is the steel industry doing enough to maintain its global reputation? We examine the plus points of an industry often criticised over emissions and the environment and look at why steel has been described as 'the fabric of life'.

Lubrication & Hydraulics: Greases, oils, lubricants, hydraulic fluids and systems, condition monitoring, oil reclamation and refining, lubrication and hydraulics bearing technologies.

DIGITAL ISSUE: Innovations: New products on the market


Conference/Expo report: AISTech 2020, Pittsburgh

SEPTEMBER

Rolling: Flat and long rolling: mills; shape control; rolls.

Special and stainless steels: Tool, high alloy; wear resistant; stainless steel; powder met; ferro alloys

Conference/Expo report: Steel Success Strategies.

 **Russian Language Edition**

OCTOBER

Ironmaking: Blast furnace; direct reduction shaft; DR rotary; direct smelting; control; charge; sinter lines; emission control; energy; tuyere injectants.

Steel markets: Steel is in competition with aluminium, timber and composites in many markets, but a Life Cycle Analysis reveals its superior environmental credentials in many applications such as construction, transport and packaging as well as its ability to meet the mechanical, thermal, volume and financial requirements of today's world.

NOVEMBER/DECEMBER

Minimills: EAF-based long and thin slab caster mills; continuous casting; rolling; scrap, DRI & pig charging; control.

Handling and scheduling: Ladle and slab carriers, identification; bundling and strapping; forklifts; crane systems, mobile equipment and transportation systems, scheduling software.

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