

Technology Demonstration of Additively Manufactured Hydrogen Industrial Gas Burners in Electric Arc Furnaces



Motivation and Relevance

- Stable production process and avoidance of copper oxides
- Temperature, flame topology, mixing conditions
- Optimised, AM-compatible design
- Process development for using infrared lasers

Approach

- In HylInnoBurn2, the operation of an additively manufactured (AM) burner will be demonstrated in an electric arc furnace (EAF) with full hydrogen capability.

Results

- Experimental investigation of additive manufactured hydrogen gas burner of pure copper in electric arc furnace in long term test

Research Area

- Hydrogen, gas burner, PBF-LB/M of pure copper

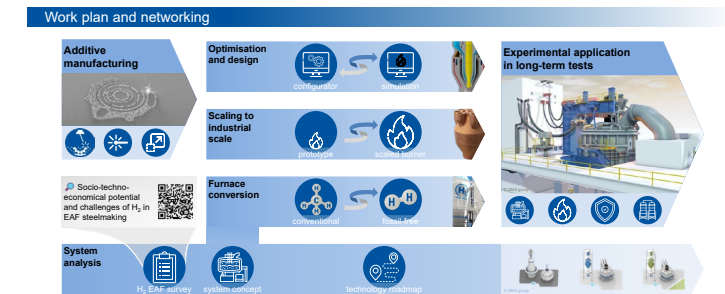
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