

SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING

F22 STEAM GENERATION

F22G SUPERHEATING OF STEAM (steam-separating arrangements in boilers F22B 37/26; removal of combustion products or residues, e.g. cleaning of the combustion contaminated surfaces of tubes of boilers, F23J 3/00)

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| <p>1/00 Steam superheating characterised by heating method (exothermal chemical reactions not involving a supply of free oxygen gas, apparatus or devices for using the heat therefrom F24J)</p> <p>1/02 • with heat supply by hot flue gases from the furnace of the steam boiler</p> <p>1/04 • • by diverting flow or hot flue gases to separate superheaters operating in reheating cycle, e.g. for reheating steam between a high-pressure turbine stage and an intermediate turbine stage</p> <p>1/06 • with heat supply predominantly by radiation</p> <p>1/08 • • from heated brickwork or the like</p> <p>1/10 • with provision for superheating by throttling</p> <p>1/12 • by mixing steam with furnace gases or other combustion products</p> <p>1/14 • using heat generated by chemical reactions</p> <p>1/16 • by using a separate heat source independent from heat supply of the steam boiler, e.g. by electricity, by auxiliary combustion of fuel oil</p> <p>3/00 Steam superheaters characterised by constructional features; Details or component parts thereof (general aspects of enclosed heat-exchangers F28D)</p> <p>5/00 Controlling superheat temperature (control systems for steam boilers F22B; regulating or controlling in general G05)</p> | <p>5/02 • Applications of combustion-control devices, e.g. tangential-firing burners, tilting burners</p> <p>5/04 • by regulating flue gas flow, e.g. by proportioning or diverting</p> <p>5/06 • by recirculating flue gases</p> <p>5/08 • • preventing furnace gas backflow through recirculating fan</p> <p>5/10 • by displacing superheater sections</p> <p>5/12 • by temperating the superheated steam, e.g. by injected water sprays (spray-mixers B01F 5/18)</p> <p>5/14 • • by live steam</p> <p>5/16 • by indirectly cooling or heating the superheated steam in auxiliary enclosed heat-exchanger</p> <p>5/18 • by by-passing steam around superheater sections</p> <p>5/20 • by combined controlling procedures</p> <p>7/00 Steam superheaters characterised by location, arrangement, or disposition</p> <p>7/02 • in fire tubes</p> <p>7/04 • in jackets around fire tubes</p> <p>7/06 • in furnace tubes</p> <p>7/08 • in fire-boxes</p> <p>7/10 • in smoke-boxes</p> <p>7/12 • in flues</p> <p>7/14 • in water-tube boilers, e.g. between banks of water tubes</p> |
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