

## ECLA EUROPEAN CLASSIFICATION

### C10J PRODUCTION OF PRODUCER GAS, WATER-GAS, SYNTHESIS GAS FROM SOLID CARBONACEOUS MATERIAL, OR MIXTURES CONTAINING THESE GASES ([synthesis gas from liquid or gaseous hydrocarbons C01B](#); [underground gasification of minerals E21B43/295](#)); CARBURETTING AIR OR OTHER GASES

#### C10J1/00 Production of fuel gases by carburetting air or other gases without pyrolysis ([for internal-combustion engines F02](#))

- C10J1/02 . Carburetting air
- C10J1/04 . . Controlling supply of air
- C10J1/06 . . with materials which are liquid at ordinary temperatures
- C10J1/08 . . . by passage of air through or over the surface of the liquid
- C10J1/10 . . . . with the liquid absorbed on carriers
- C10J1/12 . . . by atomisation of the liquid
- C10J1/14 . . . Controlling the supply of liquid in accordance with the air supply
- C10J1/16 . . with solid hydrocarbons
- C10J1/18 . . in rotary carburettors
- C10J1/20 . Carburetting gases other than air
- C10J1/207 . Carburetting by pyrolysis of solid carbonaceous material in a fuel bed (C10J 3/66 takes precedence) [\[N1111\]](#)
- C10J1/213 . Carburetting by pyrolysis of solid carbonaceous material in a carburettor [\[N1111\]](#)
- C10J1/22 . Adding materials to prevent vapour deposition
- C10J1/24 . Controlling humidity of the air or gas to be carburetted
- C10J1/26 . using raised temperatures or pressures
- C10J1/28 . Odourising air gas

#### C10J3/00 Production of combustible gases containing carbon monoxide from solid carbonaceous fuels ([destructive distillation processes C10B](#))

- C10J3/00B . [\[N: Horizontal gasifiers, e.g. belt-type gasifiers\]](#) [\[N1204\]](#)
- C10J3/00D . [\[N: Rotary drum or kiln gasifiers\]](#) [\[N1204\]](#)
- C10J3/00F . [\[N: Screw type gasifiers\]](#) [\[N1204\]](#)
- C10J3/02 . Fixed-bed gasification of lump fuel
- C10J3/04 . . Cyclic processes, e.g. alternate blast and run

- C10J3/06 . . Continuous processes
- C10J3/08 . . . with ash-removal in liquid state
- C10J3/10 . . . using external heating
- C10J3/12 . . . using solid heat-carriers
- C10J3/14 . . . using gaseous heat-carriers
- C10J3/16 . . . simultaneously reacting oxygen and water with the carbonaceous material
- C10J3/18 . . . using electricity
- C10J3/20 . . Apparatus; Plant
- C10J3/22 . . . Arrangement or dispositions of valves or flues
- C10J3/24 . . . . to permit flow of gases or vapours other than upwardly through the fuel bed
- C10J3/26 . . . . . downwardly
- C10J3/28 . . . . . fully automatic
- C10J3/30 . . . Fuel charging devices
- C10J3/32 . . . Devices for distributing fuel evenly over the bed or for stirring up the fuel bed
- C10J3/34 . . . Grates; Mechanical ash-removing devices
- C10J3/36 . . . . Fixed grates
- C10J3/38 . . . . . with stirring beams
- C10J3/40 . . . . Movable grates
- C10J3/42 . . . . . Rotary grates
- C10J3/44 . . . adapted for use on vehicles
  
- C10J3/46 . Gasification of granular or pulverulent flues in suspension
  - [N: **WARNING**
  - [N1110] Groups [C10J3/46B](#), [C10J3/46D](#), [C10J3/48B](#), [C10J3/48D](#), [C10J3/50B](#), [C10J3/50D](#), [C10J3/52B](#) and [C10J3/52D](#) are not complete pending a reorganisation.
  - See also [C10J3/46](#)
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- C10J3/46B . . [N: in stationary fluidised beds] [N1110]
- C10J3/46D . . [N: Entrained flow processes] [N1110]
- C10J3/48 . . Apparatus; Plant
- C10J3/48B . . . [N: Gasifiers with stationary fluidised bed] [N1110]
- C10J3/48D . . . [N: Entrained flow gasifiers] [N1110]
- C10J3/48D2 . . . . [N: Swirling or cyclonic gasifiers] [N1204]
- C10J3/50 . . . Fuel charging devices
- C10J3/50B . . . . [N: for gasifiers with stationary fluidised bed] [N1110]
- C10J3/50D . . . . [N: for entrained flow gasifiers] [N1110]
- C10J3/52 . . . Ash-removing devices
- C10J3/52B . . . . [N: for gasifiers with stationary fluidised bed] [N1110]
- C10J3/52D . . . . [N: for entrained flow gasifiers] [N1110]
- C10J3/54 . . Gasification of granular or pulverulent fuels by the Winkler technique, i.e. by fluidisation
- C10J3/56 . . . Apparatus; Plant
  
- C10J3/57 . Gasification using molten salts or metals ([C10J3/02](#), [C10J3/46](#) take precedence)

- C10J3/58 . combined with pre-distillation of the fuel
- C10J3/60 . . Processes
- C10J3/62 . . . with separate withdrawal of the distillation products
- C10J3/64 . . . with decomposition of the distillation products
- C10J3/66 . . . . by introducing them into the gasification zone
  
- C10J3/72 . Other features
- C10J3/72B . . [N: Multistage gasification, e.g. plural parallel or serial gasification stages] [N1110]
- C10J3/72C . . [N: Controlling or regulating the gasification process] [N1204]
- C10J3/72D . . [N: Redox processes] [N1110]
- C10J3/72S . . [N: Start-up] [N1110]
- C10J3/72T . . [N: Shut down] [N1110]
- C10J3/74 . . Construction of shells or jackets
- C10J3/76 . . . Water jackets; Steam boiler-jackets
- C10J3/78 . . High-pressure apparatus
- C10J3/80 . . with arrangements for preheating the blast or the water vapour
- C10J3/82 . . Gas withdrawal means
- C10J3/84 . . . with means for removing dust or tar from the gas
- C10J3/84B . . . . [N: Quench rings] [N1204]
- C10J3/86 . . combined with waste-heat boilers