

F17D

PIPE-LINE SYSTEMS; PIPE-LINES (pumps or compressors F04; fluid dynamics F15D; valves or the like F16K; pipes, laying pipes, supports, joints, branches, repairing, work on the entire line, accessories F16L; steam traps or the like F16T; fluid-pressure electric cables H01B9/06)

Definition statement

This subclass/group covers:

The way of operating pipelines for transporting gas or liquids like crude oil. The main subject-matter of this subclass is dealing with preventing of fluid leaks, e.g. gas leaks, monitoring losses of fluids or locating losses of fluid.

Relationship between large subject matter areas

This group deals with the operating of pipelines and does not deal with the construction of pipelines, which is relevant for subclass [F16L](#).

Informative references

Attention is drawn to the following places, which may be of interest for search:

Laying or reclaiming pipes; Repairing or joining pipes on or under water	F16L 1/00
Supports for pipes, cables or protective tubing	F16L 3/00 or F16L 7/00
Constructional details of pipes	F16L
Thermal insulation of pipe-lines	F16L 59/00
Influencing flow of fluids in a pipeline	F15D 1/02
Central heating systems	F24D
Pumps or compressors	F04
Valves or the like	F16K
Steam traps or the like	F16T
Fluid-pressure electric cables	H01B 9/06
Petroleum, Gas or coke industries,	C10

technical gases containing carbon monoxide, fuels, lubricants, peat	
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F17D 1/00

Pipe-line systems (conveying articles or materials through a pipe- line by means of a fluid carrier B65G51/00, B65G53/00; liquids B67D; special devices for transferring liquids from bulk storage containers into vehicles or boats or vice versa, e.g. loading or unloading vehicles or portable containers B67D5/00; conveying material which has been excavated by a dredger or soil shifter through a pipe-line E02F7/10; sewer pipe-line systems E03F3/00; thermal insulation of pipe-lines F16L59/00; central heating systems F24D)

Definition statement

This subclass/group covers:

The way of conveying fluids, like two phase gas liquid mixtures, gas, liquids or viscous products, slurries comprising solid particles within a fluid. This group also includes systems to reduce friction and improve flow in pipe lines.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Conveying articles or materials through a pipe-line by means of a fluid carrier	B65G 51/00 , B65G 53/00
Dispensing, delivering transporting liquids	B67D
Special devices for transferring liquids from bulk storage containers into vehicles or boats or vice versa, e.g. loading or unloading vehicles or portable containers	B67D 5/00
Conveying material which has been excavated by a dredger or soil shifter through a pipe-line	E02F 7/10
Sewer pipe-line systems	E03F 3/00

Heating or cooling pipes or pipe systems	F16L 53/00
Water main or service pipe systems	E03B 7/00
Public or like main pipe systems	E03B 7/02
Domestic or like local pipe systems	E03B 7/04
Domestic hot-water supply systems	F24D 17/00

F17D 3/00

Arrangements for supervising or controlling working operations

Definition statement

This subclass/group covers:

- Supervision and control of the conveyance of one or several products.
- Arrangements for sampling fluid from the pipe-line or for injecting a composition into the pipe-line.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Using cleaning devices introduced into and moved along the pipes by fluid pressure	B08B 9/04
Pigs or moles, i.e. devices movable in a pipe or conduit with or without self-contained propulsion means and their launching and detection	F16L 55/26 to F16L 55/48
Sampling and preparing specimens for investigation	G01N 1/00
Separation of liquids	B01D 17/00
Separation of gases or vapours	B01D 53/00
Separation in general	B01D

Measuring volume or flow	G01F
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F17D 5/00

Protection or supervision of installations (arrangements for protecting foundations E02D31/00; protecting pipes from damage or internal or external wear F16L57/00, against corrosion and scale F16L58/00; investigation of the fluid-tightness of structures G01M3/00)

Definition statement

This subclass/group covers:

The prevention of gas leaks, or the monitoring of losses of fluids or the locating of losses of fluid.

Protection or monitoring of installation or pipelines

Protection of installations or persons from the effects of high voltage induced in the pipe-line

Informative references

Attention is drawn to the following places, which may be of interest for search:

Protecting pipes from damage or internal or external wear	F16L 57/00
Arrangements for protecting foundations	E02D 31/00
Protection against corrosion or scale	F16L 58/00
Investigation of the fluid-tightness of structures	G01M 3/00