

INDUSTRIAL INSULATION

CYLINDER

For pipework operating at temperatures to 650 °C

Mounting considerations

1. MOUNTING OF THE CYLINDER ON THE PIPE

Install the cylinder on the pipe through the outer longitudinal section. Cylinders should be tightly pressed to each other. Lateral surface of the cylinders should be smooth. There should be no gaps between the cylinders. If there are any irregularities, they must be eliminated by leveling the surface with a knife or saw. Fix the cylinders on the pipe with the clamps of steel wire, galvanised wire, steel or plastic tape. The distance between the clamps shall not exceed 300 mm for the bandings of wire and 600mm for the bandings of plastic or steel tape. When the outer diameter (D) of the cylinder is less than 500 mm, you can use galvanised wire with 0.7-0.9mm gauge. When the outer diameter of the cylinder is 500 mm or more, use steel or plastic tape 13x0.4 mm or a larger one. If insulating the pipelines operating at temperature more than +200 °C, use only steel tapes as clamps. Wrap the wire twists over the obtained insulation and put the laver of the covering insulation it necessary. Bends and elbows are isolated by segments cut from the respective cylinders. Use a mitre box for cutting the cylinder into segments.

2. MOUNTING OF THE CYLINDER ON BENDS AND PIPE CONNECTIONS

The cylinders are cut into segments.

The most convenient mounting angles are of 15° and 30°.

Such segments can be cut by means of the mitre box for cutting cylinders.

Choose the segments for the desired angle of the pipe bend. Tighten each segment at least with one clamp.

Foil cylinders are mounted in a similar manner. The joints of the cylinder, longitudinal cuts, the contours and curves are fixed with aluminum tape.

3. INSTALLATION OF PIPE CONNECTIONS AND T-JUNCTIONS

Cut the cylinder with the help of the mitre box as shown.

Mount the obtained blanks on the pipes.

The segments shall be installed tightly to each other.

Refine the blank parts if there are any gaps, the gaps between the parts must be eliminated.

Mounted insulation is fixed by clamps made of steel wire, steel tape or plastic tape.

If foil cylinder is used, cylinder joints, longitudinal cuts, the contours and curves are glued with aluminum tape.

4. MOUNTING OF THE FOIL CYLINDER

Foil cylinder has a self-adhesive foil overlap at the longitudinal cut of the cylinder. First of all after the cylinder is mounted on the pipe, self-adhesive overlap should be fixed over the longitudinal cut of the cylinder, then the transversal joints of the cylinders on the pipe shall be fixed with self-adhesive aluminum tape (or aluminum reinforced tape for cylinders with large diameters).

Tightening clamps are mounted over the fixed cylinder:

- when the outer diameter of the cylinder (D) is less than 250 mm, you can use a wire of galvanised steel with 0.7-0.9 mm gauge;
- when the outer diameter of the cylinder is more than 250 mm use steel or plastic tape with profile 13×0.4 mm or a larger one.

Recommendations for use

1. The maximum temperature of the insulated pipe for non foiled cylinder is +650°C.

For foiled cylinder maximum temperature of the insulated pipe with thickness of insulation is the following:

20 mm - 250°C

30 mm - 300°C

40 mm - 350°C

50 mm - 400°C

60 mm - 450°C

80 mm - 500°C

90 mm - 550°C

100 mm - 600°C

120 mm - 650°C

2. Before use, the material must be maintained at a temperature from -10 to +75°C with in at least 24 hours.

3. Installation of the cylinder can be made at temperatures from -10°C to +75°C.

4. While initial heating (above 200°C) of the cylinder the smoke and smell, irritation of eyes and throat. In closed, poorly ventilated areas it is recommended to use forced airflow into the room or ventilation during the first few cycles of heating.

5. Foil cylinder can be used without providing an additional coating layer indoors, in case there is no possibility of mechanical damage. Outdoors it is always necessary to arrange an outer protective insulation layer.

Precautions:

1. It is recommended to use at work:

- Dustmask
- Protective glasses
- Rubberized gloves

2. Use working clothes that cover the body from dust during installation.

3. Wash work clothes separately from other clothes.

Wash out the washing machine thoroughly.

4. Follow safety precautions when working with sharp tools and electrical tools.

First aid

1. If there is dust on your skin, wash hands with water thoroughly. First, rinse your hands with water jet not rubbing them to wash the dust away. Then wash your hands with soap and water.

2. If there is dust in eyes - rinse them with water thoroughly. If it is necessary, consult a doctor.