CONDURON 33

Stop-Off Paint for Deep Carburizing in Gas
for Case Depths up to 5 mm

Characteristics

CONDURON 33 is extremely effective as a stop-off paint for all kinds of gas carburizing. It is particularly suitable for deep case carburizing up to depths of approx. 5 mm (0.2"). As a benefit over normal silicate base protective paints CONDURON 33 provides enhanced adherence to the steel surface.

The main field of application of CONDURON 33 is the local protection against carbon pickup of heavy gears, axles, shafts etc. during deep carburizing.

CONDURON 33 provides
- easy application by painting or automatic feeding systems
- exact limitation of the coated area
- excellent adherence to the steel surface.

Since after heat treatment the residues of CONDURON 33 are not soluble in water, alkaline solution or solvents, they are removed mechanically by shotblasting or steelbrushing. CONDURON 33 is free of any solvents, which is an important feature in respect of health and safety regulations as well as protection of the environment.

Application

Prior to painting, the surfaces of the components to be protected must be cleaned thoroughly by either a vapor degreaser or a detergent washer, so that the parts are free of oil and grease. Also they must be free of rust and oxide layers. CONDURON 33 should be applied at normal room temperature. At temperatures below +10°C it would thicken to an extent that it would not be paintable any more . Before applying, stir the contents of the CONDURON 33 tin thoroughly.

As received, CONDURON 33 is suitable for application by painting with a fine hair flat brush.

Two coatings of CONDURON 33 are required for optimum protection.

Apply a first coating of CONDURON 33 thin and as evenly as possible. The coating should be allowed to air dry thoroughly. After that, a second coating is applied in the same manner which must again be thoroughly dry before the parts are put into the furnace.

Total drying time

Total drying time which strongly depends on coating thickness, ambient and part temperature, atmospheric humidity etc. can range from approx. 3 to 8 hours. For effective protection it is important to have the coating thoroughly dried as mentioned above before heat treatment is started. This can be checked by "fingernail test".

During use, with the can open, CONDURON 33 has a tendency to thicken due to evaporation of the liquid vehicle in the paint. Normal consistency can be restored by adding small amounts of "Special Thinner for CONDURON 33". Please note that overthinning would impair the effectiveness of the paint.

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Removal of Residues after Heat Treatment
After carburizing and subsequent quenching, residues of CONDURON 33 can be removed by shotblasting or steelbrushing. They are not soluble in water or solvents.

Cleaning of Equipment
As mentioned above, CONDURON 33 cannot be resolved or washed off after drying. So immediately after use, CONDURON 33 cans should be tightly resealed and the brushes cleaned with water. If painting is interrupted for any length of time, the brushes should be set in water to prevent drying of the bristles.

Storage
CONDURON 33 tins shall be stored in a dry cool place. **Prevent from freezing.**