

ISO 9001:2008





TECHNICAL BULLETIN

MEPROCHE 5151

Nitriding basically is employed to avoid distortion during heat treatment and also provide a wear resistance surface.

Carburizing can achieve good case depth and high hardness, but it involves distortion.

Nitriding on steels can achieve good wear resistance and practically no distortion, but it gives very low case depth and comparatively low hardness.

There are administrative problems in storage and purchase of Ammonia to create atmosphere of nitrogen, hence Meproche 5151 can be used. This is easy to store and can be drip fed.

Operating Conditions of Meproche 5151

- 1. Furnace Temperature to be maintained at 570°C.
- 2. Depending upon the size of the furnace/ retort the feed should be adjusted. Normally for a 1200 lit capacity 0.5/1 lit/ Hr.feed is sufficient.
- 3. Time for absorption 1 Hr. to 5Hrs. depending upon case depth and hardness required

Pre nitriding Treatments:

- 1. The jobs should be free from contaminations such as oxides, rust, scales, oil etc.
- 2. If the jobs are not freshly machined then shot blasting may be employed.
- 3. Vapor degreasing or liquid degreasing should be done with CHLOROSUL or equivalent solvent.
- 4. A light phosphate coating with MEPROCHOS 301SPL prior to Carbonitriding will enhance the performance. (Its optional.)
- 5. Surfaces having very low surface roughness respond well to nitriding.
- 6. Stress relieved components retain core properties after nitriding.

For more details please contact to: -

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