



ISO 9001:2008

# Deluxe

Meproché

TECHNICAL BULLETIN

## MEPROCHE 5152

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 lower hardness.

**Meproche 5152** carbonitriding fluid is designed to work on drip feed system, to give good case depth, corrosion resistance and of wear resistance.

### Operating Conditions of Meproche 5152

1. Furnace Temperature to be maintained at 570/580°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/ Hour. feed is sufficient.
3. Time for absorption 1 Hr. to 5 Hrs. depending upon case depth and hardness required.
4. Diffusion time is 0.66 times the time taken for carbonitriding.

### Furnace:

1. The hot chamber temperature should be controllable within  $\pm 5^\circ \text{C}$  of 570/580°C throughout the entire volume.
2. Gas leaks should be eliminated.
3. Undecomposed fluid should be safely brunt off/scrubbed off.
4. If possible, before feeding **Meproche 5152**, the air in the furnace must be purged out by anhydrous nitrogen at 560°C.

### Precarbonitriding 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. Vapour degreasing or liquid degreasing should be done with CHLOROSUL or equivalent solvent.
4. Stress relieved components retain core properties after carbonitriding.

Components & steels recommended for carbonitriding with **Meproche 5152**.

Rockerarm, spacers, machinery gears, cylinder blocks, jet nozzles, spindles, and such components where wear – resistance is the prime – property. Carbon steels, cast iron, stainless steel, tools steels etc. are recommended for carbonitriding.

For more details please contact to: -

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