

NON-STICK MASKING FIXTURES AND METHODS OF PREPARING SAME

ABSTRACT

[0037] Non-stick fixtures for selectively masking portions of a workpiece during application of a workpiece coating are described herein. These fixtures have predetermined surfaces thereon having an average surface roughness of about 25 Ra or less and a Rockwell hardness of about 65 Rc or more. The controlled average surface roughness ensures that these fixtures are non-stick with respect to the workpiece coating being applied to the workpieces disposed therein. The controlled Rockwell hardness ensures that the desired average surface roughness can be maintained throughout repeated use of the fixture in harsh coating environments. These fixtures reduce the workpiece coating bridging that occurs between the fixture and the workpiece, and also reduce the amount of overspray that occurs on the workpiece, thereby minimizing the amount of handwork and/or rework that is necessary after the workpiece is coated. This improves process cycle times and yields significantly.