

AccuRez

Advanced Bead-Less coating system for 45nm mask

Application – 45nm node Photomask Accurate Bead-Less Coating System

In Brief: AccuREZ is a resist coating system specifically designed to reduce edge bead. Resist bead can result in significant defects after the resist stripping. These defects manifest as resist residue on the edge of mask because of the significant thickness differential between the edge bead and the field resist thickness. A new design in coater systems is utilized. A localized exhaust port is placed in close proximity to mask edge and surface evacuating resist during coating processing. This results in significant reductions in bead height and width at the edge of the mask.

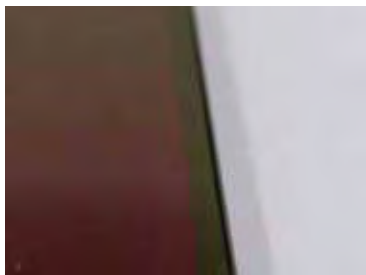


Fig.1 Bead(width 2mm)

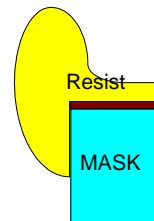


Fig 2 Bead cross section

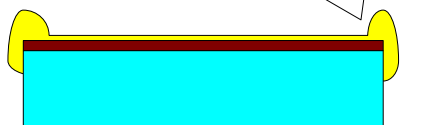
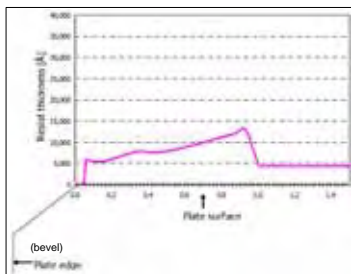


Fig.3 Existing coating system

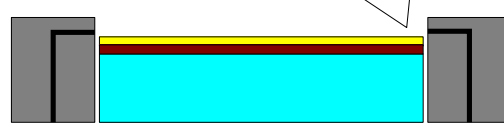
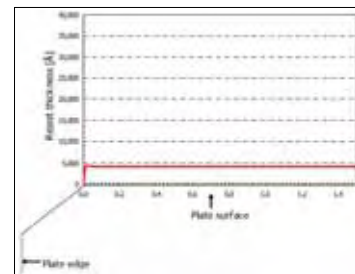


Fig.4 AccuRez coating system

Features and Benefits

Feature	Benefit
Vacuum port	<ul style="list-style-type: none"> Removal of resist from edge resulting in no edge bead
Circle shape chuck	<ul style="list-style-type: none"> Reduce turbulence
High spin speed (4500rpm)	<ul style="list-style-type: none"> Better uniformity

概要
Overview

プロセス
Process

システム
SYSTEM

その他
Other