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Thin films making by magnetron sputtering cathode having high deposition rate and wide erosion area

Jang Sick Park, Tae Woo Kim, Jae Eun Heo*, Kanp Du Lee*, Sang Won Park* and
Won Sul Ahn**

Mirae Engineering co. ltd, *Department of Environment Science,
**Department of Chemical Engineering, Keimyung University

High quality cathode for magnetron sputtering system is required in thin film manufacture process of LCD and Semiconductor because it have high productivity, property of particles decreasing and high adhensive power for thin film.

We developed WV(wide view) cathode of magnetron sputtering system having high deposition rate and making wide target erosion area. Because it have equal plasma density in the discharge space above target, thin film thickness variation below 5% is obtained. Norrrmal cathode have thin film thickness variation above 30% in 200 kwh target life time. Because wide area of target is sputtered by WV cathode, particles is decreased.

TiO-N Thin films characteristics is studied by some researchs^(1,2). It is applied by WV cathode. We thank GIET(Gumi Institute of Electronics Technology) for analysis of thin film.

[참고문헌]

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