Inner diameter coating for monolithic rotary targets

A new inner diameter coating for monolithic molybdenum targets prevents direct contact between the target material and cooling water during the sputtering process. We will present our "upgraded rotary target" at the EU PVSEC in Frankfurt.

Molybdenum sputtering targets are used to deposit the back contacts in CIGS cells by magnetron sputtering. Monolithic rotary targets have no backing tube. They consist entirely of the thin film material. Thanks to these targets, CIGS manufacturers can considerably increase sputtering performance and consequently achieve greater throughput. The particularly high level of material utilization also reduces the total cost of ownership in solar cell production.

When monolithic targets are used, the molybdenum is in direct contact with the cooling water inside the sputtering equipment. Additional particular additives (so-called inhibitors) have to be used to condition the cooling water for operation with monolithic targets. These stabilize the pH-value of the cooling water.

Plansee has now developed a protective coating for the inner diameter (ID) wall of the target, designed to make it even easier to use monolithic targets. This polymer-based layer ensures that the molybdenum no longer is exposed directly to the cooling water. The
advantage: CIGS manufacturers do not need to use the additional inhibitors and are therefore able to reduce their costs. The ID coating does not noticeably impair the thermal conductivity of the rotary target.

Find out more. At the EUPVSEC in Frankfurt.

Visit us at the EU PVSEC in Frankfurt from September 24 to 28, Hall 3.0, Stand F29. Alongside these ID coated monolithic targets, you will also be able to discover our wide range of sputtering targets. As well as presenting its molybdenum, MoTa and MoNa products, we will present our coating material for CIGS absorber layers and chromium targets for the production of diffusion barriers at EU PVSEC.