INDIUM CORPORATION®

Product Data Sheet

Pure Indium Sputtering Targets

Introduction

Indium Corporation's Indium (In) Sputtering Targets offer tight control of the final thin-film composition. This is due to our unique manufacturing process that results in a fine grain monolithic material. Impurity levels are controlled before and during the manufacturing process.

Application

Indium Sputtering Targets can be used in a variety of applications:

• CIS/CIGS

Indium Sputtering Targets are commonly used with CuGa Sputtering Targets to co-deposit copper, indium, and gallium in combination with sulfur/selenium to form the active layer on CIS/CIGS thin-film solar cells.

• Reactive Thin-Films

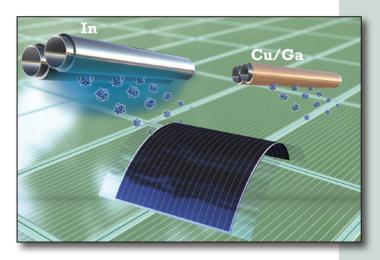
Indium Sputtering Targets can be reactively sputtered with oxygen and other materials to create transparent conductive oxide layers (TCO) on glass or alternative substrates.

Bonding

Indium Sputtering Targets can be used to deposit pure indium for room-temperature or low-temperture bonding applications, such as flip-chip bonding and cold welding.

Custom Solutions for High Throughput

Indium Sputtering Targets are available in custom shapes, sizes, and purities to suit your unique needs. Targets are available for the smallest prototyping chambers or full scale roll-to-roll equipment. In addition, cylindrical, rotatable sputtering targets increase material utilization and system throughput while reducing the total cost of ownership. The cylindrical, rotatable shape offers greater than 70% material utilization with less system downtime and high system throughput.



Superior Quality

- Capability to analyze and control impurities to the part per billion levels.
- Tightly controlled Fe, Ni, Zn, Cd, and Hg enable higher solar conversion efficiency.

Hg=10 ppm max*

Fe=25 ppm max*

Ni=25 ppm max*

Zn=25 ppm max*

- The targets are securely packed to avoid contamination and damage during shipment. Custom packaging is available on request.
- * Typical values. Higher purities are available upon request.

OVER→

Form No. 98709 R0

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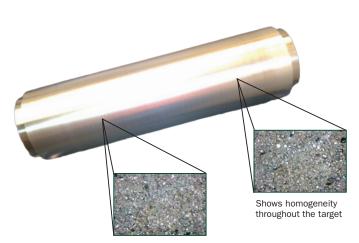




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Standard Shapes and Sizes



Rotatable Cylindrical:

Length: 304.8 - 3200mm (12 - 126 inches) Diameter: 76.2 - 152.4mm (3 - 6 inches) Thickness: 3.175 - 12.7mm (0.125 - 0.5 inches)



Round Planar:

Diameter: 50.38 - 381mm (2 - 15 inches) Thickness: 15mm (0.591 inches)



Rectangular Planar:

Length: up to 1700mm (67 inches) Width: up to 381mm (15 inches) Thickness: up to 12.7mm (0.5 inches)

Custom shapes and sizes available on request.

Technical and Customer Support

Indium Corporation sets the industry standard in providing online and onsite technical support to our customers worldwide. Our team of research scientists, application engineers, and technical support engineers work closely with customers to develop custom solutions to their technical problems and increase their productivity.

Material Safety Data Sheet

The MSDS for this product can be found online at http://www.indium.com/techlibrary/msds.php

This product data sheet is provided for general information only. It is not intended, and shall not be construed, to warrant or guarantee the performance of the

products described which are sold subject exclusively to written warranties and limitations thereon included in product packaging and invoices.

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