



ITC Intercircuit

VIA HOLE PLUGGING SERVICE

Plugging Service:

I.T.C. Intercircuit Production GmbH in Germany has been providing our „Via Hole Plugging“ as a new sector since 10 years now

Planar sealing of buried vias.
Hole Plugging is a key-process of SBU / Micro via – Technology. (Through Hole, Blind Hole, Buried Vias)

We have 3 models of our THP Series:

Advantages over conventional screen printing processes:

- ◆ Air-bubble-free hole filling
- ◆ Less residue after curing process by prior scraping of the panel in a special designed chamber.
- ◆ Highest Aspect Ratio is possible
- ◆ Highest flexibility
- ◆ Low paste consumption
- ◆ Filling of Blind/Buried Vias & Through holes in one step
- ◆ THP series can use all common paste types



THP 30 new (THP 10)



THP 35



THP XXL

All of our Plugging - Machines were designed and patented by I.T.C. Intercircuit

Overview:

- ➔ Absolutely air-bubble-free hole filling.
- ➔ Plugging process is done with vacuum.
- ➔ Selective plugging is possible
- ➔ Partial plugging is possible
- ➔ Reference holes are masked before process
- ➔ Plugging of via holes on external layers for late copper stacking
- ➔ Plugging of via holes on inner layers for the following RCC lamination
- ➔ Perfect planarity of the panel by using special grinding methods.
- ➔ Aspect Ratio: 1:40
- ➔ Smallest Hole: 0,1 after plating
- ➔ Largest Hole: 2mm dependent on AS 1:2
- ➔ Measurement of the copper layer thickness after grinding (random examination)

Board dimensions:

Minimum: **100 mm** x 150 mm
Maximum: 610mm x **762 mm**
Max XXL: **762mm** x 1.000mm



Taiyo THP-100DX1 USA-VF
Technical Datas on:

www.taiyo-america.com

Further pastes available on request



ITC Intercircuit Plugging Room

Grinding after the Plugging Process:

ITC PD 30“ Manual Grinding Machine:

Our **ITC PD 30“** removes excessive plugging paste from panels and inner layers after hole plugging process. A uniform plane surface is achieved.

A partial loop through of the copper layer is prevented by specified movement of linear guides.



2 Pieces PD 30 Grinding Machines

WISE FLATSTAR: Automatic Wet Grinder:

The **WISE Flatstar** removes the Plugging paste automatically in wet process.

A uniform plane surface is achieved.

You find the advantage of Flatstar in high throughput per hour.

Max. Board width: 650 mm

further information please visit the webpage:

www.wisecompany.it



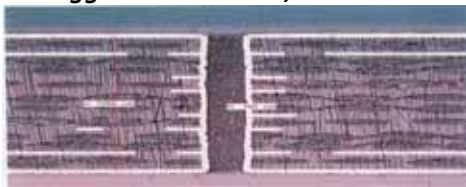
WISE Flatstar

ITC Hole Plugging Results:

Through & Blind holes filled on THP35



Plugged & Planerized, hole 0.2 mm



Plugged & Plated



We would plug a test order of 1 - 5 panels and afterwards submit you an individual price offer

Contact

I.T.C. Intercircuit Production GmbH

Burkhardtsdorf/Deutschland Tel: 037 21/39 92-0, Fax: 037 21/39 92-18

E-Mail: production@itc-intercircuit.de

Please ask for Mr. **Christian List**

Test our Service - come and visit us