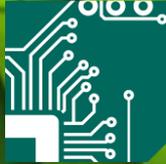


APL Hofstetter, the service  
provider for functional  
surfaces in the electronic  
and pcb industry



## APL Hofstetter PCB GmbH

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## APL Hofstetter PCB GmbH

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### APL Hofstetter PCB GmbH



APL Hofstetter PCB GmbH is a service company [job plater] specialized in immersion tin (iSn), iSn refresh and FinalClean (ENIG/ ENEPIG). The location of APL Hofstetter is in Lörrach (Germany). APL Hofstetter cooperates with all kind of printed circuit board (pcb) manufacturers, electronic manufacturing services (EMS)-industries, trading companies (national/ international), and worldwide original equipment manufacturer (OEM).

The target of APL Hofstetter is to create added value for the customers through smart surface coating and service. APL Hofstetter fulfills this high claim by producing high level solutions with latest production equipment as thinking and acting ahead.

Our customers already represent the "who's who" of the European electronic- and pcb-industry; increasingly, orders are also being placed by customers from the Far East.

The APL Hofstetter technology stands in harmony with social and political guidelines regarding quality and environmental protection. APL Hofstetter will not only live up to these superimposed guidelines through our quality- and environmental management; we will also proactively contribute to sustainable preservation and improvement of ground, air, and water resources.

## Products

### Immersion tin



The immersion tin (iSn) surface, is the result of nearly 20 years of chemical know-how. This procedure is a unique system and process engineering technology as well as reliable processing chemistry by ATOTECH.



External analysis confirm the best corrosion resistance in compare to all other available surface coatings on the market.

- Layer thickness:
  - 0.8  $\mu\text{m}$  up to max. 1.2  $\mu\text{m}$  (in exception)
  - APL Hofstetter will gladly help you to find the right layer thickness.
  
- Guaranteed storage period:
  - 12 months (1.0  $\mu\text{m}$  layer thickness;  $c_{pk} = 1.333$ )
  - 6 months (0.8  $\mu\text{m}$  layer thickness;  $c_{pk} = 1.333$ )
  
- Applications:
  - Soldering
  - Press-fit
  - iSn refresh
  - (Refresh can transform pcbs with soldering problems to a solderable condition.)

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### **FinalClean**



FinalClean is a process for cleaning and activating ENIG and ENEPIG pcb surfaces. The FinalClean process is used for surfaces which show bad solderability, it is also used for overlaid pcbs. The simplified process permits the treatment to be accomplished in horizontal mode of equipment.



After cleaning and drying, the panels will be repacked and delivered according to the customers requirement. A test report on ionogenic contamination before and after cleaning will be enclosed.

Using this special cleaning step following problems will be eliminated:

- high contamination values  $> 1.56 \text{ g/cm}^2$  NaCl-Equivalent (in dependence on IPC4552/3.6)
- bad solderability
- wetting problems
- negative bonding characteristics
- general surface contamination (e.g. rinsing residues from production)

### **Service**

At APL Hofstetter your pcbs are in excellent hands. APL Hofstetter will coat your pcbs with a solderable layer and offer our customers much more than "just" a surface. The standards of APL Hofstetter are individual solutions for his customers personal needs as competent advice and quick delivery. APL Hofstetter always takes great care to achieve an added value for the customers – through high quality products and the best possible service!

### **Stock concept**



The trend of having pcbs produced in low-wage countries is constant. APL Hofstetter can see an increase number of faulty solderable pcbs, especially produced in the Far East. Those pcbs do not fulfill the required mounting and soldering standards which are demanded by the electronics branch.

At this point APL Hofstetter trusts in his know-how. Once the pcbs have been delivered at APL Hofstetter, these will be stored before processing. It is possible to store pcbs with a copper surface and also already coated pcbs. The coating must be immersion tin, electroless nickel/ immersion gold (ENIG) or electroless nickel/ electroless palladium/ immersion gold (ENEPIG). Already coated pcbs can be reworked at APL Hofstetter to bring the boards back into an optimal solderable condition. Immersion tin boards can be refresht (tin on tin), ENIG or ENEPIG pcbs can be treated with the FinalClean process to clean and activate the surface finish for another following solder step.

Thereby a safety buffer occurs, which procures a convenience of a fast response time. APL Hofstetter ensures a high quality soldering surface on the assembly lines "just in time".

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### **24h service**



APL Hofstetter keeps short-term production capacities free for his customers at all times in order to be able to guarantee the usual high quality standard. If it's urgent and the order is registered 24 hours beforehand, APL Hofstetter will send the processed goods back to the client on the same day as received. APL Hofstetter offers this service for orders of up to 100 pcbs of maximum 610 mm x 530 mm for the iSn-, iSn refresh- and FinalClean-process.

The forwarding agents and couriers have priority and can take the processed goods back directly after a short waiting period. And that's before the engine has cooled down.

### **Consulting**



Our customers are and will be market leaders because they have more competence and more knowledge. More knowledge is always the result of questions and answers. Next to the service of surface coating and cleaning pcbs APL Hofstetter also advise pcb producers and EMS/ OEM on clearances and qualifications. If you have any questions about orders or in case of damage APL Hofstetter will give you detailed information on the technical possibilities.

APL Hofstetter is looking forward to advise you of outsourcing of your own surface processes.

### **Quality assurance**



APL Hofstetter PCB GmbH is certified according to ISO 9001:2015 and ISO 14001:2015.

The main pillars of constant high quality are the result of many individual measures. APL Hofstetter continuously monitor the sequences through analytic supervision of the process chemistry. The analysis of the process chemistry is measured and tested at the internal laboratory, as well as using external certified centers. In order to keep the error rate as low as possible the corresponding final reports (x-ray layer thickness measurement, ionogenic contamination, AQL testing chart, etc.) for the pcbs will be send with the outgoing goods. In relation to our annual throughput the complaints rate decreased in the last years to much less than 0.01%.

### **APL Hofstetter and the environment**



APL Hofstetter wants to keep the balance right in terms of protection of the environment and place a great deal of value on preserving resources.

In order to fulfill the own high requirements APL Hofstetter has developed a comprehensive environment management system. This corresponds to the requirements of the international standard 14001:2015; and also conform to the EU Directives 2002/95/EC (RoHS), 2002/96/EC (WEEE), 2003/11/EC, and 2000/53/EC. Energy efficiency through intelligent building and plant infrastructure so as an entirely biological sewage cleaning system based on anaerobic-anoxic micro organisms are just some examples of understanding environmental and resource protection.

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In recognition of activities APL Hofstetter received an award in the framework of the "Umweltpreis für Unternehmen 2008" [Environment Award for Companies 2008] from the Baden Württemberg Ministry of the Environment. The company is able to achieve placement in the TOP TEN of the category "service provider". APL Hofstetter received an award from the State Environmental Minister Tanja Gönner. Environmental protection – this is something what people just talk about. As a company specifically depending on these resources. APL Hofstetter is environmentally aware of the responsibility and act on it respectively.

### People at APL Hofstetter



These are the people working for our customers day by day. Get in contact with the employee who is responsible for your concern!

**Dipl. Ing. (FH) Andreas Stütz**  
CEO

phone: +41 41 850 50 50  
E-mail: a.stuetz@hofstetter-pcb.ch

**Dirk Kaschel**  
Production Manager  
deputy CEO  
Quality  
Documentation

phone: +49 (0)7621 157935 - 60  
E-mail: d.kaschel@hofstetter-pcb.de

**Dennis Hoffmann**  
Administration  
*Customer service*  
Communication

phone: +49 (0)7621 157935 - 40  
E-mail: bestellung@hofstetter-pcb.de

**Andrea Keller**  
Administration  
Accounting

phone: +49 (0)7621 157935 - 22  
E-mail: a.keller@hofstetter-pcb.de

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### Further information



For further information, please contact Mr. Dirk Kaschel.

**APL Hofstetter PCB GmbH**

Mr. Dirk Kaschel  
Im Entenbad 17  
79541 Lörrach - Hauingen  
Germany

Phone.: +49 (0) 7621 / 157935 - 60

Fax.: +49 (0) 7621 / 157935 - 99

E-mail: [d.kaschel@hofstetter-pcb.de](mailto:d.kaschel@hofstetter-pcb.de)

web: [www.hofstetter-pcb.de](http://www.hofstetter-pcb.de)