



IDFL Calendar

- 23 – 25 September EDFA Meetings
- 10 – 12 November Down Festival in Lu'an
- 07 – 10 December China International Down & Feather Exposition in Xiaoshan – Market Reports, Seminars, Tours of IDFL China Office

For more information about any of the above events please contact info@idfl.com for more details.

Durable Water Repellency Testing

IDFL has been doing research on all kinds of down treatments for years. IDFL has been researching and testing the following:

- DWR
- Antimicrobial treatments
- Odor masking treatments
- Treatments to increase fill power
- Optical brighteners and other finishing agents

IDFL has been testing many different DWR treatments for outdoor brands, down processors, manufacturers and retailers. IDFL has a comprehensive testing package for DWR testing. Not only does IDFL test the down & feathers for the water repellency claims, but IDFL also does a complete testing package to make sure that the other performance factors of down are not sacrificed in the effort to increase water repellency.

IDFL has developed its own testing standards for testing DWR treatments, but welcomes down processors, brands and others in the industry to help in establishing industry wide testing standards for these treatments.

IDFL DWR Testing

There are various types of water repellency treatments that have different effects on the down. DWR testing is performed in order to inspect the specific claims and qualities of a water repellency treatment and evaluate the effectiveness of the treatment.

IDFL LABORATORY AND INSTITUTE

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IDFL 日历

- 9月23 – 25 EDFA 会议
- 11月10 – 12 六安羽绒节
- 12月07 – 10 中国萧山国际羽绒博览会 – 市场报告，研讨会以及 IDFL 中国办公室参观

更多活动详情请联系 info@idfl.com.

羽绒防水测试

IDFL 多年来一直在进行各种羽绒处理方法的研究。以下是我们进行的研究项目：

- 羽绒防水性
- 抗菌处理
- 除异味处理
- 提高蓬松度处理
- 荧光增白剂以及其他加工制剂

IDFL 已经为众多户外品牌，羽绒加工商，制造商以及经销商检测羽绒防水性能。IDFL 不仅检测厂家声明的羽绒防水性能而且还进行一系列研究，检测增加羽绒防水性能的同时是否会损害羽绒其它性能。

IDFL 制定了自己的羽绒防水处理的标准。我们同时欢迎羽绒加工商，户外品牌及行业其它同僚共同协作制定行业标准。

IDFL 羽绒防水性能测试

羽绒防水处理方式多种多样，防水效果也各有不同。防水测试主要检测防水性能是否符合要求以及防水处理的质量和效果。



Does the treatment affect common characteristics of down such as content or fill power?

- **Standard Core Tests:** The following tests are performed on both treated and untreated samples in order to understand the effects of the treatment:

- Content Analysis
- Species Identification
- Moisture immediately upon arrival
- Down cluster size
- Fill Power
- Fat and Oil
- Oxygen Number
- Turbidity
- Odor

Does the treatment change the way the down looks or feels?

- **Physical Comparison:** provides a comparison between treated and untreated down samples.

- Appearance
- Feel
- Odor
- Additional Observations



防水处理对羽绒常规特性如含绒量，蓬松度等是否有影响？

- **标准核心检测:** 我们对处理前和处理后的样品做以下检测项目以此了解处理对羽绒的影响：

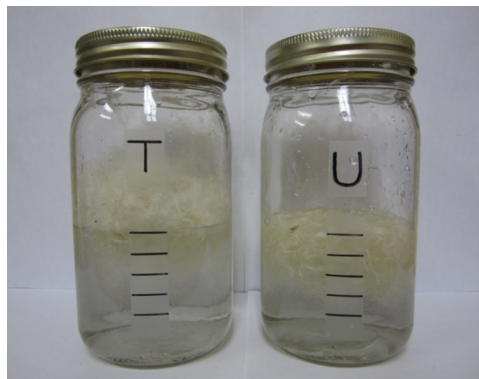
- 成分分析
- 种类鉴定
- 即时含水量
- 朵绒大小
- 蓬松度
- 残脂率
- 好氧指数
- 浊度
- 气味

防水处理是否改变羽绒外观和手感？

- **物理对比:** 比对处理前和处理后的样品：

- 外观
- 手感
- 气味
- 其它观测





How well does the treatment repel water?

- **Hydrophobic Shake Test:** The down sample is machine shaken in a container of water for timed increments until *one* of the samples reaches complete saturation in order to demonstrate the improvement of a given treatment.

The down sample is machine shaken in a container of water for timed increments until *both* samples reach complete saturation. This provides a time difference of how much longer the treated down lasts in wet conditions compared to the untreated down.

What are some of the water-resistant effects of the treatment?

- **Added Water Weight Test:** The down sample is machine shaken for half the time it takes the untreated down to become completely saturated in order to see how much water weight is added at the moment the sample starts breaking down in the presence of water.

How much water absorption does the treatment reduce?

- **Water Absorption (EN 13543):** The sample is weighed before and after completely submerging the down in water for a set amount of time in order to calculate the percentage of water weight that the down absorbs.



防水处理的性能如何?

- **斥水性震荡测试:** 将装有羽绒样品的盛水容器放在机器上震动并计算该样品达到完全湿透状态所需时间。以此来判断样品的防水处理效果。

将装有羽绒样品的盛水容器中放在机器上震动并分别计算两个样品达到完全湿透状态所需时间。比较用时差别以判断处理过的样品比未处理样品在持续防水的时间上长多少。

防水处理都有哪些性能测试?

- **增加水重量测试:** 羽绒样品在机器中震荡到使未处理样品湿透时间的一半。并检测羽绒分散到水中时所增加的水的重量。羽绒样品在机器中进行震荡,以检测样品浸入水中以后,水的重量变化。震荡时间为样品从未处理到完全浸透所需时间的一半。

防水处理可以降低多少羽绒吸水性?

- **吸水率 (EN 13543):** 对测试前样品和经过一定时间完全湿透后的样品分别称重以计算羽绒吸收水重量百分比。

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Page 3
14 August 2012



Will the treatment come off after washing?

- Laundry Durability Test:

- Fill Power after 5 and 10 washes- Compares the fill power results before and after washing.
- DWR tests after washing- DWR tests are performed again after washing the sample to see how the treatment reacts to the washing process.

For More Information

IDFL welcomes those interested in more information about DWR testing to visit its lab to see the testing being done. IDFL has prepared a presentation about the testing that can be presented in a webinar. Please contact info@idfl.com to schedule a lab tour or webinar.

防水处理可以被洗掉吗?

- 耐洗测试:

- 经过水洗 5 次和 10 次后的蓬松度- 对比水洗前后蓬松度结果。
- 洗后防水性测试- 样品在水洗后再次进行防水性测试以此判断水洗过程对防水处理的影响。

更多信息

IDFL 欢迎对防水处理感兴趣的客户参观我们实验室，观看实际检测。IDFL 已准备好关于防水测试演示稿件，可通过网络会议形式呈现。请联系 info@idfl.com 约定实验室参观或网络会议的时间。

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Page 4
14 August 2012