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| **Demo of how to check for proper pectin removal** | **如何检查胶质是否已妥善去除的演示** |
| Demonstration of how simple it is to perform a pectin removal test in less than 15 minutes… | 演示去除胶质有多么轻松，整个试验不到 15 分钟… |
| Enzymatic scouring is a pre-treatment of cotton fabric to enable an even dyeing result | 酶精练是一种棉织物的前道处理工艺，可以达到均匀的染色效果 |
| The result of the pre-treatment is invisible to the naked eye, so how do you know if it works? | 前道处理的效果裸眼是无法看到的，所以怎样才能知道它的作用呢？ |
| A simple test can give you the answer… | 通过一个简单的试验就能给出答案… |
| First a bit of science | 首先来一点科普知识 |
| A wax-free fabric has the best and most even dye uptake | 不含蜡的织物染色均匀度最好 |
| Cotton cell walls contain pectin that acts like a glue, binding the wax to the fiber | 棉细胞壁内含有胶质，它的作用类似胶水，会将蜡与纤维结合在一起 |
| Enzymes break down pectin, which releases the wax | 酶可以破坏胶质，将蜡脱去 |
| Here is a method to test if the pectin is removed efficiently | 这里有一个方法可以检验胶质是否已有效去除 |
| We perform the test on 4 different samples | 我们对 4 种不同的样品进行试验 |
| Untreated fabric | 未经处理的织物 |
| Treated with Novozymes’ scouring enzymes | 用 Novozymes 的精练酶处理 |
| Treated with wetting agent | 用润湿剂处理 |
| Alkaline boiling incl. wetting agent | 沸腾碱水处理（含润湿剂） |
| Reagent (A) | 试剂 (A) |
| Soak the samples for 10 minutes in a reagent (A) which will be absorbed by the pectin on fabric | 将样品在试剂 (A) 中浸泡 10 分钟，使之被织物上的胶质充分吸收 |
| Take the samples out of reagent (A) and rinse them thoroughly in water | 将样品从试剂 (A) 中取出，然后用水彻底冲洗 |
| Dry in paper towels | 用纸巾中吸干 |
| Reagent (B) | 试剂 (B) |
| Place the samples in a container with a reagent (B) which reacts with the absorbed reagent (A) | 将样品放入含试剂 (B) 的容器中，容器中的试剂 (B) 已经与吸收的试剂 (A) 发生反应 |
| Take the samples out of reagent (B) and rinse them thoroughly in water and dry them in paper towels | 将样品从试剂 (B) 中取出，然后用水彻底冲洗，并用纸巾中吸干 |
| Read off the result within 1 minute – the effect will fade hereafter | 在 1 分钟内读取结果 – 之后效果就会减弱 |
| The intensity of brown reflects how much residual pectin is left B: Treat with Novozymes’ souring enzymes D: Alkaline boiling incl. wetting agent | 棕色的强度表示有多少胶质残留 B:用 Novozymes 的精练酶处理 D:沸腾碱水处理（含润湿剂） |
| The colors show that the sample treated with enzymes has the **same** or **better** pectin removal as the sample treated with the alkaline boil | 经过酶处理的样品所显示的颜色与沸腾碱水处理过的样品相比，其除胶效果**相同**或**更好** |
| **Regional-launch-of-bioprep-fusion-for-the-textile-1** | **Regional-launch-of-bioprep-fusion-for-the-textile-1** |
| BioPrep Fusion for enzymatic scouring of cotton knits | 棉织厂的 BioPrep Fusion 酶精练 |
| BioPrep Fusion | BioPrep Fusion |
| 3 Baths reduced to 1- and at lower temperatures  Temperature  Conventional scouring  Time  Souring with enzymes | 3 道水浴工艺被减少至 1 道，水温更低  温度  传统  时间  酶精练 |
| Significant drop in water consumption – up to 67%  Water use m3  Alkaline scouring +bleach  BioPrep Fusion  Reduce chemical heavy effluent | 水耗显著减少 – 高达 67%  用水量 m3  碱精练 + 漂白  BioPrep Fusion  减少化学废水 |
| Save half the time and utilize capacity  Hours  Alkaline scouring +bleach  BioPrep Fusion | 时间节约一半，提高产能利用率  小时  碱精练 + 漂白  BioPrep Fusion |
| More than 50% of savings in steam and electricity  Steam/ton  Alkaline scouring +bleach  BioPrep Fusion  Electricity, Kwh/ton  An optimal composition in one complete product  Instant absorbency  Even dyeing  Convenient 1 bath process  Sustainability and cost savings  Wider recipe use | 蒸汽和电力节约 50% 以上  蒸汽/吨  碱精练 + 漂白  BioPrep Fusion  用电，千瓦时/吨  理想的全合一产品  迅速吸收  染色均匀  方便的 1 次水浴工艺  可持续且节约成本  配方使用更广泛 |
| Are you ready to give BioPrep Fusion a try? | 您愿意试试 BioPrep Fusion 吗？ |