

Jilin Realcon Contact Lens Co.,Ltd. is the one and only production base of colored contact lens in northeastern three provinces, located in national pioneer park of Jilin hi-tech zone. Our company belongs to sterile third-type medical device manufacturing enterprise with the possession of autonomous center of research and development. We are possessed with a full set of top-ranking Korean automatic research and development team of producing contact lens equipment as well as complete production technology. Our company is established in 2010, with 6,600,000 RMB registered fund and 5000 square meter of floor space, with the total staffs of approximately 140, among which 60 staffs with the college degree or above. In 2010, we are certified the production enterprise license of third-type medical device. In 2011 and 2012, we are certified two times the medical device GMP certificate, while in the end of 2013, our company gains the invention patent of internal coating printing and dyeing technique.

东北三省唯一一家彩色隐形眼镜生产基地

位于吉林高新区国家创业园区，本公司属于无菌三类医疗器械生产企业，东北三省唯一一家正规生产彩色隐形眼镜的生产基地有自主研发中心，拥有一流的韩国自动化全套生产隐形眼镜设备的研发团队和完整的生产技术。本公司成立于 2010 年，注册资金 660 万，占地面积约 5000 平方米，共有员工约 140 人，其中大专以上学历人员约 60 人，2010 年核发三类医疗器械生产企业许可证。2011 年-2012 年两次核发无菌医疗企业生产质量管理规范检查通知书（医疗器械 GMP 证书）2013 年末取得内面覆膜印染技术工艺的发明专利。

Our production technique introduces Korean advanced mixed process of half-molding and half-turning. The main advantages are the features such as flexible operation, low cost, long life length of lens, etc., which is extremely fit to the production of colored contact lens. The now available main equipments of our company are 60 production devices, 28 inspection devices and the majority is imported device.

生产工艺引进韩国先进的半模压半车削混合工艺，主要优点为操作灵活性，成本低，镜片使用寿命长等特点，极为适合彩色隐形眼镜的生产。我公司现有主要设备为生产设备 60 台，检验设备 28 台，大多数为进口设备。

GMP standard and 6s management

The production scene performs GMP standard and 6s management as well as conducts a

sectional-type cyclic inspection to the production process, guarantee the inspection to each lens of every process from the preparation of raw material to the final output, every process has been inspected and traceable. The packaging of contact lens is operated inside the ten thousand grade clean area. Complete quality system is the strong guarantee to the health of consumer.

GMP 规范和 6S 管理

生产现场实行 GMP 规范管理和 6S 的现场管理对生产过程进行分段式循环检测, 保障每个镜片的生产从原材料准备到最后出厂的每个过程都有检测, 每个过程的检测都有衔接, 都可追溯, 隐形眼镜的分装也是在万级洁净区里操作, 完善的质量体系是对消费者健康的有力保障。

Five superiorities

1. Our colored contact lens are the most strong one among the domestic production and technology capability.
2. We are the sole domestic company with a large-scale capability of producing internal-coating technique of colored contact lens.
3. We are the first company that has passed the assessment of sterile medical device quality system in Jilin province.
4. We are the single third-type production enterprise of sterile medical device in Jilin city.
5. We are the company that introduces the most diversified and latest models of contact lens among the domestic fields.

五大优势

- 1、我们的彩色隐形眼镜是全国生产技术能力最强的。
- 2、我们是国内目前唯一一家具备大规模生产内面覆膜彩色隐形眼镜能力的公司。
- 3、我们是全省第一家通过无菌医疗器械质量体系考核的公司。
- 4、我们是吉林市唯一的 3 类无菌医疗器械生产企业。
- 5、我们是全国行业内推出最多新款彩色隐形眼镜的公司

Our company adopts the internal coating technique, which has solved color fading problem of colored contact lens, making use of high-polymer material thin film covered on the color layer and making the pigment completely not touch the cornea, which effectively escapes from the cornea dyeing. It provides the consumers with inexpensive, more safe as well as comfortable

product. In addition, we apply for national patent in 2012.

我们公司的内面覆膜技术解决了彩色隐形眼镜的褪色问题，利用高分子材料薄膜覆盖颜料层，使染料完全接触不到角膜，有效避免了角膜染色的发生，为消费者提供了物美价廉的、更安全舒适的产品。并且于 2012 年申报了国家专利。

The core point of “internal coating technique” is how to form this “film” with good compatibility and stability to the contact lens. The main content that we have been researching and developing is to improve lens’ tinting method and the material preparation process of this layer of “film”.

“内面覆膜”着色技术的核心重点是如何形成能够与隐形眼镜镜片材料相容性较好的且稳定性也较好的这层“膜”。我们研究开发的主要内容是改善镜片着色方式和这层“膜”的材料制备工艺。

The key of technology

1. Our technique resolves the problem that the lens are directly printed and dyed as well as the problem of color fading problem. Internal and external surface is smooth, not easily precipitated protein, with good oxygen permeability, comfortable wear effect as well as healthy and safe.
2. Under the premise of cast molding and turning mixed technique, in combination with the previous mature printing and dyeing internal coating to produce colored contact lens, which resolves the shortcomings of traditional “sandwich” coloring process, which are high-cost, low-production efficiency as well as unsteady quality. For the moment, our company has already improved the production rate of internal coating coloring technique up to 60-75%.

技术关键

- 1.解决了镜片直接印染易褪色问题。内外表面光滑、不易蛋白质沉淀、透气性好、佩戴舒适、健康安全。
- 2 在模压和车削工艺的混合工艺前提下，结合此成熟的内覆膜印染方式生产彩色隐形眼镜解决传统“三明治”着色工艺的成本高、生产效率低、质量不稳定的缺点，目前我公司已将内面覆膜着色技术的生产成品率升高到 60-75%。

The innovation of technology

To perform the coating on the terrace die of contact lens, then print and dye the pigment with the printing machine, form a layer of organic thin film as well as pigmentary layer after the stage of intensifying temperature and fixing color. The organic thin film blocks very well the contacts between pigmentary layer and the eyes as well as resolves the problem such as colour fading problem of pigmentary layer and weakness of comfort degree of wearing contact lens, etc.

技术创新

在隐形眼镜凸模上进行覆膜，然后再利用印色机印染上颜料，经加温固色阶段后形成一层有机薄膜及色素层，有机薄膜很好的阻断色素层和眼睛的接触，解决了由于色素层褪色问题及佩戴舒适度不强等问题。

The innovation of material

This layer of “film” prepared with the printing and dyeing technique of internal coating needs to be possessed with the following several features:

1. With favorable hydrophilicity, expansivity is similar to the lens material
2. With favorable biocompatibility, cause no stimulant and allergic reaction to the eyes
3. With steady and solid physical property, cause no easy fall off
4. With nonpolar material, it doesn't easily absorb protein
5. With favorable optical effect as well as oxygen permeability property

材料创新：

内覆膜印染工艺配制的这层“膜”需要具备以下几个特征：

- 1.有良好的亲水性，膨胀率和镜片材料类似
- 2.具有良好的生物相容性，不会引起眼刺激和过敏反应
- 3.物理性能稳定牢固、不易脱落
- 4.非极性材料，不易吸附蛋白质
- 5.良好的光学效果和氧通过性能