2016年6月　第2期　总第101期 The 2nd Issue June 2016 Issue 101

YOFO TODAY

今日長飛

双月刊

目录 Contents

2016 年 06 月 总第 101 期
The 2nd Issue June 2016 Total Issue 101

《今日长飞》

跨越

《今日长飞》自 1991 年创刊以来，至今已走过了 100 期。从公司创立初期的厂房建设、生产探索，到如今蓄势而发的全球布局、技术创新，《今日长飞》见证了公司发展壮大的每一步，搭建了公司内部沟通的桥梁，编织了长飞价值体系传播的纽带，对传播长飞的企业文化起到了重要作用。

2016 年是长飞新的五年期发展的第一年，也是公司跨越式发展的第一年。作为全球领先的光纤光缆企业，致力于实现“全球第一，行业领袖”的战略目标，长飞借助上市带来的活力，秉持迎接新挑战的态度和精神，在全产业链、多工艺路线、国际化、相关多元化以及智能制造上积极布局，业绩稳步增长，布局成果初显。长飞已由一家立足中国的合资企业成长为实力强大的跨国企业集团，公司内刊将不再只是服务于长飞本部，而是辐射到各关联公司，成为联络全球长飞人的纽带。正是基于这样的背景和实际需求，全新改版的《今日长飞》应运而生，迈出了与公司跨越发展同步的步伐。

一本好的企业内刊，既是展示员工风采、沟通企业信息的平台，也是展示公司形象、传播企业文化的载体。《今日长飞》自创刊以来，一直以传播企业文化为己任，服务于企业发展，此次改版后要继续发挥内刊功能，力争成为所有长飞人的精神家园，成为助力长飞实现战略目标的亮丽名片。希望各位长飞人积极投稿，分享长飞的欢乐与喜悦，也希望《今日长飞》更好地汇集职工智慧、传播企业文化、彰显品牌价值，为实现长飞“全球第一，行业领袖”的战略目标继续努力奋斗！

为了更好前行

Striding, for Better Moving Ahead

"YOFC TODAY" has been issued for 100 times since its first publication in 1991. "YOFC TODAY" has witnessed the development and expansion of the company step by step, from plant construction and production exploration at the early stage to global distribution and technological innovation now, accumulating strength for a take-off. It also builds a bridge of communication within the company and knits YOFC's link for value system spreading, which plays important role in spreading the enterprise culture of YOFC.

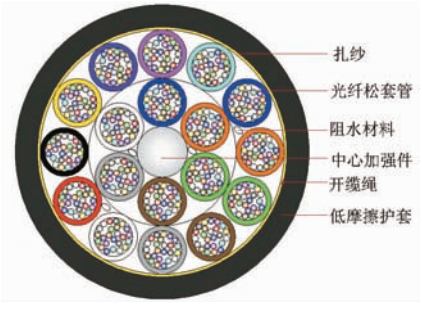
2016 is the first year of YOFC's new five-year development, which is also the first year for the company's leapfrog development. As a global leading optical fiber and cable manufacturing company, committing to achieve the strategic goal of "Be top one in the world, be the industry leader" and adhering to the attitude and spirit for meeting the new challenges, YOFC carries out overall arrangement of the whole industry chain, multi process lines, internationalization, related diversification and intelligent manufacturing actively with the help of vitality brought by listing. The performance increases steadily and the arrangement work shows primary results. YOFC has grown to a powerful multinational group from a joint venture rooted in China. Company internal journal will no longer just serve YOFC, but radiate to the affiliated companies, which becomes the link for contacting YOFC employees all over the world. Based on such background and actual demand, "YOFC TODAY" of total new revision emerges as required, keeping pace with the leapfrog development of the company.

A good journal of the enterprise is not only a platform for showing staff style and enterprise information communication, but also a carrier for presenting the company's image and culture. Since its first publication, "YOFC TODAY" takes spreading the enterprise culture as its mission and serves for the enterprise development. After this reversion, "YOFC" will continue to exert the function of a journal of the enterprise, striving to become the spiritual home of all YOFC employees and shining name card for helping YOFC realize its strategic objectives. Hope each YOFC employee contribute articles actively, sharing YOFC's joy and happiness; hope "YOFC TODAY" bring together the wisdom of employees, spread enterprise culture and highlight brand value in a better way, continuing to work hard to achieve the strategic goal of "Be top one in the world, be the industry leader"!

Zhuang Dan

长飞公司成功开发出国内最大芯数气吹微型光缆

研发中心　卢星星



5 月初，长飞公司根据海外客户提出的需求，采用普通单模光纤成功开发出目前国内最大芯数的气吹微缆产品。该产品的成功开发，标志着长飞公司气吹微缆技术已达到国际领先水平。

为满足客户需求，长飞公司光缆研发团队与国际销售人员密切配合，通过与客户的深入沟通，成功开发出目前国内最大芯数的气吹微缆产品，并通过各项性能测试最终销售至海外高端市场。该产品在一根直径仅 11mm 的光缆中容纳了 432 根光纤，光缆中光纤密度高达 4.4F/mm^2，可以很好地应用于 16/13.5mm 管道中进行气吹敷设。

随着全球通信业务对网络带宽的要求越来越高，光纤通信作为速度最快、传输质量最好的通信方式而被广泛使用。然而在网络建设上，随着管道资源的紧张，用户对管道的空间利用率、施工效率和维护的便利性等提出了更高的要求，气吹微管微缆技术作为一种成熟的光缆网络敷设技术，为解决运营商面临的管道资源瓶颈问题提供了良好的解决方案，在海外市场被广泛使用。

作为光纤光缆行业的龙头，长飞公司秉承“自主创新，对外合作”的理念，始终坚持以人才、机制、观念作为公司创新文化的重要元素，不断推进光纤光缆的技术创新，并积极开拓新的市场，持续保持核心技术的领先。

YOFC Successfully Developed Microduct Air Blowing Cable with the Largest Fiber Count in China.

R & D Center Lu Xingxing

At the beginning of May, YOFC applied the common single mode fiber to successfully developed the microduct air blowing cable with the largest fiber count in China at present according to the demands of overseas customers. The successful development of the product marked that the micro cable technology of YOFC Company has reached the international leading level.

In order to satisfy the customer demands, the optical cable R&D team of YOFC coordinated with the international salesmen closely and carried out in-depth communication with customers, as a result, which has successfully developed the microduct air blowing cable with the largest fiber count in China, what's more, the foregoing product has been sold to the overseas high-end market after passing through the performance tests. Considering that the product contained 432 optical fibers in one optical cable with diameter of 11mm, it can be favorably applied to 16/13.5mm microduct for air-blowing installation and the optical fiber density in the cable can reach up to 4.4F/mm^2.

Optical fiber communication is widely used as the fastest, the best transmission quality of communication along with the increasingly high requirements for the network bandwidth which are proposed by the global communication business, In terms of network construction, users are putting forward higher requirements for space utilization rate, construction efficiency and maintenance convenience along with the tightness of ducts resources. As a kind of matured optical cable network installation technology, the air-blowing microduct and micro cable technology has provided favorable solution to solve the duct resource bottleneck problems for telecom operators, as a result, it is widely applied on the overseas market.

As the leading enterprise in the optical fiber and cable industry, YOFC always adheres to the "Self-independent Innovation and Foreign Cooperation" concept, insists on taking talent, mechanism and concept as the important factors for the innovative culture, as a result, it can continuously promote the technological innovation about optical fiber and cable, actively exploit new market and continuously maintain the leading position of core technology.

长飞公司喜获两项
国际质量大奖

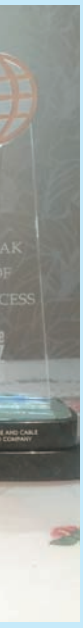
运营管理中心　田巧丽

继荣获武汉市市长质量奖、湖北省长江质量奖、中国质量奖提名奖等多项国内质量荣誉，长飞公司又传捷报。2016年5月，长飞公司相继参加了由BID(Business Initiative Directions)和WORLDB (WorldConfederation of Business) 组织的全球企业国际质量会议，并分别获得年度ISLQ——International Star for Leadership in Quality(质量领导力国际之星)和年度The BIZZ EUROPE——PEAK OF SUCCESS(成功之峰)两项国际质量大奖。

5月初，49个国家代表参加了在巴黎举行的BID公司年会，各国代表在会上进行了广泛的交流。BID公司是国际著名质量评价机构，在过去的三十年里，该机构致力于在全球范围内推动质量及其相关方面的活动，举办了许多交流会议及培训。

5月中旬，来自全球的会员汇聚摩纳哥WORLDCOB公司年会。WORLDCOB公司总部设在美国，在全球有约3000名会员单位，每年在各大洲召开质量年会，为世界各地的公司提供一个广泛交流的平台，为质量管理方面的经验交流和业务往来提供便利条件。

作为全球领先的光纤光缆企业，成立20多年来，长飞公司一直以“客户至上，质量先行，以人为本，创新发展”为经营理念，注重技术和产品创新，同时注重制度、市场、组织、管理等创新，推动大质量管理从战略策划到实施落地。长飞公司运营管理中心总经理助理钮国辉代表公司出席了颁奖典礼，并在颁奖仪式上致辞，向各国代表进一步介绍了公司及其发展愿景。会议期间，长飞公司同各国的代表进行了广泛的接触和深入的沟通，介绍了公司的国际化发展战略，同时也为长飞品牌走向世界宣传造势。



YOFC Won Two International Major Quality Awards

Operation Management Center Tian Qiaoli

YOFC made another success after winning Wuhan Mayor Quality Award, Changjiang Quality Award of Hubei Province, award nomination of China Quality Award and many other domestic honors on quality.In May 2016, successively, YOFC attended International Quality Conference of Global Enterprises co-organized by BID (Business Initiative Directions) and WORLDCOB (World Confederation of Business) and won two international major quality awards, namely ISLQ (International Star for Leadership in Quality) of the Year and The BIZZ EUROPE (PEAK OF SUCCESS) of the Year.

In early May, national representatives from 49 countries attended BID Annual Meeting held in Paris and had extensive exchanges with each other at the meeting.Over the past thirty years, as an internationally famous quality assessment agency, BID has been devoted to promoting quality and relevant activities globally and organized many exchange meetings and training.

In the middle of May, members from all over the world gathered at WORLDCOB Annual Meeting in Monaco. Headquartered in the United States, WORLDCOB has a membership of 3,000 units globally and it holds annual quality meetings in every continent every year, providing companies around the world with a platform for extensive exchanges and with convenient conditions for experience exchanges and business contacts on quality management.

Since its establishment over 20 years ago, YOFC has always taken the concept of "being customer oriented, taking quality first, caring for people, and developing with innovations" as its operation principle, paid attention to technology and product innovation as well as innovation on system, market, organization, management and so forth, and facilitated the transfer of great quality management from strategic planning to practical implementation.NiuGuohui, GM Assistant of Operation and Management Center of YOFC, attended the award ceremony on behalf of the company and addressed the award ceremony to further introduce YOFC and its development vision to the representatives of countries.During the meeting, YOFC had extensive contacts and in-depth communication with representatives of countries, introduced the company's international development strategy and also made great efforts to promote the brand of YOFC for reaching out to the outside world.

长飞公司荣获斯里兰卡电信 i-srilanka 项目优秀供应商奖

YOFC Won Excellent Supplier Award of Sri Lanka Telecommunication i-srilanka Project

销售中心 李书海 /Sales Center Li Shuhai

4 月初，在斯里兰卡首都科伦坡，斯里兰卡电信举行了 i-srilanka 项目完成庆典。长飞公司荣获斯里兰卡电信 i-srilanka 项目优秀供应商奖。

斯里兰卡电信是斯里兰卡的国家电信运营商，早在 2005 年，斯里兰卡电信就开始了其传统网络向下一代网络 (NGN)的升级 。2011 年，为加速这一项目的升级发展，斯里兰卡电信启动了 i-srilanka 项目，此项目旨在让斯里兰卡享受到国际标准的高速不间断网络连接服务，并保证全境 90%的用户可以体验到前所未有的 20M 宽带网络服务。经过近 4 年的投入与发展，斯里兰卡已增加了 4500 个网络接入点 。2015 年 12 月，斯里兰卡电信宣布完成了 i-srilanka 项目所有阶段。

长飞公司对于核心的光纤和光缆产品始终追求精益求精，获得全球十大电信运营商的认证和青睐，在竞争激烈的国际市场上占有重要席位。长飞公司以其优质的光缆产品占据斯里兰卡 60%以上的市场份额，并已连续 7 年成为斯里兰卡电信最大的光缆供应商。

In early April, Sri Lanka Telecommunication held i-srilanka project completion celebration in capital of Sri Lanka- Colombo. YOFC won the Excellent Supplier Award of Sri Lanka Telecommunication i-srilanka Project.

Sri Lanka Telecommunication is the national telecommunication operator of Sri Lanka. In 2005, Sri Lanka Telecommunication began its upgrading to next generation network (NGN) from traditional network. In 2011, in order to accelerate the upgrading development of this project, Sri Lanka Telecommunication started i-srilanka project. This project aims at enabling Sri Lanka people to enjoy high-speed uninterrupted network connection service with international standards, and guarantee 90% users of the whole country to experience the unprecedented 20M broadband network service. With nearly 4 years' input and development, Sri Lanka has increased 4500 network access point. In December, 2015, Sri Lanka announced that it had completed all stages of i-srilanka projects.

YOFC always keeps improving for the core optical fibers and cable products and obtains the certification and good graces of global top 10 telecommunication operators, and occupies an important position on competitive international market. YOFC occupies over 60% market share in Sri Lanka with its high quality optical cable products, and has become the biggest optical cable supplier in Sri Lanka continuously for 7 years.

质量先行　行业领军

长飞公司第三届光缆技术质量交流会顺利召开

Taking Quality First and Leading the Industry

The third exchange meeting of YOFC for optical cable technology and quality was held successfully

■ 长飞四川公司　曾容 /YOFC（Sichuan）　Zeng Rong

2016 年长飞公司第三届光缆技术质量交流会合影

2016 年 6 月 2 日，长飞公司第三届光缆技术质量交流会在长飞四川公司召开。会议由长飞公司制造中心副总经理兼光缆部经理许定昉主持，长飞公司副总裁兼运营中心总经理闫长鹃、制造中心总经理江志康、研发中心副总经理兼光缆技术总监熊壮、各公司负责人和技术骨干共 35 人参加了会议。

首先，闫总、江总强调了长飞公司对光缆技术研发、质量管理和成本控制的要求，长飞四川公司总经理肖毅对各位领导、技术骨干的到来表示热烈的欢迎，希望大家坦诚交流，促进长飞技术质量的发展。

会上，熊总分享了光缆标准最新进展，各公司就新产品、新工艺开发、质量控制、成本控制等进行了交流，介绍了新方法、新举措，并就技术和质量管理出现的问题进行了探讨。

本次会议的召开，进一步加强了长飞公司内部技术质量交流，有利于促进长飞公司新产品、新技术的开发与应用，提升长飞公司的竞争力。

会后，参会领导和技术人员参观了长飞四川公司生产现场。

On June 2, 2016, the third exchange meeting of YOFC for optical cable technology and quality was held in YOFC(Sichuan). The meeting was chaired by Xu Dingfang, the deputy general manager of YOFC manufacturing center and manager of optical cable department, with 35 people attending the meeting, including Yan Changkun (YOFC's vice president), Jiang Zhikang (general manager of manufacturing center), Xiong Zhuang (deputy general manager of R&D center and technical director of optical cable), and heads and key technical personnel of all branches. During the meeting, the participants deeply discussed and exchanged opinions on the achievements and problems in optical cable technology and quality in recent half year, the new optical cable products, and the intelligent manufacturing of optical cables.

First, Yan and Jiang stressed YOFC's requirements for the research and development, quality management, and cost control of optical cable technology, and Xiao Yi, the general manager of YOFC(Sichuan), extended a warm welcome to the arrival of the heads and the key technical personnel and expressed his wish that all participants could promote the development of YOFC's technical quality by having full discussions on common problems and communicating with each other honestly.

At the meeting, Dr. Xiong Zhuang shared the latest progress in international standards of optical cable such as ITU and IEC,

芯影随行
—长芯盛助力微软献跑 Hackathon

■ 长芯盛　陈怡萱

伴随着近 32 个小时不间断的“马拉松”编程比赛接近尾声，此次以 MPC 技术为主题的微软下一代人机交互 Hackathon 也于 5 月底在北京微软亚洲研究院即微软总部大厦圆满落幕。这是在中国境内举办的第一届赛事，长芯盛携核心产品 USB3.0 AOC 出席，更有产品经理 Lewis 讲解了 AOC 光纤数据线的优势及发展趋势，现场切磋可谓精彩绝伦。

大赛伊始，由拥有 18 年设计经验的微软 Windows 设计组织核心负责人 Yannis Paniaras 为大家拉开此次比赛讲师报告的序幕，随后即开启了组员分组和比赛的进程。在微软的 MPC 技术中，Kinect for Windows 是其中最重要也是近几年发展最迅猛的一项技术，由于 Kinect 数据量巨大，采用 USB3.0 的接口用于数据传送成了必要的选择，但 Kinect 自带的铜线只有一米多的距离，若在此基础上延长则会出现数据延迟、丢失或仍然无法满足传输距离。为突破此局限性，长芯盛 USB3.0 AOC 首次亮相此赛事，凭着 5Gbps 无损传输、百米延长距离、无干扰抗弯折、衰减率＜0.0035dB/m 的特点，完全展现了“即时同步、完美传输”的高性能，保证了赛事的稳定和成功，更突显了长芯盛创新和研发能力。

---

and people from different branches exchanged opinions on new products, development of new technologies, quality control, cost control and so on, with new methods and new initiatives being introduced, and meanwhile, they also discussed problems in the management of technology and quality.

This meeting further strengthened YOFC's internal exchanges on technical quality, helpful to the development and application of YOFC's new products and to the enhancement of YOFC's competitiveness.

After the meeting, these leaders and technical personnel visited the production site of YOFC (Sichuan).

Core Shadowing

-Everpro Assists Microsoft and Contributes Hackathon

Everpro Chen Yixuan

As the 32-hour uninterrupted "Marathon" programming contest waned to the close, the Next-generation Microsoft Human-computer Hackathon which takes MPC technology as the them was successfully closed in Beijing Microsoft Research, namely, the Microsoft Headquarters at the end of May. On this first session contest which was held in China, Everpro was present by holding its core product USB3.0 AOC, then, the product manager Lewis explained the advantages and development trend of AOC optical fiber cable. It can be said that the scene discussion was excellent beyond comparison.

At the beginning of the contest, Yannis Paniaras (the core responsible person of Microsoft Windows Design Organization) who has 18-year design experience kicked off the competitive instructor report, followed by starting the team member grouping and competition process. In the MPC technology of Microsoft, Kinect for Windows was considered as the most important technology with the rapidest development speed in recent years. Due to the great amount of Kinect data volume, it is inevitable to apply USB3.0 interface to transmit data. However, considering that the self-contained cooper line length of Kinect is a little more than 1m, it is likely to suffer from data delay, missing or fail to satisfy the transmission distance if the cooper line is prolonged on the foregoing basis. In order to break through the foregoing limitation, Everpro made its first appearance in this contest by holding USB3.0 AOC. By right of 5Gbps lossless transmission, one hundred of meters distance, non-interference and anti-bending, as well as the attenuation rate (＜0.0035dB/m), Everpro has completely displayed its high performance (namely, "immediate synchronization and perfect transmission"), guaranteed the stability and success of contest, as well as highlighted the innovation and research & development capacity of Everpro.

AOC 有源光缆 AOC Active Optical Cable

长芯盛 AOC 有源光缆产品主要包含 SFP+ 有源光缆系列、USB3.0 有源光缆系列、HDMI 有源光缆系列、1394B 有源光缆系列等，应用领域涵盖数据中心、云计算系统、机器视觉、远程教育、安防监控、医疗、家庭影院等。长芯盛本着自主研发和持续创新原则，将把高速光电芯片速率从 10G 提升到 40G-100G、USB3.0 有源光缆提升到 USB3.1 有源光缆、HDMI 有源光缆从 HDMI 1.4 版本提升到 HDMI 2.0 版本，产品系列将增加 VR 有源光缆、DVI 有源光缆、DP 有源光缆等。

Everpro AOC Active Optical Cable products mainly included SFP+ Active Optical Cable series, USB3.0 Active Optical Cable series, HDMI Active Optical Cable series, 1394B Active Optical Cable series, etc. With the extremely wide application, AOC Active Optical Cable can extend to the data center, cloud calculation system, machine vision, distance education, security and protection monitoring, medical, family cinema, etc. Adhering to the independent research & development and continuous innovation principles, Everpro has enhanced the high-speed photoelectric chip rate to 40G-100G from 10G, increased USB3.0 Active Optical Cable to USB3.1 Active Optical Cable, promoted HDMI Active Optical Cable to HDMI 2.0 version from HDMI 1.4 version, besides, the products will add VR Active Optical Cable, DVI Active Optical Cable, DP Active Optical Cable, etc.

长飞四川公司 400万芯公里光缆技改项目成功达产

The 4 Million Core km Optical Cable Technical Improvement Project of YOFC (Sichuan) Successfully Reached Capacity

长飞四川公司　曾容 / YOFC (Sichuan)　Zeng Rong

长飞四川公司2014年底产能为400万芯公里，面对通信行业需求旺盛的形势，公司双方股东在2015年初果断决策将产能从400万芯公里扩产到800万芯公里。扩产项目开工后，在各级政府和双方股东的帮助与支持下，长飞四川公司全体员工艰苦奋战，忘我工作，于2016年3月实现了设计产能，400万芯公里扩产技改项目全面达产，这个项目成为峨眉山市工业发展蓝图上的又一颗闪亮明珠。

在达产仪式上，峨眉山市副市长何俊华代表市政府表示，将继续为长飞四川公司创造良好的经营环境，希望双方股东将公司做大做强。川投能源公司金总高度认同了公司的发展成果，希望能在更宽、更深、更广的领域持续合作。长飞公司董事长文会国高度肯

定了公司取得的成绩，肯定了管理团队和员工的辛勤付出，希望长飞四川公司抓住市场机遇，不断开拓市场，推动公司发展。

长飞四川公司员工倍受鼓舞，总经理肖毅表示公司将抓住市场发展机遇，以项目达产为起点，坚持创新发展，不断提高综合实力，打造西部最有竞争力的光纤光缆制造企业，向股东交出靓丽答卷。

The capacity of YOFC (Sichuan) in the end of 2014 was 4 million core km. Due to the great demand of the communications industry, company shareholders on both sides made a decisive decision at the beginning of 2015 to expand the capacity from 4 million core km to 8 million core km. Upon commencement of the expansion project, the staff of YOFC (Sichuan) worked hard and selflessly with the support of governments at all levels and shareholders on both sides, and finally achieved the designed capacity in March 2016, namely the 4 million core km production expansion and technical improvement project comprehensively reached capacity, which makes it another shining pearl on the industrial development blueprint of Emeishan City.

On the capacity reaching ceremony, He Junhua, the deputy mayor of Emeishan City, expressed on behalf of the government that they will continue to create good business environment for YOFC (Sichuan), and hope the shareholders on both sides will grow the company bigger and stronger. Manager Jin of Chuantou Energy Co., Ltd. highly approved the development achievements of the company, and hoped to continue cooperation in wider, deeper and broader fields. President of YOFC, Wen Huiguo highly affirmed the achievements of the company, affirmed the hard work of the management team and staff, and hoped YOFC (Sichuan) will grasp the market opportunity, constantly expand the market and promote the development of the company.

The staff of YOFC (Sichuan) were greatly inspired and Xiao Yi, the Manager, expressed that the company will grasp the market development opportunity, take capacity objective of the project as start point, adhere to innovative development, continually improve the comprehensive strength, strive to create a most competitive optical fiber and cable manufacturing enterprise in the West, and submit an excellent achievement to the shareholders.

长飞公司“一带一路”战略规划有序展开

The strategic planning of “One belt, one road” of Changfei Company has been conducted orderly

编者按：Editors Notes

面对国内外市场的竞争与挑战，长飞公司凭借近 30 年的砥砺奋进和深厚的技术积累，依托国家“一带一路”发展战略，制定了“走出去”的全球产业产局。上市后长飞公司已先后在缅甸、印尼合资建厂，如今长飞非洲公司成功奠基，潜江、兰州等项目按规划进展有序建设。下面，小编带您去看看那些建设中的“今日长飞”。

In the face of fierce competition and challenge in domestic and oversea markets, YOFC formulated its “going out” global industrial layout with its deep technique accumulation for nearly 30 years and relying on the national strategy of “One belt, one road”.After listing, YOFC has established plants in Burma and Indonesia with joint venture, and has successfully laid a foundation for orderly construction of Qianjiang, Lanzhou and other projects as planned.In the following, we will show you “YOFC Today” under construction.

长飞公司潜江科技园建设有序展开

长飞潜江公司　钱新伟

长飞潜江科技园位于潜江市王场镇江汉盐化工业园内，将打造国内首个具有循环经济模式的预制棒及光纤产业园，以及全球最大的预制棒制造基地。园区占地 700 亩，计划分三期建设成为年产预制棒 3000 吨、光纤 2500 万公里的世界一流预制棒和光纤制造基地。潜江科技园项目于 2015 年 8 月份开始建设，计划于 2016 年年底投产。项目建设过程中虽然受到连续降雨等不利天气条件的影响，但通过现场施工单位和人员夜以继日的奋战，该项目整体建设进度按计划有序进行，目前预制棒和拉丝车间土建工程已接近完工，其中预制棒车间将在 6 月中旬完成封顶，拉丝车间将在 6 月底完成封顶。从项目指挥到施工人员，在潜江科技园的建设现场，整个团队都在为长飞公司的这一重点项目辛苦付出，为实现公司“全球第一，行业领袖”的战略目标努力奋战。

Construction

of YOFC (Qianjiang) Sci-tech Park is conducted orderly

YOFC (Qianjiang) Qian Xinwei

YOFC (Qianjiang) Sci-tech Park is located inside the Jianghan Salinization Industrial Park, devoting into creating the domestic first pre-fabricated bar and optical fiber industrial park with circular economy mode and the world largest pre-fabricated bar production base.The park occupies 700mu, planned to be constructed by three stages to be a world first class pre-fabricated bar and optical fiber production base with annual output of 3000tons and optical fiber 25,000,000 km. Qianjiang Sci-tech Park Project was constructed from August, 2015 and put into operation in the end of 2016 as planned. Even though the construction process was exposed to continuous rainfall and other adverse weathers, the construction organization and personnel on the site struggled day and night, and the overall construction process of the project proceeded orderly as planned. At present, the civil engineering of preform and drawing plant is almost completed, among which the main structure of the preform plant will be completed in the middle of June, and that of the drawing plant will be completed in the end of June.The whole team, including project commander and construction personnel have devoted themselves at the construction site of Qianjiang Science and Technology Park to the major project of YOFC, and fight with all their might to achieve the strategic target of "To be first in the world and leader in the industry" of the company.

长飞兰州公司投产典礼隆重举行

长飞兰州公司　雷晓霞

长飞兰州公司是长飞公司于 2015 年在兰州新区投资建设的全资子公司，根据总规划方案，该项目分三期建设，现已完成第一期工程。从开工建设到正式投产，长飞人不分朝夕、迎难而上，依靠自己的辛勤努力和拼搏精神，历经 6 个多月终于顺利完成 1# 光缆厂房建设、生产线安装调试，于 2016 年 4 月 8 日隆重举行投产典礼，比原计划提前 20 天投产。兰州新区作为第五个国家级新区，是国家向西开放的重要战略平台，也是丝绸之路经济带上的重要节点，发展潜力巨大。长飞兰州公司顺利投产后，将借势兰州新区的开发和开放，利用品牌、技术和市场优势，满足西北供货，同时依托国家“一带一路”发展战略辐射中亚。

Grand Opening of the Commissioning Ceremony of YOFC (Lanzhou)

YOFC (Lanzhou) Lei Xiaoxia

YOFC (Lanzhou) is a wholly-owned subsidiary funded in Lanzhou New Area by YOFC in 2015. According to the overall planning scheme, the project is divided into three phases, and Phase I has been finished already.From the beginning of construction till the project is put into production in commission, employee of YOFC worked day and night without being afraid of difficulties. With the struggling spirit and hard work for over 6 months, they finally succeeded in completing 1# optical cable plant construction as well as installation and debugging of the production line, and held a grand opening of the commissioning ceremony on April 8, 2016, which is 20 days ahead of schedule.As the fifth national new area, Lanzhou New Area is an important strategic platform for westward opening of the country, and also an important node on the Silk Road Economic Belt, of which the development potential is huge.After successful commissioning, YOFC (Lanzhou) will satisfy the supply in the Northwest by take power of the exploitation and opening of Lanzhou New Area and taking advantage of the brand, technology and the market. In the meantime, it will expand its influence in the Central Asia by relying on "The Belt & Road" development strategy.

Grand Opening of the Foundation Stone Laying Ceremony of YOFC (Africa)

长飞非洲公司奠基仪式隆重举行

■ 长飞非洲公司　彭国泰 /YOFC (Africa)　Peng Guotai

长飞非洲公司项目合资协议于2016年3月签署，奠基仪式于当地时间5月13日在被誉为“非洲最佳管理城市”的南非德班隆重举行。长飞非洲公司总部位于南非约翰内斯堡，初期设计光缆年生产能力为100万芯公里，预计在2016年第四季度投入运营。

2015年，南非政府大力推动国家宽带战略计划，这将大幅提高南非对光纤光缆的需求。未来，长飞非洲公司将立足南非，辐射整个非洲，联合长飞缅甸、印尼公司打造联通欧亚非三个大陆和丝绸之路经济带光纤光缆战略，形成一个海上、陆地的光通信商业闭环，力争成为南非乃至非洲地区最具影响力的光纤光缆供应商。

The joint venture agreement of YOFC (Africa) project was signed in March 2016, and the foundation stone laying ceremony was held with grand opening in Durban, South Africa, a city being honored as “City with best management in Africa on May 13”.The head office of YOFC (Africa) is in Johannesburg, South Africa. The designed production capacity of optical cable in the initial stage is 1 million core km/year, and is expected to be put into operation in the fourth quarter of 2016.

In 2015, the Government of South Africa was strongly promoting the broadband strategic plan of the nation, which would substantially increase the demand of South Africa for optical fiber and cable.In the future, YOFC (Africa) will keep a foothold in South Africa and spread its influence in the whole Africa. It will cooperate with YOFC Burma and Indonesia company to create an optical fiber and cable strategy linking with Europe Continent, Asia Continent and Africa Continent as well as the Silk Road Economic Belt, thus forming an offshore and ashore optical communication commercial closed link.Strive to be an optical fiber and cable supplier most influential in South Africa or even the whole Africa.

长飞印尼公司第一根光纤指日可待

The First Piece of Optical Fiber in YOFC (Indonesia) can be Expected Soon

■ 长飞印尼公司　张振众 /YOFC (Indonesia)　Zhang Zhenzhong

长飞印尼公司是长飞公司在海外的第一个光纤制造合资项目，是长飞上市后走向海外的又一个里程碑。长飞印尼公司自 2015 年 8 月正式动工建设以来，项目团队克服热带高温雨季、资源缺乏、手续复杂等各种困难，全力以赴推进项目进度，目前公司厂房建设已基本完工，进入了紧张的机电安装调试阶段。2016 年 5 月 23 日，长飞拉丝塔吊装首次在海外进行，经过五天的奋战，拉丝塔塔架安装完工，这标志着印尼项目进入生产设备安装的关键时期。为了实现按期投产的目标，各参战方协调推进，生产设备、厂房设备及其它辅助设备安装单位互相配合，即将迎来工厂动力系统联合调试。目前由长飞公司各相关部门组成的支持团队正有计划有步骤地进驻印尼工厂，他们将全力做好试生产的各项准备工作，长飞印尼公司第一根光纤指日可待。

▲ 工程师培训
◀ 吊装拉丝塔
主体建筑 ▶

YOFC (Indonesia) is the first overseas optical fiber manufacturing joint venture project of YOFC and also another milestone for YOFC to go overseas after listing.Since the formal start of construction of YOFC (Indonesia) in August 2015, the project team has overcame the tropical high temperature and rainy seasons, lack of resources, complex formalities and many other difficulties, and spared no pains to carry forward the project schedule. At present, the plant construction of the company has been basically finished, and the project has stepped in the intense mechanical and electrical installation as well as debugging stage.On May 23, 2016, the drawing tower lifting of YOFC was carried out firstly in overseas. After five days of endeavor, the installation of tower was completed, which indicated that the Indonesia project had entered into the critical period of production equipment installation.In order to achieve the objective of commence operation on schedule, all involved parties coordinate to carry forward, installation organizations of production equipment, plant equipment and other auxiliary equipment cooperate with each other, and joint debugging of power system of the plant is about to see. At present, the supporting group constituted by all relevant departments of YOFC is entering into the Indonesia plant in a planed and orderly way, and will spare no efforts to do well in various preparation works of trial production. The first piece of optical fiber in YOFC (Indonesia) can be expected soon.

长飞公司精彩亮相 2016 中国国际管道大会

YOFC Appears at Interpipe2016 Fantastically

特种产品事业部 徐祖应 /Special Product Division Xu Zuying

2016 中国国际管道大会暨高峰论坛于 4 月 12 日至 14 日在河北廊坊举行，展览会覆盖管道勘察测绘、设计、采办、工程施工、投产运行、运营抢修、穿越、焊接、防腐等完整管道施工和运营产业链。长飞公司针对油气管道的特殊应用场景，携特种光纤及特种光纤传感整体解决方案亮相本次石油行业展会。

长飞公司此次展示的分布式光纤传感技术是基于特种光纤的分布式传感，相对于常规通信光纤的传感技术，在保证成本的基础上，能更多维地挖掘特种光纤特性优势，将传感解调精度、高低温耐受性、安全事件分辨能力等优势极大地发挥。此外，长飞公司还展出了针对超长距离管道的超低衰减光纤，该光纤低于 0.17dB/km 的传输损耗为管道通信降低了中继放大效果、电力配备成本等相关不稳定因素。

Interpipe2016& summit was held in Langfang, Hebei at April 12, lasting 3 days, and this exhibition covered integrated industrial chains for pipeline construction and operation on such aspects as pipeline survey and mapping, design, procurement, project construction, production and operation, first-aid repair for operation, crossing works, welding, and anticorrosive works. Aiming at the special application scenarios of oil and gas pipelines, YOFC showed up in this exhibition of the oil industry with special optical fiber and its integrated sensing solutions.

The distributed optical fiber sensing technology shown by YOFC this time was distributed sensing technology based on special optical fiber, which could explore advantages of characteristics of such special optical fiber from more aspects than sensing technologies based on traditional communication optical fiber while keeping cost at a reasonable level, maximizing sensing demodulation precision, resistance to high and low temperature, resolution of security incidents, and other advantages.In addition, YOFC also exhibited extra-low attenuating optical fiber used for pipelines at an extra-long distance, and the transmission loss of optical fiber was lower than 0.17dB/km, mitigating such unstable factors of pipeline communication as relay amplification effect and electricity cost.

莫斯科

河北廊坊

长飞公司亮相 2016 俄罗斯国际信息通讯设备展览会

YOFC Appears at Sviaz/Expo Comm Moscow 2016

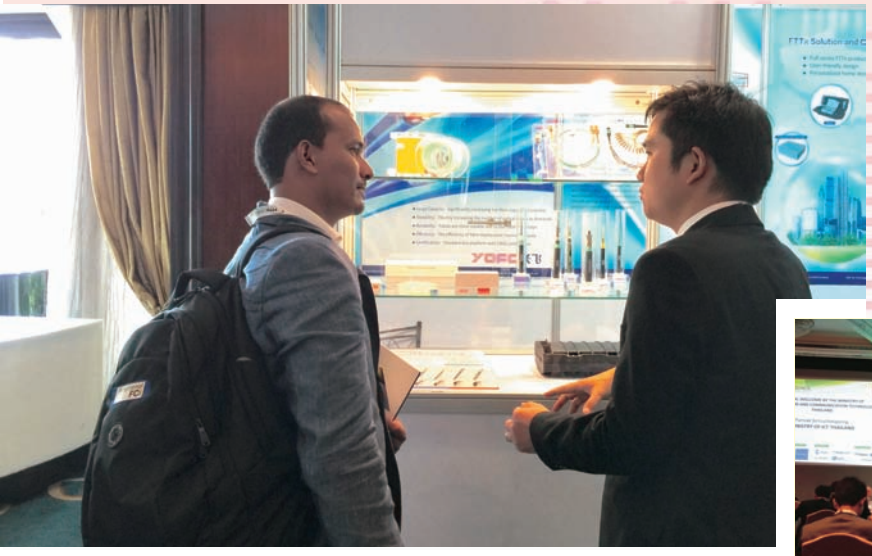
战略中心 黄落雁 /Strategic Center Huang Luoyan

当地时间 5 月 10 日，第 28 届俄罗斯国际信息通讯设备展览会在莫斯科红宝石展览中心盛大开幕，汇集了来自 25 个国家的超过 500 家企业以及 35000 余名专业观众齐聚莫斯科。长飞公司携光纤光缆、射频电缆、ODN、AOC 及微管微缆整体解决方案亮相此次信息通讯设备展览会。

本次展会长飞公司重点展出了微管微缆整体解决方案，其能在不影响光缆各项性能指标的基础上减小光缆直径，有效地提高了布线过程中的管道利用率，并能够为用户完美解决网络建设中管道资源稀缺的问题。多年来，长飞公司一直致力于气吹微缆技术的不断创新，开发出一系列具有国际先进水平的气吹微缆产品，不仅通过了美国 Telcordia 产品认证，而且成为华为——新西兰国家宽带工程项目微缆产品的唯一供货商，获得过“国家重点新产品”、“光缆技术创新奖”及“湖北省科技成果推广二等奖”等多项荣誉，奠定了长飞公司在气吹微缆领域的牢固领先地位。

On May 10 Local Time, the 28th Sviaz/Expo Comm Moscow kicked off at Expocenter Krasnaya Presnya, bringing together over 500 companies and 35,000 professional visitors from 25 countries to Moscow.YOFC showed up with integrated solutions for optical fiber and cables, radio frequency cables, ODN, AOC and micro-tube & cable.

During the expo, YOFC focused on unveiling its integrated solution for micro-tube & cable. This solution could reduce cable diameter without affecting cable performance, which effectively increased pipeline utilization rate in cabling and would perfectly resolve the scarcity of pipeline resources in network construction. YOFC, having been committed to the constant innovation of air-blowing micro-cable technology over the years, has developed a series of internationally advanced air-blowing micro-cable products, passed the certification of U.S. Telcordia, and also become the exclusive micro-cable product supplier for Huawei's New Zealand National Broadband Project. And YOFC also won a lot of honors such as "National Key New Product", "Cable Technology Innovation Award" and "Second Award for Technology Achievement Popularization in Hubei". All of these have consolidated YOFC's leading position in the air-blowing micro-cable field.



长飞公司闪耀 2016 第 11 届 FTTH 亚太会议

YOFC Shines at the 11th Asia-Pacific FTTH Conference in 2016

战略中心　阎传文 /Strategic Center　Yan Chuanwen

2016 年 5 月 17–18 日，第 11 届 FTTH 亚太会议在泰国首都曼谷召开。会议期间，泰国、缅甸、印尼等国政府通信部委代表、宽带运营商 TURE、谷歌光纤、华为公司、ITU 等嘉宾就 10G、FTTH 解决方案等技术进行了深入探讨，对东南亚地区宽带和 FTTH 市场发展前景进行预测，并对未来面临的风险与挑战进行全面剖析。

长飞公司携 FTTH 应用的最新产品和解决方案参与本次会议与展览，展台现场观众云集，不少新老顾客对长飞光纤应用产品，特别是 FTTx 产品以及采用 G.657B3 光纤的隐形缆综合布线解决方案兴趣浓厚，并进行深入洽谈。

On May 17 and 18, 2016, the 11th Asia–Pacific FTTH meeting was held in Bangkok, capital of Thailand.During the meeting, the representatives of ministries of communication of the governments of Thailand, Myanmar, Indonesia and other countries, as well as broadband operators such as TURE, Google Fiber, Huawei, and ITU, as guests, had in–depth discussions about technologies such as 10G and FTTH solutions, and they also forecasted prospects of the market development of broadband and FTTH in the Southeast Asia and fully analyzed the risks and challenges to be faced in the future.

YOFC participated in the conference and exhibition with its latest products and solutions related to FTTH application, and its booth was crowded with visitors, including many new and regular customers who were very interested in YOFC's optical fiber applications, especially FTTx products and integrated invisible–cables cabling solutions with G.657B3fiber, and these visitors also had further negotiations with YOFC.

曼谷

新加坡

长飞公司精彩亮相 2016 亚洲国际通信与信息技术展

YOFC Appears at CommunicAsia 2016 Fantastically

战略中心 张方海 /Strategic Center Zhang Fanghai

5 月，“狮城”新加坡气温如火，同样火热的还有位于新加坡滨海湾金沙会展中心的“2016 年亚洲国际通信与信息技术展”(CommunicAsia2016)现场。5 月 31 日，亚洲地区通信科技产业顶级盛事在此隆重开幕。

已连续 10 年参加此项盛会的长飞公司此次携远贝®超强超低衰减大有效面积光纤、易贝®超强弯曲不敏感单模光纤、宽带 OM4 弯曲不敏感多模光纤等新型光纤与隐形缆室内布线解决方案、4G 布线解决方案、数据中心布线解决方案、微管微缆解决方案、有源光缆及应用方案等多种线缆解决方案精彩亮相，吸引了来自新加坡、菲律宾、印尼、泰国、马来西亚等国家的客户前来长飞展台参观、洽谈。

亚洲国际通信与信息技术展齐聚百余个国家和地区、千余个全球展商，云集全球最尖端的信息通信技术和解决方案，各方英豪感受、聆听、分享综合盛会的魅力和全球革命性的信息通信创新成果的，已成为亚太地区最具代表性的 ICT 盛会。

In May, the CommunicAsia2016, as hot as the Lion City Singapore, went on in full swing in Marina Bay Sands, Singapore.On May 31, the CommunicAsia2016, as the top event in the industry of Asian telecommunication technology, was opened grandly.

Having been participating in the grand gathering for 10 years consecutively, YOFC showed up this time with its new fiber products such as FarBand® ultra low attenuation and large effective area fiber, EasyBand® bending insensitive single-mode fiber, and broadband OM4 bending insensitive multimode fiber as well as such cable solutions as indoor cabling solution with invisible cables, 4G cabling solution, cabling solution for data center, Microduct and Microcable solution, active optical cable and its applicable solution, which attracted clients from Singapore, Philippine, Indonesia, Thailand, Malaysia and other countries to YOFC's booth for visiting and negotiation.

Participated in by over a thousand of global exhibitors from more than one hundred countries and regions, the CommunicAsia2016 gathered the most sophisticated information and communication technologies and solutions of the world, in which, outstanding figures from all over the world could feel, hear and share the charm of the comprehensive grand event and globally revolutionary innovative information and communication results. Because of this, the CommunicAsia2016 has become a grand ICT event most representative in the Asian-Pacific region.

全国智能制造万里行

——走进长飞公司

本刊编辑部

智能制造的背景、现状、意义

2009 到 2012 年欧洲深陷债务危机，德国经济却一枝独秀，依然坚挺，它增长的动力来自其基础产业——制造业所维持的国际竞争力。对于德国而言，制造业是传统的经济增长动力，制造业的发展是德国工业经济增长的不可或缺因素。基于这一共识，德国政府倾力推动进一步的技术创新，其关键词是“工业 4.0”。

2015 年 3 月，李克强总理在《政府工作报告》中提出了实施“中国制造 2025”和制定“互联网 +”行动计划。2015 年 5 月、7 月、9 月，国务院先后印发了《中国制造 2025》、《关于积极推进“互联网 +”行动计划的指导意见》和《促进大数据发展行动纲要》，部署全面推进实施制造强国战略、大数据国家战略，坚定走新型工业化和信息化深度融合之路，顺应互联网等新技术和产业变革新趋势，打造中国制造新优势。

当前，以智能制造为代表的新一轮产业变革迅猛发展，数字化、网络化、智能化日益成为制造业的主要趋势。相对于传统制造工业，以智能工厂为代表的未来智能制造业是一种理想的生产系统，能够智能编辑产品特性、成本、物流管理、安全、信赖性、时间以及可持续性等要素，从而为客户进行最优化的产品制造。这样一种“自下而上”型的生产模式革命，不但能节约创新技术、成本与时间，还拥有培育新市

场机会的网络容量。

智能制造万里行——走进长飞

为积极响应国家相关政策，顺应当前制造业发展趋势，工业和信息化部自2015年初实行智能制造专项行动，公布了46个智能制造试点示范项目名单。长飞公司的“光纤智能制造试点示范项目”作为中国光纤光缆行业唯一的，也是湖北省唯一的智能制造试点示范项目入围。此次入围国家试点示范项目，对长飞来说既是对公司智能化程度的高度肯定，也是对长飞未来智能制造进一步发展的鞭策。

2016年4月14日，由中国通信协会主办，中国通信工业协会物联网应用分会、武汉企业信息化促进会承办的“中国制造2025+互联网智能制造万里行——走进武汉制造业”中国智能制造实战高峰论坛在武汉隆重召开。活动期间，全国智能制造行业的大腕专家及武汉市制造业企业的相关领导齐聚长飞，旨在构建智能制造交流合作高端平台，打造智能制造战略合作联盟，促进智能制造建设进程，推广智能制造典型案例，共话“中国制造2025+互联网”。

与会人员参观了长飞公司，长飞公司副总裁闫长鹃出席接待。闫总向来宾介绍了公司发展情况和长飞的智能制造现状。作为中国智能制造实战高峰论坛的重点主题分享，长飞公司制造中心设备部经理卢松涛发表了题为《光纤智能流程制造》的报告，从模拟仿真、自动化系统、基础建设、信息化系统、信息安全保障、实施效果等方面向来宾详细介绍了长飞公司的智能制造和管理流程。

长飞公司智能制造现状及未来规划

过去10年中国光纤行业制造技术一直在进步，摆脱了大量依赖进口的局面，但在某些方面仍然存在不足。而且，过去是依托庞大的中国市场和丰富的人力资源驱动产业发展，如今随着人力资源结构的变化，生产线制造的结构必须调整，光纤行业也迎来了重要的转折点，需要构建科学的技术体系。

长飞公司自成立初期就注重智能化与信息化，近年来更是积极应对行业形势的变革，生产设备信息化持续改进。长飞公司在现场控制层面，做到制造装备的智能化、现场工位作业的自动化和现场工位信息采集的全数字化；在执行管控层面，做到可视化数字化指挥调度、各业务人员能协同工作、物料精准配送；在计划决策层面，在全供应链智能化的基础上，做到市场研发生产全业务协同计划，在合理规划智能工厂KPI的基础上，为管理者提供决策信息。

长飞公司已经制定了未来3—5年的智能制造规划，将持续加大研发投入，并依托长飞光纤光缆制备技术国家重点实验室的技术平台，全力提升设备效率，加强制造自动化和信息化的融合。长飞也将在国家智能制造试点示范企业平台的基础上，提升生产制造智能水平，建设智慧工厂，构建一整套光纤光缆行业的智慧工厂解决方案，推动中国光纤光缆行业从“中国制造”走向“中国智造”。

Bringing Intelligent Manufacturing across China

——Getting to Know YOFC

The Editorial

Background, current situation, and significance of intelligent manufacturing

Between 2009 and 2012, Europe was trapped in debt crisis, with only Germany still enjoying strong economy, which was because Germany's economic growth was driven by the international competitiveness maintained by its basic industry, namely, the manufacturing industry.For Germany, manufacturing industry is a traditional driving power for the country's economic growth, the development of which is an essential factor in German industrial and economic growth.Based on this consensus, the German government has made its greatest efforts to promote technological innovation, with the key word being "industrial 4.0".

In March 2015, Premier Li Keqiang put forward in the Report on the Work of The Government the implementation of "Made in China 2025" strategy and the formulation of "Internet +" action plan.In May, July, and September 2015, the State Council has issued Made in China 2025 Strategy, Guidance for Actively Facilitating Action Plan of "Internet +", and Action Program for Promoting Development of Big Data, so as to create new advantages of "made-in-China" by deploying the work of comprehensively promoting the implementation of the strategy of being a manufacturing power and a big data country, firmly taking a new path of deeply integrating industrialization and informatization together, and adapting to new trends of revolutions in Internet and other new technologies and industries.

At present, a new round of industrial revolutions represented by intelligent manufacturing are developing rapidly, with digitization, network, and intelligence becoming the main trend of manufacturing industry increasingly.Compared with the traditional manufacturing industry, the future intelligent manufacturing represented by intelligent factories is an ideal production system able to intelligently edit such elements as product features, cost, logistics management, safety, reliability, time, and sustainability, which will, thus, optimize the product manufacturing process for clients.With revolution in such a "bottom-up" production pattern, we can not only save the innovative technologies, cost and time, but also have the network's capacity to foster new market opportunities.

Bringing Intelligent Manufacturing across China: Getting to Know YOFC

To respond to the relevant national policies actively and comply with the current development trend of manufacturing industry, the Ministry of Industry and Information started to implement special action for intelligent manufacturing in early 2015 and published a list containing 46 intelligent manufacturing demonstration pilot projects.YOFC's "Optical Fiber Intelligent Manufacturing Pilot" was the only project listed in it in China's optical fiber and cable industry as well as the only intelligent manufacturing pilot project in Hubei.With a project being listed in the national demonstration pilot projects, YOFC regarded this as a high recognition to its intelligent degree and also a push to its further development on intelligent manufacturing.

On April 14,2016, China Intelligent Manufacturing Practice Summit Forum with the theme of "Made in China 2025+Internet Bringing Intelligent Manufacturing Across China: Getting to Know Wuhan Manufacturing Industry", sponsored by China Association of Communication Enterprises and organized by Internet of Things Application Branch of China Communications Industry Association and Wuhan Enterprise Information Association, was opened ceremoniously in Wuhan. During the event, senior intelligent manufacturing experts all over China and leaders of Wuhan manufacturing companies gathered at YOFC to build a high-level platform for communication and cooperation among players of intelligent manufacturing, facilitate the progress of intelligent manufacturing development, advocate best intelligent manufacturing practices, and discuss "Made in China 2025+ internet" strategy.

Participants looked over YOFC companioned by Yan Changkun, vice president of YOFC, with the development of YOFC and the current situation of the company's intelligent manufacturing being introduced.As the key topic speech section of the China Intelligent Manufacturing Practice Summit Forum, Lu Songtao, the manager of YOFC's manufacturing center equipment department, made a speech titled "Intelligent Manufacturing Process of Optical Fiber", in which he introduced the intelligent manufacturing and management process of YOFC in details from such aspects as analog simulation, automation system, infrastructure construction, information system, information security, and implementation effects.

Present Situation and Future Planning of YOFC's Intelligent Manufacturing Business

In the past 10 years Chinese optical fiber industry had been making progress and ridded itself of the dependence on export. However, there is still room for improvement.Besides, in the past, the optical fiber industry was driven by the vast Chinese market and rich human resources, and now, with the structural changes of human resources, it is necessary to adjust the manufacturing structure of production line, and the optical fiber industry has also reached an important turning point and a scientific technical system is a must.

Since the establishment, YOFC has been focused on intelligence and informatization, and it has also been actively responding to the changes in industrial situation in recent years, with continuous improvement being made to the informatization of production equipment.On onsite control level, YOFC has achieved intellectualization of manufacturing equipment, automation of workstation operation, and complete digitization of the acquisition of onsite workstation information;On performance control level, it has achieved visual and digital command and scheduling, collaborative work among business personnel, and accurate material distribution;On planning and decision-making level, it has made collaborative plans for the whole business process including market research and development and production based on the intellectualization of the whole supply chain and provided the management with decision-making information on the basis of reasonably planning KPI for intelligent factories.

The company has made a 3-5 year plan for intelligent manufacturing, and will continue to increase input into research and development, comprehensively enhance the equipment efficiency and strengthen the integration of automation and informatization based on the technological platform of YOFC's national key lab for optical fiber and cable production technologies.YOFC will also improve the intelligent level of production and manufacturing, build intelligent factories, and construct a package of optical fiber and cable intelligent factory solutions based on its national intelligent manufacturing pilot platforms, so as to propel the transfer of Chinese optical fiber and cable industry from "Made in China" to "Intelligently Made in China"

光纤改变世界

——纪念光纤发明暨光纤通信 50 周年特辑

本刊编辑部

编者按：2016 年是“光纤之父”高锟博士发表光纤通信原创性理论《光频率介质纤维表面波导》50 周年，这是全球光纤通信界百年不遇的盛事。半个世纪以来，光纤通信技术的飞跃和突破性发展以及卓有成效的应用，已为互联网和现代信息技术发展铺平了道路，引领人类社会进入信息时代，为社会发展做作了历史性的光辉贡献。作为中国光纤光缆市场的领军企业，长飞公司在过去的 20 余年里既实现了自身的飞速发展，也推动了中国乃至世界光纤通信的历史进程，为“光纤改变世界”做出了巨大贡献。在光纤发明 50 周年之际，业界举办纪念大会、高峰论坛等活动，纪念高锟博士的伟大发明，回顾过去 50 年中国光通信的发展史、探讨行业发展现状和最新技术、展望未来的新一轮技术变革。

英国两院院士 David N. Payne 爵士参观长飞展台

长飞在会

5 月 9 日，以“光纤改变世界”为主题的纪念光纤发明 50 周年大会在北京国家会议中心隆重举行，同期举办了技术 / 产品展览会，长飞公司精彩亮相该展会，吸引了众多知名专家和观众前来参观。会议期间举办了 “备战 400G——新型光纤光缆技术创新及产业发展高峰论坛”，长飞公司研发中心总经理王瑞春在该论坛上发表了《超低损耗大有效面积光纤和新型光缆》主题报告，介绍了长飞在降低光纤衰减方面的研究成果。经过近几年努力，长飞“远贝®超强超低衰减大有效面积光纤” 在各项性能上均获得出色表现，它在 1550nm 波长处将超低衰减（典型值：0.165dB/km）和大有效面积（典型值：110μm²）两种优势合为一体，在用于高速、长距离、大容量陆地干线通信系统时，相对于传统 G.652 单模光纤更具优势，可以满足未来 10–25 年系统传输发展的需要。

6月17–20日，“光纤通信50周年高峰论坛”在河南鹤壁市隆重举行。大会开幕式上举行了《中国光纤通信50年》、2015年版《中国光纤通信年鉴》的首发仪式和业界风云榜的颁奖仪式。长飞公司董事长文会国获业界“风云人物”奖、总裁庄丹获业界“卓越企业家”奖、营销总监张雁翔获业界“优秀人物”奖。

会上，长飞公司副总裁张穆应邀发表了题为《提升创新能力，研发高端产品，谱写“十三五”新篇章》的报告，向与会嘉宾介绍了长飞公司的发展历程、产销业绩和全球战略布局，并重点从提升创新能力、研发高端产品方面介绍了长飞公司的举措和成绩。长飞公司研发中心主任工程师张磊发表了题为《下一代干线传输网络新型超低衰减大有效面积单模光纤》的报告，从技术角度介绍了长飞公司最新开发的用于长距离陆地干线网络的超低衰减大有效面积光纤，展示了长飞公司领先的技术实力。长飞合营公司浙江联飞光纤光缆有限公司总经理何珍宝发表了题为《中国光纤通信预制棒的开拓与发展》的报告，介绍了光纤预制棒的发展历程和未来趋势。

与会嘉宾访问长飞国家重点实验室

值此光纤发明50周年之际，大会嘉宾英国两院院士David N. Payne爵士、加拿大皇家科学院院士鲍晓毅、“千人计划”国家特聘专家何祖源教授相继访问长飞光纤光缆制备技术国家重点实验室，长飞公司技术总监兼长飞国重主任罗杰博士出席接待，并与来访专家进行前沿技术交流和深化合作研讨。鲍晓毅教授访问长飞公司期间，作了《Fiber Sensing Technologies》学术报告，分享了她在光纤传感前沿技术领域所取得的重大突破、技术创新心得以及宝贵的科研经验。长飞国重和长飞公司特种产品事业部光纤传感技术团队陪同罗博士一起，参加了和鲍院士的技术交流与接待，双方就新一代光纤传感技术的合作进行了深入探讨。

与会权威专家观点

中国工程院院士邬贺铨：目前中国正在推动“互联网 +”行动，各地的智慧城市建设也在推动 FTTH 的大规模部署，这将进一步加快信息化的进程。 中国在 2020 年前要使农村贫困地区全部脱贫，光纤在精准扶贫中将发挥重要作用，而中国实施“一带一路”战略，将拉动国家光缆干线的建设，带动光通信企业走出去。另一方面，虽然 2015 年我国宽带化取得很好的成绩，但并未达到宽带中国战略要求的普及率与国际干线带宽的要求。目前中国宽带化性能和通信资费水平在国际上排名不高。同时，中国东西部经济发展不平衡，农村与边缘地区宽带网络建设还存在经营成本压力。国家和网民对宽带提速降费的持续要求，使电信运营商也面临收入增速下降的困境。

“中国光纤之父”赵梓森：早在 1973 年就建议开展光纤通信技术的研究和技术路线，参与起草了我国“六五”、“七五”、“八五”、“九五”光纤通信攻关计划，因当时社会环境的限制，且世界上光纤通信也尚未使用，因此无法借鉴国外的技术，中国光纤通信技术发展受阻。在此情况下，武汉邮科院建成了我国第一条光缆通信工程，开创我国光纤通信应用的历史，不断发展壮大的长飞公司为中国光纤制造的产业化奠定了坚实的基础，为中国光通信事业的发展做出了巨大贡献。光纤是互联网的物理基础，随着互联网的加速发展，超低损耗光纤的研发已引发新的技术革命。

中国科学院院士王启明：光纤通信的含义无疑已远远地超越了 50 年前的电信范畴，在信息传输的类别、传输功能的拓展、传输制式的多变、传输时域的加快和传输空域的扩大等方面，都有了前所未有的巨大跃变。数字光网络的实现、互联网的渗透与普及、量子秘钥的采用、人工智能和虚拟现实的发展已使信息化社会迈向了智能化社会。在光电子信息传输系统的产业化、规模化发展进程中，硅基材料将在系统集成中占据高位，硅微电子处理器芯片内的光互联无疑将取决于在硅基芯片中构建微型光网络的实现，它将提升超快计算机运行速率做出划时代的奠基性贡献。

Optical Fiber Changes the World

——Special Article for Commemoration of the 50th Anniversary of the Invention of Optical Fiber

The Editorial

Editors Notes: 2016 is the 50th year after "the father of optical fiber" Dr. Charles K. Kao published his original theory of optical fiber communication, namely, Dielectric Fiber Surface Waveguide for Optical Frequencies, which was a once-in-a-lifetime event in the global optical fiber communication field.For half a century, the leap and breakthrough development and the effective application of optical fiber communication technology have paved the way for the development of Internet and modern information technology, led the human society to the information age, and made glory historic contribution to social development.As the leading enterprise in China's optical fiber cable market, YOFC has both realized its own rapid development in the past 20 plus years and promoted the historical process of optical fiber communications in China and even around the world, making great contributions to the concept that "optical fiber changes the world".On the occasion of the 50th anniversary of optical fiber invention, the industry held such activities as commemoration meetings and summit forums to commemorate Dr. Charles K. Kao for his great inventions, look back the history of optical communication's past 50 years in China, discuss the present situation and latest technologies of the industrial development, and look into a new round of technological changes in the future.

YOFC in the Exhibitions

The Commemoration Meeting of the 50th Anniversary of the Invention of Optical Fiber themed as "Optical Fiber Changes the World" had its grand opening in Beijing on May 9.In the meanwhile, the exhibition of technologies/products was also held, where YOFC also participated, attracting many famous experts to visit.During the meeting, "Preparing 400G New Fiber Optic Cable Technology and Industrial Development Forum" was held, where Wang Ruichun, general manager of YOFC's research and development center, made a keynote speech titled Optical Fiber with Ultra-low Loss and Large Effective Areas and New Optical Cable, introducing the research and development results of YOFC on mitigating the attenuation of optical fiber.After recent years of efforts, YOFC's "FarBand® ultra low loss and large effective area fiber" shows excellence on the all kinds of features, which integrates ultra-low attenuation (typical value: 0.165dB/km) and large effective area (typical value: 110 μm^2), the two advantages at 1550nm wave length, together. When it is used in high-speed, long-distance, and large-capacity land main line communication system, it will be more effective than traditional G.652 single-mode optical fiber, satisfactory to the demands of system transmission development in the future 10-25 years.

From June 17 to June 20, 50th Summit Forum of Optical Fiber Communications was grandly held in Hebi, Henan Province.The opening ceremony of the forum also witnessed the launching ceremony of Development of Optical Fiber Communications in China in Past 50 Years and Yearbook of Optical Fiber Communications in China (2015) and the award ceremony of industrial billboard.Wen Huiguo, chairman of YOFC, was awarded "Influential Man" of the industry, Zhuang Dan, president of YOFC, was awarded "Outstanding Entrepreneur" of the industry, and Zhang Yanxiang, marketing director of YOFC, was awarded "Excellent Person" of the industry.

At the forum, YOFC's vice president Zhang Mu was invited to give a report titled Improve Innovation Capacity, Research and

Develop High–end Products, and Write a New Chapter in "13th Five–year Plan" Period, in which, he introduced to the attending guests the development course, production and marketing achievements and global strategic layout of YOFC, as well as YOFC's measures and achievements mainly from such aspects as the innovation capacity improvement and the research and development of high–end products.Zhang Lei, the director and engineer at R&D center of YOFC, gave a report themed Single–mode Optical Fiber with New Ultra–low Attenuation and Large Effective Area for Next–generation Main–Line Transmission Network, technically introduced the optical fiber with ultra–low attenuation and large effective area newly developed by YOFC for long–distance land main line network, and showed YOFC's leading strength on technologies.He Zhenbao, general manager of Zhejiang Ally First Optical Fiber Co., Ltd., a joint venture of YOFC, gave a report themed Exploitation and Development of Performs for Optical

Fiber Communications in China, and he introduced the development course and future trend of optical fiber performs.

Guests Visit YOFC National Key Laboratory

On the occasion of the 50th anniversary of optical fiber invention, Knight David N. Payne (the academician of the Royal Society and the Royal Academy of Engineering of U.K.), BaoXiaoyi (the academician of the Royal Academy of Canada), and Prof. He Zuyuan (the specially invited expert of "Thousand Talent Program"), as guests of the meeting, subsequently visited State Key Laboratory of Optical Fiber and Cable Manufacture Technology (SKLOFCMT) of YOFC, during which, Dr. Luo Jie, YOFC's technical director and head of SKLOFCMT showed up as their companion and had exchanges on cutting–edge technologies and discussion about deep cooperation with them.During the visit to YOFC, Prof. BaoXiaoyi gave an academic report titled Fiber Sensing Technologies, sharing her breakthroughs and valuable technical innovation and research experience on the cutting–edge technologies of fiber sensing.Dr. Luo, together with the fiber sensing team from SKLOFCMT and YOFC's special product division, received and had technical exchanges with Academician Bao, and had deeply discussed with her about the cooperation on the new generation fiber technologies.YOFC has fully showed its leading technical position in the optical fiber and cable industry during the 50th anniversary of the optical fiber invention when renowned academicians and experts at home and abroad visited YOFC and SKLOFCMT and actively discussed strategic cooperation on many aspects.

Opinions of authoritative experts

Wu Hequan, academician of the Chinese Academy of Engineering:

Now, China is facilitating the implementation of "Internet +" action, and the construction of smart cities all around China is also promoting the large–scale deployment of FTTH, which will further accelerate the process of informatization.China should help people of all poor rural areas out of poverty before 2020, in which optical fiber will play an important role, and meanwhile, the implementation of "the Road and Belt" in

China will boost the construction of national main cable lines and lead optical communication companies to the outside world.On the other hand, although in 2015 China had achieved good results in the popularization of broadband networks, the popularity rate had not reached the value required by China broadband strategy or that required by international main–line bandwidth.At present, China's broadband performance and charging rate of communication rank relatively low in the world.At the same time, in China, the imbalance exists in the economic development between the east and the west, and the construction of broadband networks in rural areas and borders still suffers pressure of operating costs.Telecom operators also face the plight of declining income growth due to continuous requirements proposed by the government and users on raising speed and lowering charging rate.

Zhao Zisen, "Father of the Chinese Optical Fiber":

As early as 1973, he already recommended to carry out researches and technical routes of optical fiber communication technologies, participated in drafting the "6th five–year", "7th five–year", "8th five–year", and "9th five–year" plans for optical fiber communication problem solutions, and the development of optical fiber communication technology in China was hindered due to the limitation of social environment then and the inaccessible foreign technology reference because of the fact that optical fiber communication has not been applied in the world yet.Under such circumstances, Wuhan Research Institute of Posts and Telecommunications constructed the first optical cable communication project in our country, initiating the course of the application of optical fiber communication in China. YOFC, growing stronger and stronger, laid a solid foundation for the industrialization of the optical fiber manufacturing in China and made great contributions to the development of China's optical communication cause.Optical fiber is the physical foundation of Internet. With the acceleration of development of Internet, the research and development of ultra–low–loss optical fiber have led to a new technical revolution.

Wang Qiming, Academician of Chinese Academy of Sciences:

The meaning of optical fiber communication has undoubtedly far beyond the category of telecommunications 50 years ago, and it has unprecedented huge jump on many aspects such as information transmission category, the expansion of transmission functions, the constant changes of transmission systems, the speeding up of the time domain of transmission, and the expansion of transmission space.The realization of the digital optical networks, the penetration and popularization of Internet, the use of quantum secret key, and the development of artificial intelligence and virtual reality have led the information–oriented society to move towards an intelligent society.In the process of industrialization and large–scale development of optoelectronic information transmission system, silicon–based materials will take a high position in system integration, and no doubt, optical interconnection in silicon microelectronic processor chips will depend on the construction of micro optical networks in silicon–based chips, which will improve the operating rate of ultra–fast computers and make epoch–making and fundamental contributions.

用于下一代陆地干线传输网络的新型超低衰减大有效面积单模光纤

■ 研发中心　张磊

中国目前陆地干线网主要以普通 G.652.D 光纤为主，而 90 年代铺设的光缆已经达到预期 20–25 年的使用寿命，所以今后几年将逐步面临着对主干网络进行升级换代的要求。因此，如何为长距离陆地干线光缆选择合适的光纤，对于网络运营商和光通信公司来说都是一个急需解决的问题。为了获得最佳的系统性能，如果将超低衰减和大有效面积的特性融合到一根光纤中去，这种光纤将会是下一代通信光纤中最完美的光纤。

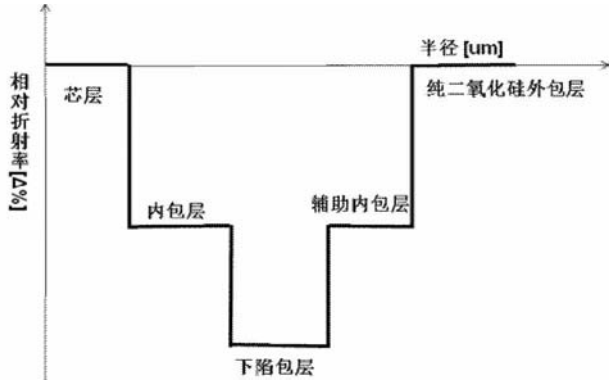
1.G.654.E 建议指标

下表中给出了目前正在讨论中的 G.654.E 光纤指标和长飞超低衰减大有效面积光纤的性能指标范围，长飞公司的超低衰减大有效面积光纤（远贝®超强）能够满足甚至优于现有最严格的 G.654.E 标准建议。

参数名称		G.654.E 讨论稿			YOFC
		建议 1	建议 2		产品手册范围
			E1	E2	
光学参数					
*模场直径 @1550nm (um)	名义范围	11.5-13.0	11.0-12.0	12.0-13.0	11.4-12.2 Typical: 11.8
	正负偏差	±0.7	±0.7	±0.7	
有效面积典型值 @1550nm (um^2)		\	\	\	110
*光缆截止波长 (nm)		≤1510	≤1530	≤1530	≤1530 典型值 1440nm
*衰减系数 @1550nm (dB/km)		≤0.20	≤0.20-0.25		≤0.174
*宏弯 (R30mm×100 turns)	1550nm (dB)	TBD	TBD	TBD	≤0.1
	1625nm (dB)	≤0.2	≤0.5	≤0.5	≤0.2
*色散系数 @1550nm (ps/nm/km)		≤22	≤22	≤22	≤22
色散斜率 @1550nm ($ps/nm^2/km$)		≤0.070	≤0.070	≤0.070	≤0.070
PMD ($ps/km^{1/2}$)		≤0.2	≤0.2	≤0.2	≤0.2
几何参数					
包层外径 (um)		125±1	125±1	125±1	125±1
芯包同心度 (um)		≤0.8	≤0.8	≤0.8	≤0.8
包层圆度 (%)		≤1.0	≤1.0	≤1.0	≤1.0

仍然在讨论中，ITU-T Q5 小组未有明确建议。

2.光纤设计和制造



光纤折射率剖面结构示意图

和传统的掺氟外包层结构的超低衰减大有效面积光纤相比，长飞采用纯二氧化硅（SiO_2）作为光纤的外包层，由于减少了氟掺杂材料的使用量，无论从材料制备成本，制备技术难度以及环保等角度，我们的超低衰减大有效面积光纤产品在成本上更具有竞争力。

3.光纤和光缆性能

3.1　光纤衰减

无论从理论还是实际角度，更低的衰减可以减少中继站的数量并降低长距离通信网络的维护成本，因此不断地降低光纤衰减系数是光纤研发的长期目标。对于光纤研发和制造企业，如果我们可以在理论上，对衰减组成的各个部分进行定性和定量的分析，就可以有效的帮助我们找到降低衰减的最优途径，在实际工作中指导我们的工作方向。

下表给出了超低衰减大有效面积光纤和标准 G.652.D 光纤在 1550nm 处各损耗贡献因素的具体对比数值。目前长飞公司正在研发第二代超低衰减光纤技术，并已经取得关键性突破，预计在 2016 年初将释放第二代超低衰减大有效面积光纤产品，其有效面积将更大，典型衰减值也将更低。

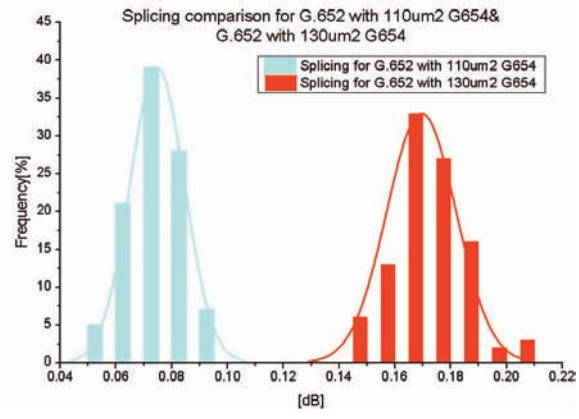
	G.652.D 标准	超低衰减大有效面积光纤
瑞利散射贡献	0.162 dB/km	0.136 dB/km
红外吸收贡献	0.014 dB/km	0.014 dB/km
其他	0.016 dB/km	0.012 dB/km
总衰减	0.192 dB/km	0.162 dB/km

标准 G.652.D 和超低衰减光纤的衰减谱分解

3.2　熔接性能

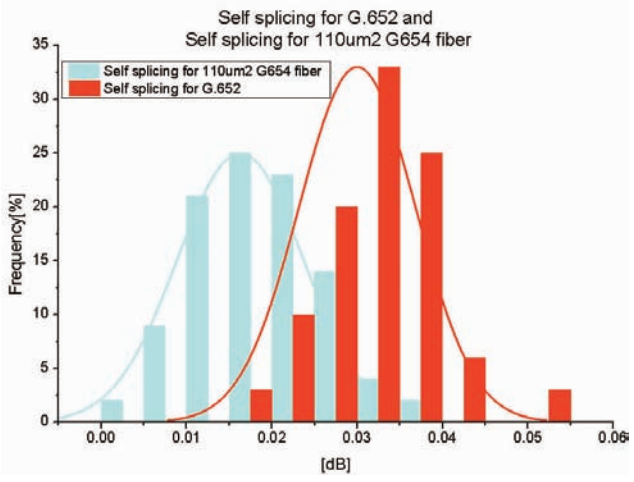
选择超低衰减大有效面积光纤作为下一代长距离通信用光纤，光纤的熔接性能是一个非常关键的参数。G654 光纤的熔接可以分为两方面：第一是 G654 光纤的自熔损耗；第二是其与现网中大量使用的 G.652.D 光纤互熔时的损耗。

影响熔接损耗的因素有很多，但模场直径失配是最关键的因素。如下图所示，有效面积为 110μm² 的超低衰减大有效面积光纤和标准 G652 光纤的典型熔接损耗值明显低于有效面积为 130μm² 的大有效面积光纤同标准 G652 光纤的典型熔接损耗值。一般认为，光纤接头热熔损耗必须小于等于 0.08dB，而有效面积为 130μm² 的光纤同标准 G652 熔接时，熔接损耗明显大于 0.08dB。这也是我们选择 110μm² 作为下一代通信光纤最优有效面积的主要原因。



标准 G652 光纤和不同有效面积光纤的熔接性能对比

需要注意的是，在现网部署中需要对光纤进行熔接的情况有 2 种：第一个就是光缆与光缆之间的熔接，这部分主要是同种光纤的互熔，不可能出现较大的模场直径失配；第二种就是光缆与各种有源和无源设备之间的连接，对于这种情况我们可以通过把设备跳线换为 G654 光纤跳线的方法，避免模场直径失配，所有在实际部署中 G654 光纤同 G652 光纤的熔接接头数量非常少，不会影响整体链路衰减。



G652 和 G654 光纤自熔接损耗对比

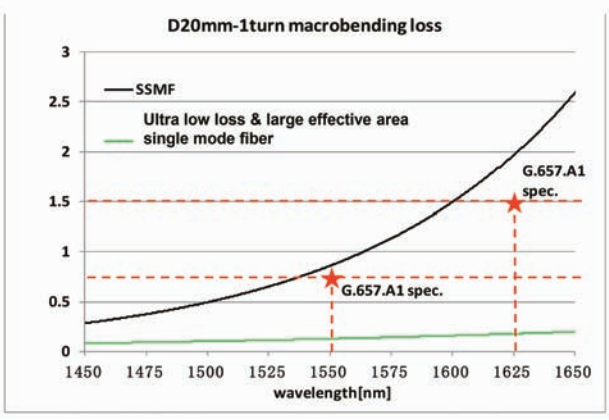
如上图所示，我们测试并比较了有效面积为 110μm² 的超低衰减大有效面积光纤自熔损耗和标准 G.652.D 光纤的自熔损耗。相对于传统的 G652 单模光纤，由于有效面积相对较大可以减少模场直径失配的影响，有效面积为 110μm² 的超低衰减光纤的自熔接损耗低于标准 G.652.D 光纤，典型值在 0.15dB 左右。考虑到长距离通信网络中的大部分熔接为同一种光纤的自熔接，因此使用超低衰减大有效面积光纤作为下一代通信光纤可以显著地减小因熔接损耗造成链路损耗增加。

3.3　宏弯损耗

另一个影响大有效面积光纤在陆地使用的因素是陆地缆的安装和应用环境比海缆更复杂，经常需要经过一些转角或需要在分线盒内留有余长盘纤，因此我们必须保证陆地干线

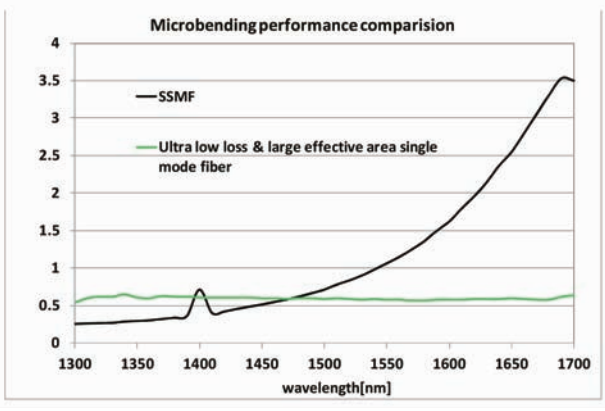
光纤比海缆光纤有更好的抗宏观弯曲性能。

影响宏弯的主要因素是光纤的剖面设计。辅助下陷内包层结构是弯曲不敏感 G.657 光纤所使用的主要设计方案，而在我们的超低衰减大有效面积光纤设计中，我们使用类似的结构，将下陷内包层的体积优化至一个合理的值来获得更好的抗弯曲性能。如下图所示，我们的超低衰减大有效面积光纤较标准 G.652.D 单模光纤有着更优异的抗弯曲性能，完全满足并优于 G.657.A1 标准，从而满足陆地干线实际部署中各种苛刻复杂苛刻环境的要求。



宏弯损耗对比

3.4　微弯损耗

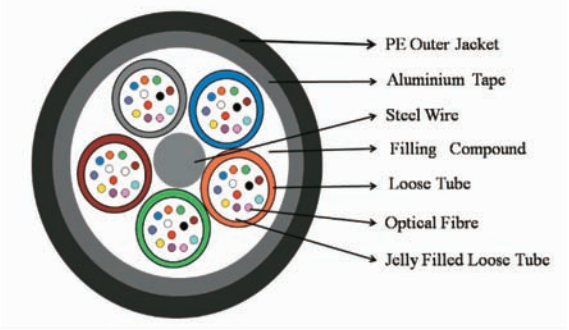


超低衰减大有效面积光纤同普通 G652 光纤的微弯损耗对比

目前对大有效面积光纤在陆地使用的最大担心就是微弯性能。微弯是影响成缆设计和成缆过程的重要因素，优异的微弯性能可以减小成缆设计和成缆过程的难度，并且可以改进光缆在不同应用条件下，尤其是极端环境中的性能稳定性。但目前主流的增大光纤有效面积的方法是增加芯层直径或降低芯层相对折射率，这两种设计都会对光纤的微弯带来负面影响。对于长飞公司的超低衰减大有效面积光纤，我们通过特殊优化设计的下陷内包层结构，并结合特殊的光纤涂覆工艺，有效的降低了超低衰减大有效面积光纤的微弯损耗。上图给出了我们的有效面积为 110μm² 的超低衰减光纤和标准 G.652.D 单模光纤的微弯性能对比，可见我们的光纤具有优异的微弯性能，在全波段范围内的典型微弯损耗低于 0.5dB/km。

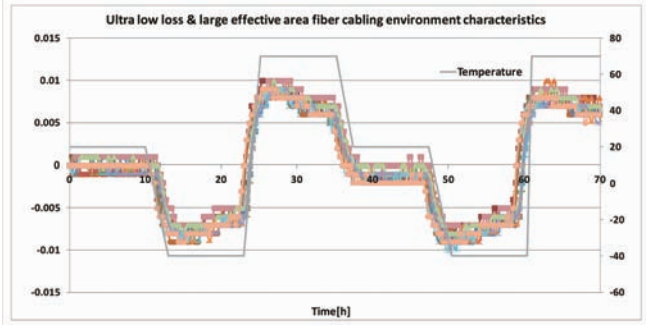
3.5　光缆 TCT 性能

如上文讨论，由于陆地干线光缆的使用环境较海洋光缆使用环境更为复杂苛刻，陆地缆需要在经历更剧烈的温度变化的条件下仍然保持链路损耗的稳定性。为了进一步验证我们光纤在成缆后的性能，我们进行相关成缆实验。在相关标准汇总，通常使用光缆温度循环测试来检测衰减随温度的变化。在实验中，我们将 12 芯超低衰减大有效面积(110μm²)光纤置于一个 GYTA 的光缆管内进行 TCT 实验，下图为我们的光缆结构示意图 。



光缆结构示意图

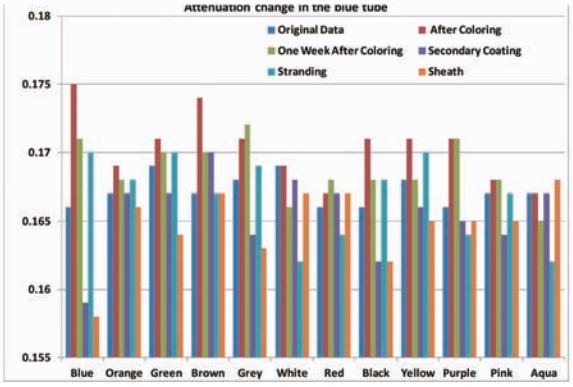
由下图我们可以发现，当温度在 −40 摄氏度到 +70 摄氏度的范围内变化时，我们的超低衰减大有效面积(110μm²)光缆的衰减变化小于 0.01dB/km，远远优于 IEC 和 ITU−T 标准规定的 0.05dB/km。



光纤衰减随温度的变化:12 个颜色代表 12 芯光纤的衰减变化

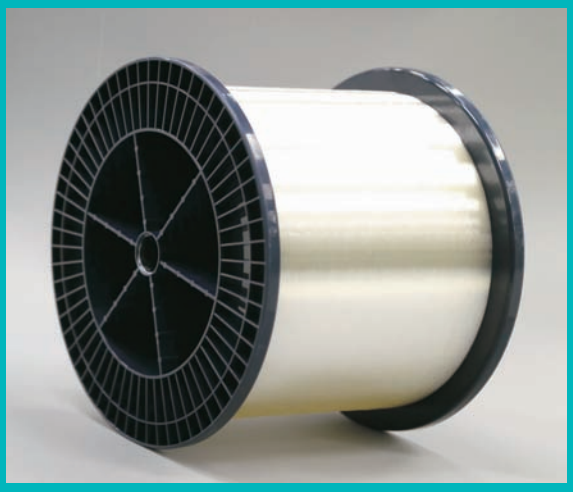
3.6　成缆过程中的衰减变化

下图为长飞超低衰减大有效面积光纤在成缆各个工序中衰减的变化,同组不同颜色的彩色柱状图代表了一根光纤在成缆不同工艺过程中光纤衰减的变化。每组最左边的蓝色彩条是成缆前光纤在光纤盘上时的原有衰减值,最右侧橙色彩条是光纤成缆后的衰减值;12 组代表在同一根套管中的 12 根不同光纤。从实验我们可以发现,由于我们的光纤拥有优异的宏弯和微弯性能,在成缆后光纤在 1550nm 波长处的衰减值较成缆前光纤原有衰减在同一水平,甚至更低。因此,长飞的超低衰减大有效面积光纤增加了光缆设计的灵活性,且成缆过程不需要其他特殊工艺控制,减少了成缆的时间和成本。



在同一套管中的 12 芯光纤在成缆过程中的光纤衰减伴随成缆工艺流程的变化

长飞超低衰减大有效面积光纤具有超低的衰减系数、较大的有效面积、优异宏弯和微弯性能和良好的成缆适应性,并且可以兼容现有的 G652 光纤,是下一代 400G 和超 400G 陆地干线通信系统的最优选择。



Used for New Ultra-low Attenuation Large Effective Area Single-mode Fiber of the Next-generation Terrestrial Transmission Network

R & D Center Zhang Lei

The terrestrial network in China is mainly subject to the ordinary G.652.D optical fiber currently, while most of the optical cable laid in 1990s and have reached 20 –25 years' service life, therefore, the backbone network should be upgraded gradually in the next few years. Therefore, how to choose the right optical fiber for the long–distance terrestrialoptical cable is a key problem urgent to be solved for the network operators and optical communication companies. In order to obtain the best system performance, if we can combine the ultra–low attenuation and large effective area characteristics into an optical fiber, such optical fiber will be the best optical fiber in the next–generation communication optical fiber.

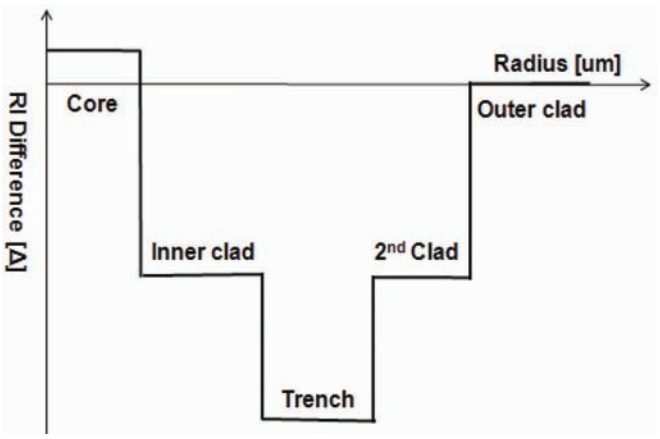
1.G.654.E Recommended indicators

The following table shows the currently discussed G.654.E optical fiber indicators and YOFC ultra–low loss large effective area optical fiber datasheet. the ultra–low attenuation large effective area optical fiber (FarBand®Ultra) of YOFC Company can meet and even be better than the most existing stringent G.654.E standard recommendation proposals.

Parameter name		G.654.E discussion paper			YOFC Scope of product manual
		Proposal 1	Recommendation 2		
			E1	E2	
Optical parameters					
*Mode field diameter @ 1550nm (um)	Nominal	11.5-13.0	11.0-12.0	12.0-13.0	11.4-12.2 Typical: 11.8
	Deviations	±0.7	±0.7	±0.7	
Effective area typical value @ 1550nm (um2)		\	\	\	110
*Optical cable cut-off wavelength (nm)		≤1510	≤1530	≤1530	≤1530 Typical value 1440nm
*Attenuation coefficient @ 1550nm (dB / km)		≤0.20	≤0.20-0.25		≤0.174 (Typical 0.160)
*Macro-bending (R30mm × 100 turns)	1550nm (dB)	TBD	TBD	TBD	≤0.1
	1625nm (dB)	≤0.2	≤0.5	≤0.5	≤0.2
*Dispersion coefficient @ 1550nm (ps / nm / km)		≤22	≤22	≤22	≤22
dispersion slop @ 1550nm (ps / nm2 / km)		≤0.070	≤0.070	≤0.070	≤0.070
PMD (ps/km1/2)		≤0.2	≤0.2	≤0.2	≤0.2
Geometric Parameter					
Cladding outer diameter (um)		125±1	125±1	125±1	125±1
Core cladding concentricity (um)		≤0.8	≤0.8	≤0.8	≤0.8
Cladding circularity (%)		≤1.0	≤1.0	≤1.0	≤1.0

*Still under discussion, ITU–T Q5 group has no specific recommendations.

2. Design and manufacturing of optical fiber



Schematic diagram for optical fiber refractive index profile structure

Compared YOFC the ultra–low loss large effective area optical fiber with the traditional fluorine–doped external cladding structure ULL fiber, YOFC adopts pure silicon dioxide (SiO_2) as the optical fiber cladding, due to the reduction in the use amount of fluorine–doped materials, in terms of material preparation cost, preparation technology difficulty, environmental protection and other points of view, our ultra–low attenuation large effective area optical fiber products are more competitive in the cost.

3. Optical fiber and optical cable performance

3.1 Optical fiber attenuation

In terms of theory and practical points of view, the lower attenuation can reduce the number of repeaters and reduce the maintenance costs of long–haul communication network; therefore the continuous reduction in the optical fiber attenuation coefficient is the long–term goal of optical fiber research and development. For optical fiber R & D and manufacturing enterprises, if we can carry out the qualitative and quantitative analysis on various parts composed by the attenuation in theory, it can effectively help us find the best way to reduce attenuation and guide our work direction in the practical work.

The following table shows the specific comparison value for each loss contribution factors of the ultra–low loss and large effective area optical fiber and the standard G.652.D optical fiber at 1550nm.Currently, YOFC Company is reaching and developing the second–generation ultra–low attenuation optical fiber technology and a key breakthrough has been made, it is expected that the second–generation ultra–low attenuation large effective area optical fiber product will be released in early 2016, its effective area will be greater and the typical attenuation value will also be lower.

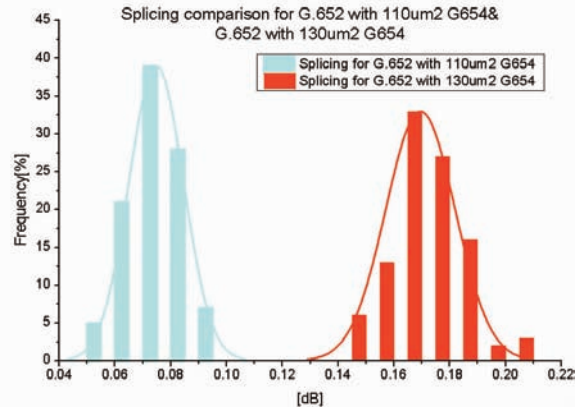
Standard G.652.D and ultra–low attenuation optical fiber attenuation spectral decomposition

	Standard G.652.D	Ultra-low loss & Large Aeff. fiber
Rayleigh scattering contribution	0.162 dB/km	0.136 dB/km
Infrared absorption contribution	0.014 dB/km	0.014 dB/km
Others	0.016 dB/km	0.012 dB/km
Total attenuation	0.192 dB/km	0.162 dB/km

3.2 Fusion performance

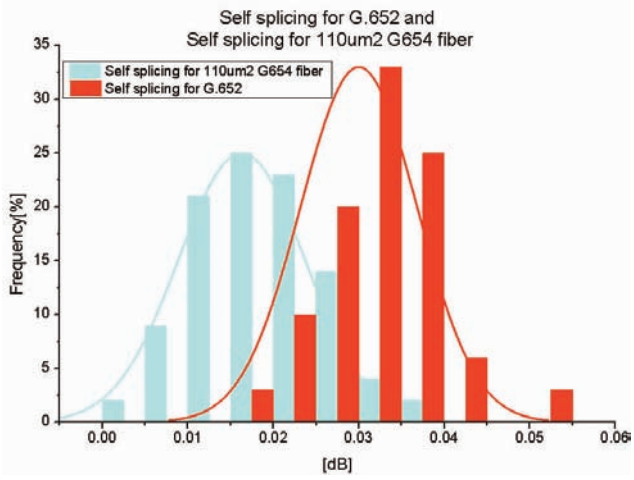
Select ultra–low loss large effective area optical fiber as the next–generation long–distance communication optical fiber, and the optical fiber fusion performance is a critical parameter. G654 optical fiber fusion can be divided into two areas: The first is the self–fusion loss of G654 optical fiber; The second is the loss when it is mutually fused with G.652.D optical fiber network extensively used in the current network.

There are many factors affecting the fusion loss, but the mode field diameter mismatch is the most critical factor. As shown in the figure below, the typical fusion loss value of the ultra–low loss large effective area optical fiber with an effective area of 110 μ m^2 and the standard G652 optical fiber is significantly lower than the typical fusion loss value of the large effective area optical fiber with an effective area of 130 μ m^2 and standard G652 optical fiber. It is generally believed that the splicing loss of the optical fiber must be less than or equal to 0.08dB, while when the optical fiber with an effective area of 130 μ m^2 is spliced with standard G652, the splicing loss will be significantly greater than 0.08dB. It is the main reason for us to select 110 μ m^2 as the optimal effective area of the next–generation communication optical fiber



Comparison of the fusion performances when standard G652 optical fibers are fused with the optical fibers of different effective areas (110 μ m² and 130 μ m²)

It should be noted that there are two kinds of fusing situations required for the optical fiber in the current network deployment: The first is the fusion between the optical cables, this part is mainly the mutual fusion between the optical fibers of the same kind, the larger mode field diameter mismatch situation may not be occurred; The second is the connection between the optical cable and a variety of active and passive equipment, in this case, we can avoid mode field diameter mismatch by the way of changing the equipment jumper to G654 optical fiber jumper, there are very fewer fusing connectors of all G654 optical fibers and G652 optical fibers in the actual deployment, which will not affect the overall link loss.



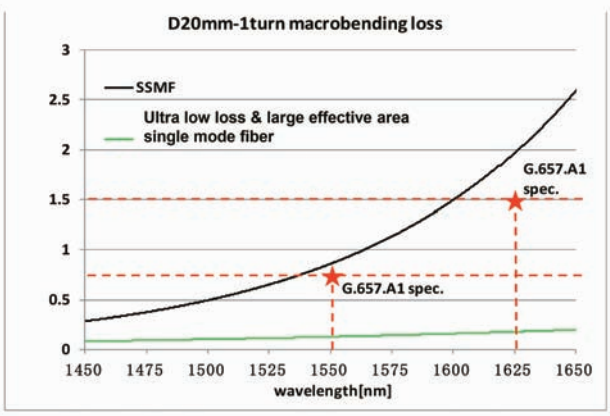
Comparison of self–fusion losses between G652 and G654 optical fibers: G652 typical value: 0.035dB, G654 typical value: 0.15dB

As shown in the above figure, we have tested and compared the self–splicing loss of the ultra–low loss large effective area optical fiber with an effective area of 110 μ m² and the self–splicing loss of the standard G.652.D optical fiber. Compared with the traditional G652 single–mode fiber, because the large effective area can relatively reduce the impact of the mode field diameter mismatch, the self–splicing loss of ultra–low loss optical fiber with an effective area of 110 μ m² is lower than the standard G.652.D optical fiber, and the typical value is about 0.015dB. Considering that most of splicings in the long–distance communication network is the self–splicing of the optical fibers of the same kind fibers, therefore, the use of the ultra–low loss large effective area optical fiber as the next–generation communication optical fiber can significantly reduce the link loss increase arising from the fusion loss.

3.3 Macro–bending loss

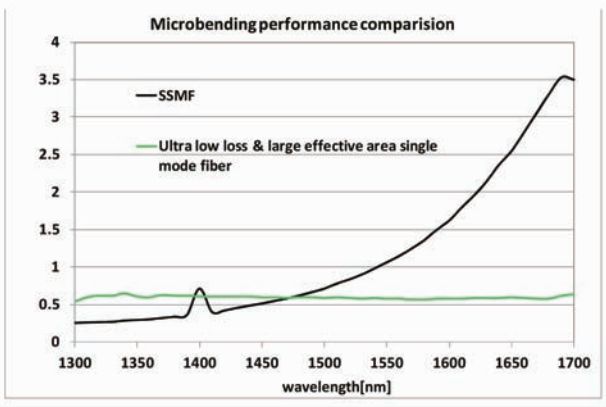
Another factor affecting the use of large effective area optical fiber on land is that the terrestrial cable installation and application environment are more complex than the submarine cable, it often needs to go through some of the corners or needs to leave enough cable or fiber lenth in the junction box, therefore, we must ensure that the terrestial optical fiber has better macro–bending resistance performance than the submarine optical fiber.

The main factor affecting the macro–bending is the profile design of the optical fiber. The depressed trench structure is the main design scheme used for bend–insensitive G.657 optical fiber, while in our ultra–low loss large effective area optical fiber design, we use a similar structure, which can optimize the volume of the depressed trench to a reasonable value in order to obtain a better bending resistance performance. As shown in the following figure, compared with the standard G.652.D single–mode fiber, our ultra–low loss large effective area optical fiber has more excellent anti–bending performance, it can fully meet and be better the standard G.657.A1, thereby meeting various harsh and complex environment requirements in the actual deployment of the terrestrial cable application.



Comparison of macro–bending loss

3.4 Micro–bending loss

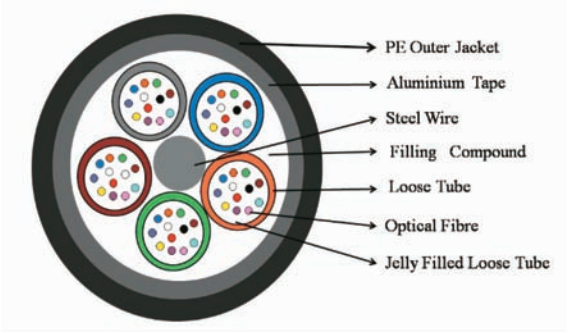


Comparison of micro–bending losses between the ultra–low loss large effective area optical fiber and the standard G652 optical fiber

The most worried thing for the use of the large effective area optical fiber on land is the micro–bending performance. Micro–bending is an important factor affecting the cabling design and cabling process, better micro–bending performance can reduce the difficulties in the cabling design and cabling process and improve the performance stability of the optical cable under different application conditions, especially in extreme environments. But the current mainstream methods for increasing the effective area of the optical fiber is to increase the fiber core layer diameter or reduce the fiber core layer relative refractive index, both designs will have a negative effect on the micro–bending of the optical fiber. For the ultra–low loss large effective area optical fiber in YOFC Company, we have effectively reduced the micro–bending loss of the ultra–low loss large effective area optical fiber by using the specially optimized and designed depressed trench structure design and combining with the special optical fiber coating process. The above figure shows the comparison of the micro–bending performances between our ultra–low loss optical fiber with an effective area of 110 μ m^2 and the standard G.652.D single–mode fiber, it can be seen that our optical fiber has excellent micro–bending performance and its typical micro–bending loss is less than 0.5dB / km in the whole wavelength range.

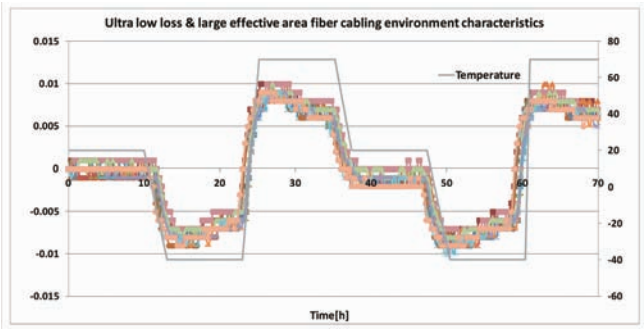
3.5 Optical cable TCT performance

As discussed above, since the application environment of the terrestrial optical cable is more complex and harsh than the environment of the submarine optical cable, the terrestrials optical cable needs to keep the link loss stability even under the more fierce temperature change conditions. To further validate the performance of our optical fiber after cabling, we have performed the relevant cabling experiments. In the summary of the relevant standards, the optical fiber temperature cycle test is commonly used to detect the changes in loss with temperature. In the experiment, we placed 12–core ultra–low loss large effective area (110 μ m^2) optical fiber in an optical cable pipe of a GYTA for TCT experiment; the following figure shows the schematic diagram for our optical cable structure.



The figure below is the schematic diagram for optical cable structure

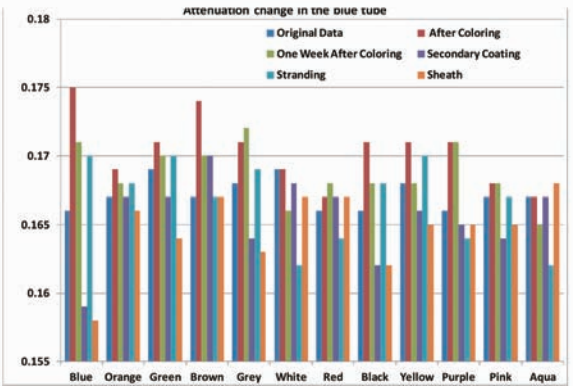
We can see from the following figure, when the temperature changes in the range of –40 degrees Celsius to +70 degrees Celsius, the loss changes of our ultra–low loss large effective area (110 μ m^2) optical cable will be less than 0.01dB / km and far superior to 0.05dB / km specified by the IEC and ITU–T standards.



Changes in the optical fiber loss with temperature: 12 colors represent the loss changes of 12–core optical fiber

3.6 Loss changes during the cabling

The following figure shows the loss changes for YOFC ultra–low loss large effective area optical fiber optic in each procedure of cabling, the color histogram in different colors but in the same group represents the loss changes of one optical fiber in different technology processes of cabling. The blue strip in the left–most in each group is the original loss of the optical fiber, while the orange strip in the right most is the loss of the optical fiber after laying–up;12 groups indicate 12 different optical fibers in one tube. From the experiment, we can see that, as our optical fiber has excellent macro–bending and micro–bending performance, the loss of the optical fiber at 1550nm after cabling will be at same level or lower than the original loss of the optical fiber before cabling. Therefore, the ultra low loss and large effective area of YOFC increase the flexibility of the cable design, which does not require other special process to control during the laying up process, and reduce the time and costs for cabling.



Loss changes of of 12–core optical fiber in same sleeve along with the laying up process

The ultra low loss and large effective area of YOFC optical fiber has super low loss coefficient, larger effective area, excellent macro–bending and micro–bending performance as well as excellent adaptability of laying up, and is compatible to the existing G652 optical fiber, which is the best choice of the next generation 400G and super 400G terrestrial communication system.

严静

2004 年 1 月进入长飞公司后在光纤部测试工序从事操作员工作，2007 年开始担任工序代主操一职，2010 年 9 月因工作需要调至 PCVD 工序。在不同的岗位上，他一直勤勤恳恳、兢兢业业，工作绩效名列前茅，曾分别获得“测试工序青年岗位能手”、“PCVD 工序青年岗位能手”荣誉称号。4 月 29 日，武汉市庆祝“五一”国际劳动节表彰大会在武汉剧院隆重召开，他荣获了 2016 年武汉市“五一劳动奖章”。

用实际行动诠释长飞企业文化

——记 2016 年度武汉市“五一劳动奖章”获得者严静

特种产品事业部　钟伟

努力学习　勤奋严谨

严静曾工作的测试工序在光纤生产制造流程中是一个非常关键的环节，所有生产的光纤产品必须在该工序进行光纤几何性能及光学性能的测试，剔除参数不合格产品，这要求从业人员必须具备高度的责任心及良好的质量意识，严防不合格产品出厂。严静凭借刻苦肯干的钻研精神、以身作则的高度责任感、严谨踏实的工作态度，迅速成长为光纤测试工序的骨干力量。6 年以来，他未放过不合格光纤、未引起客户抱怨、未产生质量事故，获得领导及同事的高度赞扬。因对待工作认真负责，经领班推荐，部门领导认可，严静于 2007 年开始担任工序代主操一职，在协助主操搞好工序团队管理中起到重要作用。

2010 年 9 月，因工作需要，严静调至 PCVD 工序。这是光纤生产流程中的核心工序，所涉及到的设备及工艺问题复杂，任何操作细节上的失误都有可能导致产品报废，一旦产生报废将会导致严重的经济损失。严静一如既往地保持自己勤于学习、善于思考、努力钻研的学习精神，虚心地向老师傅学习操作要点、向工程师请教工艺流程及原理、向

设备维修人员了解设备构造及功用。凭借这股刻苦钻研的精神，他很快就掌握了 PCVD 工序的操作技能，同时了解了玻璃芯棒的制棒原理及设备工作原理，在工作当中融会贯通，多次提出改善产品质量及优化生产流程的合理化建议。

积极进取　精益求精

2014 年 10 月，严静通过竞聘担任 PCVD 工序主操职务。主操岗位担负有一定的管理职能，不仅要保质保量做好自己的本职工作，还要协助领班对工序进行协调管理、培训督导新员工。在担任主操期间，他一直以“减少芯棒报废、降低生产成本”为己任，经常和操作员交流操作细节、探讨操作技巧、分享自己的操作经验，积极指出他们工作中的不足，纠正不良的工作习惯，帮助 2 班 PCVD 团队成长为一个优秀的集体。

严静不仅工作认真，责任心强，而且技术过硬。保偏光纤是长飞公司特种光纤系列的拳头产品，其中应力棒的制作既是核心技术，也是工作难点，尤其在熔缩时，由于掺杂浓度高，应力大，稍有不慎就会造成应力棒炸裂，因此对释放应力、拉锥下棒的操作精细度要求更高。严静一边向工艺工程师请教其产品特性，一边积极与其他操作人员交流沟通，摸索出一套行之有效的操作方法并积极分享推广，在确保产品批次稳定性、降低应力棒报废率方面取得不俗成绩。

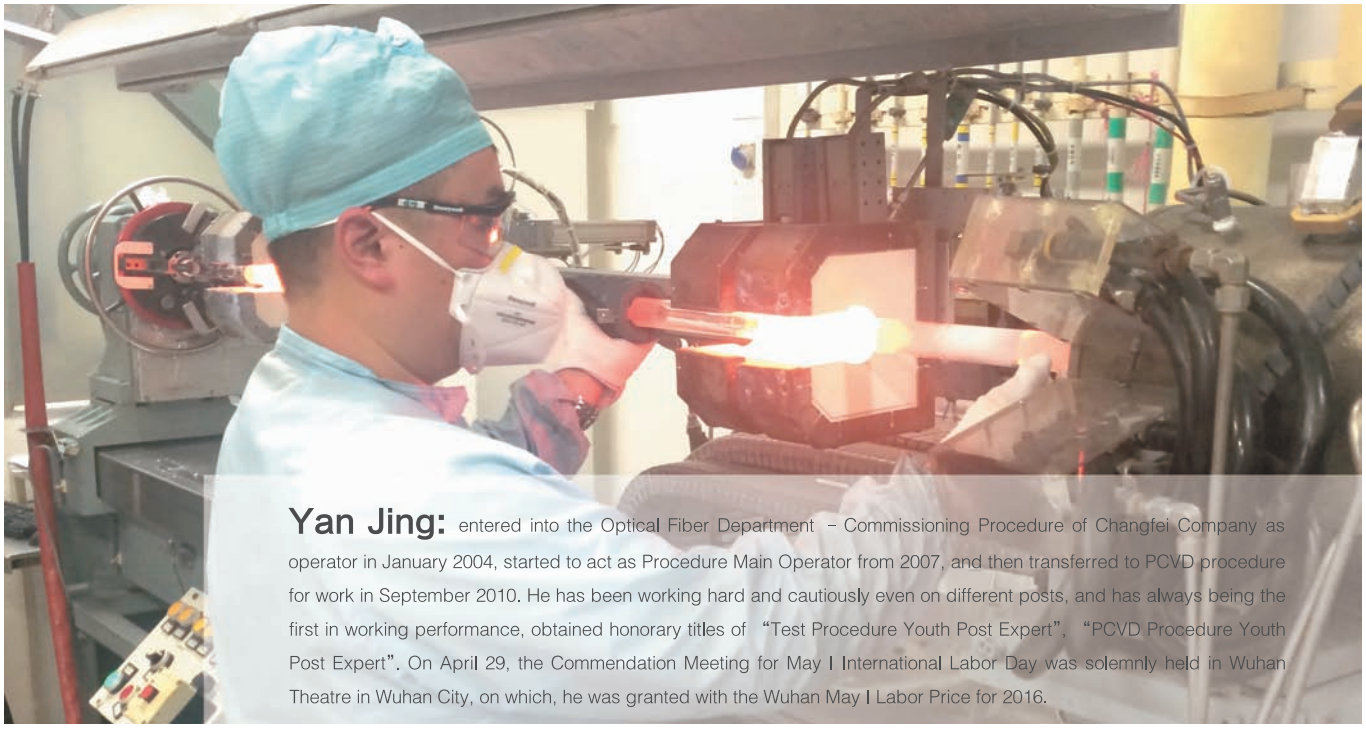
在做好本职工作的同时，严静还协助工艺工程师进行了一些工艺操作流程的优化。长飞公司特种产品事业部所生产的光纤品种繁多，G.655 DCF 就是其中的一种。这种产品的参数控制稳定性较差，芯棒熔缩时孔径控制困难，严静凭借多年积累的操作经验及对设备状况的熟悉，向工艺工程师提出自己的操作方法，该提议对 G.655 DCF 光纤芯棒的孔径圆度控制有很大改善，得到工艺工程师肯定，并参照此方法对操作流程进行优化，使该品种光纤的芯棒成品率得到大幅度提升。

在当今光纤行业竞争激烈，光纤价格低位徘徊的市场环境下，如何降低生产成本、提升产品质量、增强产品竞争力是每一个长飞人都要积极面对的严峻考验。严静同时也意识到了这个问题，也在积极地思考，摸索如何减少 PCVD 芯棒报废的有效方案。他提出的“加装 Reheater 故障报警装置”的合理化建议已被采纳用于各台熔缩车床，大大减少了 Reheater 故障造成的芯棒报废数量，为公司的“降成本、增效益、求发展”战略贡献了自己的一份力量。

无私传带　领导团队

随着公司业务量的逐年增长，一线员工队伍也逐渐扩大，如何让新员工快速掌握操作技能、适应团队氛围是每一个管理者需要重视的问题。不论在光纤测试工序还是在 PCVD 工序，严静凭借他扎实的理论功底、娴熟的操作技能，陆续带出了十几个徒弟。本着“授人以鱼不如授人以渔”的想法理念，他不仅仅是教会徒弟如何操作，同时将自己在日常工作中积累的经验、心得，掌握的理论知识及操作要点都毫无保留地传授给徒弟，鼓励他们努力学习。正是因为他的细心、无私、勤勉，他的众多徒弟都迅速掌握了相关技能，成长为班组团队的业务骨干。在他的带领下，2 班 PCVD 团队已逐步成长为一个优秀团队。

“爱岗敬业、富有激情、勇于担当”是严静的工作理念，他时刻将这股正能量传递给身边的每一位同事，用自己的实际行动诠释了“做一名有责任心的长飞人”的企业文化理念。



Yan Jing: entered into the Optical Fiber Department – Commissioning Procedure of Changfei Company as operator in January 2004, started to act as Procedure Main Operator from 2007, and then transferred to PCVD procedure for work in September 2010. He has been working hard and cautiously even on different posts, and has always being the first in working performance, obtained honorary titles of "Test Procedure Youth Post Expert", "PCVD Procedure Youth Post Expert". On April 29, the Commendation Meeting for May I International Labor Day was solemnly held in Wuhan Theatre in Wuhan City, on which, he was granted with the Wuhan May I Labor Price for 2016.

Interpret Enterprise Culture of Changfei with Practical Actions

——Chronicle of Yan Jing, the winner of Wuhan May I Labor Price

Special Product Business Department Zhong Wei

Study Hard, Diligence, Accuracy

The test procedure in which Yan Jing has worked is a critical link in the optical fiber production and fabrication process, all optical fiber products produced must undergo geometric performance and optical test, the products not qualified in parameters should be sorted out, which requires the worker must have strong sense of responsibility and quality awareness so as to prevent any defect product out of factory. By virtue of its hardworking spirit, strong sense of responsibility, rigorous and steady work attitude, he turned into the backbone in the optical fiber test procedure in a short time. In these six years, he has never missed any unqualified optical fiber, has never cause any customer complaint, has never cause any quality accident, but has been highly praised by leaders and colleagues. Recommended by shift head and approved by department leaders, Yan Jing started to act as the Procedure Main Operator from 2007, playing an important role in providing assistance to main operators in procedure team management.

In September 2010, Yan Jing was transferred to PCVD procedure by work demand. This is the core procedure in the optical fiber production procedure, all equipment and process problems involved are complex, any mistake on any operation detail will cause the product scrapped, the scrap will cause serious

economic loss. Yan Jing keeps his hardworking, thoughtful and spirit of study as always, earnestly learns operation key points from old master, consult engineers for the process flow and principles, understand equipment structure and functions from equipment maintenance personnel. With such hardworking spirit, he grasped the operation skills of PCVD procedures as well as the fabrication principles of glass–core bar and equipment working principles in a short time, and put forward several reasonable suggestions for improvement of product quality and optimization of production flow.

Proactive, Excelsior

In October 2014, Yan Jing started to act as the PCVD procedure main operator through competitive selection. The main operator post has certain management functions, the main operator should not only do well its own work with good quality and sufficient quantity, but also assist the shift leader in coordination and management on procedures, training and urging new employees. During the term of main operator, he takes the "reduce the core bar scrap, lower the production cost" as his own task, frequently communicate with operators for details of operation, explore operate skills, and share own operation experiences, actively point out the shortages in work and correct their bad habits, so as to help class 2 PCVD team become an excellent group.

Yan Jing has not only hardworking attitude, strong sense of responsibility but also hard technique. Baopian Optical fiber is the fist product of special optical fiber series in Changfei Company, among which, the fabrication of stress bar is the core technology, as well as the difficulty of work, especially in collapsar process, as the large mixing concentration and large stress, the stress bar will explode for any carelessness, therefore, there are higher requirements on stress release and precision of tapering bar operation. At the same time consulting the process engineer for the product characteristics, he also actively communicate with other operators to explore a set of practical operation method and actively share and promote, obtained excellent achievement at the aspects ensuring the stability of product batches and lowering the rate of scrap of stress bar.

While doing his work well, Yan Jing also provides assistance to process engineers in optimization of some process operation flow. There are various types of optical fiber produced by Special Product Business Department of Changfei Company; G.655 DCF is one of them. For these products, the stability of parameter control is poor, and it is difficult to control the aperture during the optical fiber collapsar process, with years accumulated operation experience and knowledge about the equipment situation, Yan Jing put forward his own operation method to process engineers, which greatly improved the control of aperture of G.655 DCF fiber core bar, and affirmed by process engineer, the optimization of operation flow is conducted by this method, greatly improving the core bar finished product ratio of the optical fiber of that kind.

The optical fiber industry is in fierce competition today, and the price of optical fiber keeps low, under such circumstance, how to reduce the production cost, improve the product quality, and enhance the product competition are severe tests for each worker in Changfei which should be positively faced to. Yan Jing has recognized this problem and actively thought about it, and finally find out an effective scheme for reducing the PCVD core bar scraping rate. The reasonable suggestion of "install with Reheater fault alarm device" put forward by him has been adapted in various collapsar beds, greatly reduced the scrapped number of core bar caused by fault of Reheater, and contributed his force to the strategy of "Lower Cost, Increase Benefits and Seek for Development" of the company.

Teach selfless, lead teams

With the year by year increase of business volume of the company, the first tire employees have been expanded as well, how to make new employees grasp the operation skills in a short time and fit in with the team work are the problems which should be paid attention on by each manager. Regardless of in optical fiber test procedure and PCVD procedure, Yan Jing has cultivated tens of apprentices with his solid theory foundation and accomplished operation skills. By the concept of "teach one to fish is better than giving him fish", he teaches his apprentices not only about the operation method, but also his experience, theories, operation key points accumulated in daily work without any reservation, and encouraged them to study hard. Thanks to his careful consideration, selflessness and hardworking, many of his apprentices have grasped relevant skills and developed as the business backbone in the shift team. Under his leadership, class 2 PCVD team has developed into an excellent team.

"Love post, Be passive, brave to act" is his working concept, he transfers this positive energy to every colleague around him and interprets the enterprise cultural concept of "Be a responsible Changfei worker" with his practical action.

长飞公司第三届气排球比赛圆满落幕

YOFC Third Balloon Volleyball Match Successfully Concluded

制造中心　汪从顺 /Manufacturing Center　Wang Congshun

为了进一步弘扬长飞公司的企业文化、培养员工的团队精神、丰富广大职工的业余生活，长飞公司工会和团委于2016年4月9日在武汉火车头体育馆联合组织了“长飞光纤光缆股份有限公司第三届气排球比赛”。

气排球运动可谓是纯粹的“中国制造”，是一项由我国发明的群众性排球运动，具有运动、休闲、娱乐等特点。由于运动量和激烈程度适中，男女都可以混合进场参与，适合各个年龄层次的人进行强身健体活动。气排球运动集体性强，各比赛队员必须协调配合；比赛规则宽，身体任何部位都可以触球，将球打进对方场地为有效。长飞公司已成功举办了两届气排球比赛，队员的整体水平有了较大提高。

随着长飞公司党委副书记、工会主席王沙京的一声令下，长飞第三届气排球比赛正式开始。六只代表队分成两个小组，首先进行小组赛，小组前两名再进行交叉淘汰赛。由张武领衔的特纤代表队是前两届的冠军得主，实力雄厚；由张流率领的光缆代表队是后起之秀，咄咄逼人。两只球队在小组赛就相遇了，结果特纤队2:1险胜，以小组第一身份出线。光缆代表队在战胜另外一只小组队后也以第二名出线。在分别战胜交叉赛对手后，两只队伍又在决赛场上会师。明星球员张流不负众望，凭借突出的个人能力和良好的团队合作，率领光缆代表队以2:0战胜对手，最终获得冠军。特纤队、光纤队分获二、三名。比赛结束，王主席做了精彩的点评并为获奖团队颁奖。

通过这次气排球比赛，不仅广大员工锻炼了身体、增强了团队精神，企业凝聚力也得到加强。同时，这次比赛也为今年六月长飞组队参加湖北电信系统“长飞杯”气排球大赛进行了一次人才选拔和内部练兵。预祝长飞代表队在“长飞杯”气排球大赛上赛出风格、赛出水平，取得好成绩！

In order to further promote and develop YOFC culture, nurture team spirit and enrich life of our staff, on April 9, 2016, "YOFC Third Balloon Volleyball Match" was jointly held in Wuhan Locomotive Gymnasium by YOFC Labor Union and YOFC Youth League Committee.

Balloon volleyball deserves "pure China-made sport". It is a mass sport invited in China, achieving doing sport and enjoying leisure and amusement at the same time. Due to its moderate amount of exercise and intense level, it suits both male and female and people of all ages for keeping fit. Balloon volleyball is a collective sport which requires coordination and cooperation of all the team members. Rules for it are less strict: any part of body may touch the ball and results are effective as long as the ball is hit to the other court. Up till now,YOFC has successfully organized two matches and the overall level of players has been greatly enhanced.

One command from Wang Shajing, Deputy Party Secretary and Labour Union Chairman of YOFC, brought the Third Balloon Volleyball Match to an official start. Six teams were divided into two groups. So the first round is group game. Top two of the group game go to cross-knockout game. Specialty fiber team led by Zhang Wu has won the first two games and demonstrates enormous potentiality; optical cable team led by Zhang Liu is a rising star and very aggressive. Two teams met in the group game with specialty fiber team won at 2:1 and was selected for cross-knockout game as top one. Optical cable team was selected as the second after winning another team. The two teams met in the final after triumph over their respective opponents in cross-knockout game. Star player Zhang Liu lived up to expectations and led optical cable team to win over the opponents at 2:0 and won the champion. Specialty fiber team and optical fiber team came as the second and the third. Chairman Wang Shajing delivered wonderful comments and presented awards for the winners.

This balloon volleyball match not only provides a chance for staff to exercise, but also enhances team spirits and corporate cohesion. Meanwhile, it serves as a talent selection and internal training for YOFC attending the upcoming Hubei-Telecom-sponsored "YOFC Cup" Balloon Volleyball Match in June this year. We wish our YOFC team to carry forward YOFC spirit, demonstrate YOFC style and achieve good results!

凝心聚力　合力共赢

——记长飞公司光缆部 2016 龙湾拓展训练

制造中心　汪从顺

拓展训练可以有效加强员工间的沟通、培养良好的团队精神、增强员工的归属感。针对长飞公司光缆部科技园扩产后新员工较多的特点，公司人力资源行政部和制造中心光缆部联合组织了一期长飞公司光缆部 2016 梁子湖龙湾拓展训练。本次拓展训练旨在磨砺团队精神、提升行动意愿、振奋士气、严肃态度、消除职业倦怠。

为保证公司光缆生产的正常进行，光缆部将本期拓展训练安排为两批次，2016 年 5 月 25 日开始首批拓展。在鸿途拓展教练的指导下，参加拓展的队员很快分成 8 个团队，评选出队长、队委、旗手和环保大使，并分别确定了队名、队徽、队歌和宣传口号。不同班别、不同工序的员工迅速融入到新的团队中来，团队建设迅速展开，“破冰之旅”由此开启。团队间的竞赛从队列展示开始，由各团队队长率团有序进行列队造型展示、唱队歌、宣传口号，并接受各位教练的评分。当队员看到各位队长因为没有拿到满分而代表大家在做俯卧撑时，全体队员不约而同地自觉和队长一起做起俯卧撑，此刻他们也深深体会到什么是担当！ 随后，进行了团队建设主体项目：罗马架炮。这是一项考验团队计划组织协作能力的项目，每个团队利用有限的资源（八根竹篙和若干绳索）架设一个炮架，通过投掷沙包的形式来打击对方、保卫自己。比赛以沙包投掷最远、最准或能有效击中对方队员为胜利。

中午稍事休息后，穿插进行了趣味安全知识竞赛。所有参赛队员都围坐在草坪上，踊跃抢答竞赛主持人的各道安全知识题。经过激烈角逐，本部 D 班、维修组、本部 A 班分获前三名。随后进行了拓展领导力主题的项目：沙场点兵。此拓展项目为队长背对沙场，通过观察两位参谋长的手势，来指挥盲眼的士兵投掷沙包打击消灭对手的趣味活动。沙场点兵拓展活动可以检验信息传递准确与否，直接影响团队计划的实施。一个团队要有好的策划方案，更要有好的执行力；商场如战场，在激烈竞争中获胜很大程度取决于团队领导的组织协调能力。拓展最后一个项目“动力圈”考验的是整个长飞拓展团队的毅力，所有队员围坐成一个大圈，每人手握麻绳，依次从上左下右的方向将绳索定向移动。尽管手臂酸痛，但是没有人叫苦，没有人放弃；当大家齐心协力完成 2400 圈运动时，现场每一个人都以自己是这个优秀团队的成员而感到自豪和骄傲！我们长飞人是一个勇于拼搏，敢于担当的团队！ 此情此景，天空中无人机航拍的画面一定很美！

6 月 4 号，第二批光缆部成员如期完成拓展训练。人行部、安环部和光缆部相关领导到场为优胜团队和个人颁奖。尽管大家感觉有些疲惫，但依旧兴趣盎然，纷纷表示希望以后还能有机会参加类似活动。虽然拓展训练已经结束，但“文者称雄，武者称霸，看我长飞，雄霸天下”的豪迈口号依然在大家耳边萦绕。

One Mind and Joint Efforts Achieve Win-win

——YOFC Optical Cable Department 2016 Dragons Gulf Outward Bound

Manufacturing Center Wang Congshun

Outward bound is an effective way to promote staff communication, nurture team spirits and strengthen staff's sense of belonging. After production expansion, YOFC Optical Cable Department has welcomed many new employees. On this occasion, in order to nurture team spirits, promote action willingness, build morale, correct attitude and eliminate job burn-out, YOFC HR & ADM Department and Optical Cable Department of Manufacturing Center jointly organized YOFC Optical Cable Department 2016 Liangzi Lake Dragons Gulf Outward Bound.

In an attempt to ensure regular production, Optical Cable Department makes this outward bound a two-run process. The first batch started on May 25, 2016. With guidance of trainer from Hongtu Outward Bound, members for the training was divided into 8 teams. Then, team leaders, team committees, flag-bearers and environmental protection ambassadors were selected and name, emblem, song and slogan for each team determined. Staff from varied classes and processes rapidly melted into new teams, team building started promptly and an "ice-breaking journey" started here. Competition started from team show, in which teams, led by leaders, took turns to present formation, sing team songs, shout slogans out, and then were graded by the judges. When a team didn't get full score and its team leader had to do push-ups, all the team members did push-ups together with him, and at that time they had a deep understanding of responsibility! Then came the main item of team building: Roman gun-mounting. This is an item testing planning, organizing and coordinating ability of a team which requires a team to use limited resources (8 bamboo spars and a number of ropes) to mount a gun carriage. Then, team members are required to stroke the other party and guard themselves through throwing sandbags. Team which throws the farthest, the straightest and hits the other party the most effectively wins.

During noon break, teams had an interesting safety knowledge contest. All the team members sat in a round on the lawn and answered enthusiastically questions about safety knowledge. After fierce competition, Class D from headquarter, Maintenance Group and Class A from headquarter got the first three places. After that came the item for training leadership: Battlefield Command. In this item, a team leader was required to turn his back to the "battlefield" and direct "blind soldiers" to damage and even eliminate the opponents through throwing sandbags. This item tested whether message can be accurately conveyed, which has a direct influence on plan implementation. A team must have careful planning, while good execution is more important. The Business circle is like a battlefield; to win or not is dependent, to a large extent, on the coordination and organization of the team leader. The last item was called "power circle" and it tested the perseverance of all the members participated in this training. All members were required to sit in a large circle with a same hemp rope in hand. Everyone had to move the hemp rope from left to right and make it whirl. They all felt stiff and pain in their arms but nobody complained or gave up. Finally, when they successfully made the large rope turn 2400 round, everyone felt proud to be a member of the excellent large team! We YOFC people are brave to win and bold to take responsibilities! Aerial photo of such a sight must be very beautiful!

On June 4, the last batch of Optical Cable Department staff finished their training. Leaders of HR & ADM Department, Security & Environment Department and Optical Cable Department came to the site to present award for winner teams and individuals. Despite being kind of fatigue, staff for the training kept with genuine interest and made requests for another chance to take part in such activities. The outward bound has come to an end, but the lofty slogan "Those adept with pen declare to queen; those with sword declare to king; here comes our YOFC, champions the world" lingers in our ears.

道士下山

制造中心　张博立

小道士下山，师傅说：“一门之隔就是两个天地，山下的世界你没见过，好好坏坏什么人都会遇到，你功夫还要练，嘴要甜，遇到什么都不要怕。”于是，小道士开始了他的寻“道”之路……

仰首是夏，俯首已是秋。弹指一挥间，秋去夏又来，我与筛选一门之隔，却是两个天地，个中情愫 一言难尽。回想当年我怀着笔挺的骄傲来到筛选工序，五年多的时间里，我驯化了内心不羁的野马，在筛选的岗位上踏实勤奋地工作着。曾坚定地以为筛选应该就是我这辈子的归宿了，但是，当我在筛光纤筛得最“欢”的时候，领导告诉我，我不能再在筛选“欢”了，但是可以换个地方“欢”。就这样，我来到了包装工序。我想到多年前的一个暑假，我在工地上夹着扁担无心走着，一不留神摔了一跤，当时干脆就地躺着跟路上打酱油的蚂蚁任性玩了一下午。后来在颓废中我顿悟了一件事，不管命里有怎样的际遇，或好或坏，别忘了肩上的担子，那样，人生的路才能走得稳健；也别忘了路上还有不同的风景和繁华，那样，生活的艰难才不会让我对未来失去希望。让我来到包装工序的这份际遇，曾经感觉是让我“摔一跤”，但细细思量，却似摔跤之后遇见蚂蚁的顿悟。《道士下山》里如松师傅说：命运就像那瓢一样，触着即转。上天于我们就是那掷瓢的手，心有定境，不住因果，还有什么不快乐的呢？所以，我来了，一切随缘。

王小波说的那位汉密尔顿让我敬仰了许多年，一有空我就拿出来感慨一番，要知道他双目失明了还在黑暗里奋不顾身地写着十四行诗。生活中也有一个人让我同样的佩服，在我来长飞的五年多里，有位老人在残破的角落里风雨无阻守着他那无人问津的热干面摊位，早出晚归，从不缺席。这两位伟人的坚韧让我感触深刻，他们为了坚守心里的自我，与世无争却坚忍不拔，着实令人高山仰止。他们的行为并不是为了获得多少报酬，而是想着曾经的我是这样的，今后的我也必须是这样，是否眼睛看得见？是否该年老退休？这些都不是退缩的理由。写诗也好，卖热干面也好，或者包光纤也好，细想这最珍贵的地方，有关职业尊严，无关金钱权利。所以，为了坚守属于我的职业尊严，无论筛选还是包装，我都会认真做事。

筛选是我娘家，每次回去都倍感亲切。还能回想起每台筛选设备的沟沟坎坎，仿佛那不是机器，而是人，一个个熟悉的老朋友。听听筛选机的声音就知道它的性能怎样，看看筒子抖动就知道速度多少，看看筒子深浅就知道还要筛什么段长……曾经极其不愿意操作任何一台设备，无比反感擦洗他的任何部位，现在却是每一次从旁经过都感慨万千，每一次抚摸都倍感亲切，仿佛我与他是莫逆之交，总有万语千言说不尽。

我是一个怀旧的人，喜欢看夕阳、看朝霞，喜欢那些陈旧的、有岁月积淀的事物，我会想起他们背后的经历，想象着他们经历过多少风雨，见证过多少沧桑的过客。任何一个陪我成长的地方都有我深刻的记忆，这些记忆组成了我

Monk Comes down the Mountain

Manufacturing Center Zhang Boli

A young monk was told by his master before coming down the mountain: "Worlds separated by a door may be different. You've never seen the world down the mountain where you will certainly meet all kinds of people, no matter good or bad, so you must practice your kung-fu and your speaking skills and get rid of your fear for everything." Hence, the young monk began his search for "Scripture".....

Seasons change in a flash and years come and go. Coming out of the door of Screening Line, I felt a different world. It would take too long to tell those feelings in full. Thinking back the old days, I came to Screening Line with full proud. During 5 or more years there, I tamed the unruly wild horse in my mind and work diligently on my screening post. I ever thought with no doubt that Screening was home of my life. However, when I was working with high spirits there, my leader told me that I would be unable to show my high spirits there, yet I may take my high spirits to other posts. Then I came to Packing Line. It reminds me of a summer vocation many years ago when I was walking casually on the building site with a shoulder pole under my arm, I tumbled. In desperate, I lay on the road and played with an ant passed by for a whole afternoon. Later, I was hit by an insight that we should never forget the

---

的过去，也成就着我的现在和未来。我想，某一天当我不得不离开包装的时候，对于包装的感情恐怕也是难以割舍吧！

生命至此，小道士在山下见闻众多，受益匪浅。原来，"道"可以在龙蛇影外，风云声中，可以在筛选间轰隆隆的生产中，也可以在包装间一车又一车的光纤里。

小道士下山时师傅还说：不择手段非豪杰，不改初衷真英雄。在包装的这片天地里，不改初衷，也是我新的追求。

load on our shoulders no matter how bad or good the turns in our life are. That way, we may walk on the road with firm steps. Also, we should never forget the beautiful and flourishing scenery on the road. At that, we will not give up hope duet to hardships in life. Coming to Packing Line was ever regarded as a "tumble", while thinking carefully, it is more like the insight came to me when I had a fall and met the ant. Master Ru Song in the film Monk Comes down the Mountain said: "Fortune is like a water ladle which whirls as long as you touch it." God is to us like the hand that touches the ladle. If we have composure inside and care less about the causes and effects in our life, how could we be unhappy? Therefore, I came here and let it be.

I have been an admirer of the Hamilton eulogized by Wang Xiaobo for many years and I find many sorts of feelings from it well up in my mind whenever I am at leisure. He was such a guy who takes all chances to write sonnets even in darkness after becoming blind. There is another guy in my life who I admire as much. During over 5 years when I am in YOFC, an old man sticks to his stall in the shabby corner to sell Wuhan hot-dry noodles, regardless of the weather. He comes early and leaves late and is never absent. The two great men impressed me with their tenacity. In order to adhere to their own faiths, they stand aloof from worldly success and keep to themselves, which deserves others' great admire. They don't aim for profits but a faith that I should behave in the future in the same way I do today. Am I blind or not? Am I old enough to retire? All those are not reasons to retreat. As for whether to write poems, to sell hot-dry noodles, or to pack optical fiber, with careful thinking, we will find that the most precious things lie not in money and power, but in professional dignity. Therefore, in order to stick to my professional dignity, I will certainly work diligently on every post.

I came originally from the Screening Line, so every time I return to it, I feel at home. I can still recall grooves of the screening machine as if it is not a machine but a guy, and every one of them is my old friends. I am crystal clear about its performance from the voice, its speed from shaking of the tube and how long the fiber it screens is from depth of the tube.....I was ever extremely unwilling to operate any of them and extremely disliked to clean any part of it, but now Isigh with emotions every time I pass them and I feels particularly close to them for every touch. It seems that we are the firmest friends and there are thousand words between us.

I am a reminiscent person and I enjoy the setting sun, the morning glow and all those old and with years of accumulation. I tend to recall those behind them and imagine how many vicissitudes they have experienced and how many passers-by they have witnessed. Any place keeps my company during growing up has left on me deep memories which composed my past and is making my present and future. I think maybe one day when I have to leave Packing Line, I will find it hard to part with it.

Having reached such a stage in life, the young monk has accumulated much knowledge down the mountain and benefited a lot. He has realized that the Scripture can actually be found beyond those supernatural shadow-lands, in real and common life; it can be found in rumbling machines of the Screening Line and one and another truck of optical fibers in the Packing Line.

One more advice from his master before the monk came down the mountain is: "False hero is he who wins by hook or by crook; true one is he who sticks to his original intention." In such a vast world as the Packing Line, it's my new pursuit to stick to my original determination.

游宝通禅寺

战略中心　黄巧

曾多次乘车路过位于洪山南麓的宝通禅寺，但每次都是远远地看着这街边的寺庙，从未停下脚步走进去看一看。4月初，在一次机缘巧合之下，我和朋友相约来到宝通禅寺参观游玩。

来到寺前，可见山门整饰，门额上书“宝通禅寺”四个鎏金大字，雄浑有力，气势不凡。寺院占地11万多平方米，其规模之大、殿堂之宏伟为武昌诸刹之首。宝通寺为历世清净佛刹，是三楚第一佛地和武汉市著名佛教四大丛林之一，也是武汉现存最古老的寺院之一。

进入寺内，只见建筑层层嵌套，阶阶相连，回廊和阶梯有序交错，由山脚的寺门到寺内最高点一路显得别致而幽静。一路上我和朋友参观了各个殿，印象比较深刻的是大雄宝殿、弥勒殿和观音殿。大雄宝殿是寺院的核心建筑，彩绘装饰相比其他殿堂更为精美；弥勒殿里笑容满面的弥勒佛露出大肚子，十分和蔼可亲；观音殿里观音菩萨端庄慈祥，手持净瓶杨柳，似乎要给人无量的智慧和神通。作为一个从小就被灌输马克思主义思想的唯物主义者，在此地此情此景，我还是在各个主要的佛像前虔诚地拜三拜，默默许下自己的心愿。在这样的地方总觉得有些东西是很神圣的，寺院特有的精美彩绘和塑像，神奇的寓言和故事传说，拜佛的人们恭敬而虔诚的叩拜，静悄悄的空气里弥漫着淡淡的檀香味，还有做法事的和尚们敲着木鱼神情专注地念经……这里有在闹市之中难以感受到的庄严和肃穆，承载着千年的历史记忆，存放着诚心者的寄托和宿愿，平和幽静的气氛使人情不自禁地行走无声，少言耳语。如此环境里，心境自然摆脱了浮躁，回归到了对神秘力量心怀崇拜的世界。

参拜是一种态度，其实我和朋友的主要目的是游玩。我们一路随意走着，看看那些特色的建筑，观看参拜各种神态各异活灵活现的菩萨塑像，静静地旁听刚好碰上的一场法事，然后最多的时间花在了圣僧桥上。圣僧桥连接了两个圆形的放生池，池中有很多乌龟，游泳的、吃东西的、探着脑袋东张西望的、四脚朝天的……小乌龟们姿态各异，自由玩耍着，观赏起来也十分有趣。通过桥边的石碑，我们了解了这座桥和两个圆形放生池的意义，也就是同心锁的来源。一对同心锁曾在宝通禅寺里见证了一对忠贞善良夫妻的乱世相聚，这池与池相通，桥与岸相连，恰似一对同心锁，“金凤玉龙相会，永结同心百年”。

宝通禅寺位于闹市之中，临街傍山，门外是车水马龙络绎不绝，门内是佛院深深暮鼓晨钟，一墙之隔，两个世界。“大隐隐于市，小隐隐于野”，宝通禅寺隐于市中，刚进寺门的地方依然有嘈杂声，但走进里面就完全听不到汽车和行人的声音，一派幽深宁静。每当看到寺里的和尚潜心念经，或者仅仅是一两个和尚穿着袈裟行走在寺里，不禁感叹这样安静的生活，真如陶潜所言“结庐在人境，而无车马喧”。

从寺院出来已是傍晚，门外车辆依然川流不息，但是此刻我却没有嫌弃这座城市的嘈杂，而是看到了她的勃勃生机。

Travel to Baotong Temple

I have passed by the Baotong Temple on a car for numerous times which is located at the southern foothills of Hong Mountain. But every time I just looked at this temple in the street in a distance, never stopping to walk in. Early in April, my friend and I went to visit Baotong Temple by chance.

When I arrived at the temple. I found the door was integrally decorated, and four gold Chinese characters "Baotong Temple" were written on the board over the door, forceful and powerful. The temple covers an area of more than 110 thousand of square meters, which is top one of all the temples in Wuchang by its large scale and grand hall. Baotong Temple is a peace and quiet Buddha in all ages which is top one of the states of Chu, one of the four most famous Buddhist jungle systems of Wuhan City, and also one of the most ancient temples existing in Wuhan now.

Entering the temple, you will see the buildings are multi–level–nested and step–connected and the corridors and stairs crisscross in order. All the way from the door of the temple at the foot of the mountain to the highest point of the temple is chic and quiet. Along the way, my friend and I visited every temple, which impressed us are the Daxiong Hall, Maitreya Hall and Guanyin Hall. Daxiong Hall is the core building the temple, painted decoration is more beautiful than any other; Maitreya Buddha in Maitreya temple looks very amiable with the smiling face and big exposed belly; Avalokiteshvara in Guanyin Temple is dignified and kind, holding a bottle of pure water with willow, seeming to give people infinite wisdom and theurgy. Although I was taught to be a materialist by Marxist ideology at a young age, now standing here and imaging the scene, I still worship every important Buddha devoutly and make a wish silently. In such a place always you will feel that something is very sacred: unique beautiful paintings and statues of the temple, fantastic fables and legends, respectful and devout kowtowing to

Strategic center Huang Qiao

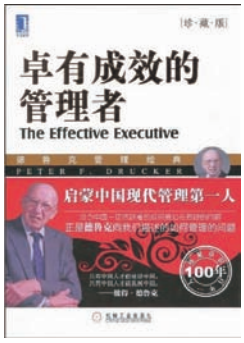
the Buddha, faint smell of sandalwood in quiet air, and intent look on the faces of ritual monks, knocking on the wooden fish... Here has the dignity and solemnity which you cannot feel in busy urban areas, carrying a thousand years of historical memory, storing the sincere hope and dream of sincere person. The atmosphere of peace and quiet makes people can't help walking silently, less words and whisper. In such environment, the state of mind naturally gets rid of impetuous, returning to the world where you worship the mysterious force.

Worship is a kind of attitude; in fact, my friend and I intend to travel. We walked all the way at will, enjoying characteristic buildings, watching and worshiping various different demeanor vivid Buddha statues and listening to the ritual met by chance. We spent most of the time on Holy Monks Bridge. The Holy Monks Bridge connects two circular Free Life Ponds in which there are a lot of turtles. Some are swimming in various postures, some are eating, some are exploring their heads in all directions and some are sprawled out... It is fun to enjoy these turtles. Passing through the stone near the bridge, we find out the meaning of these two circular Free Life Ponds, which also is the source of Heart Lock. Each pair of Heart Lock in Baotong Temple has witnessed the love story of a faithful couple in trouble times. The pond connects to pond and bridge connects with the shore, which shapes a pair of Heart Lock–"Women and men meet each other and love each other forever".

Baotong Temple is located in busy urban areas, on the street and near the mountain. Out of the door there is an endless stream of people, busy all the time; inside the door there is timely exhortations to virtue and purity in the temple. A wall separates two worlds. "Hermit in the city, small faint in the wild". Baotong Temple is hidden in the city, and you can still hear the noise when you just enter the door of the temple, but all the noise of cars and pedestrians will disappear completely as you continue walk further. All is deep and quiet. Whenever I saw the monks chanting in the temple with great concentration or just one or two monks wearing robes walking in the temple, I could not help sighing that such a quiet life is just like what Taoqian once said "Jielu people in the territory, never with angst".

When I went out of the temple it was in the evening. I found myself less impetuous but more and more peaceful indeed. Outside there is still an endless stream of vehicles on the road, but at the moment I do not dislike the noisy of this city but see her vitality.

好书推荐



《卓有成效的管理者》

《卓有成效的管理者》是(美)德鲁克(Drucker,P.F)最著名的管理学著作之一,该书论述了一个管理者如何做到卓有成效。管理者的成效往往是决定组织工作成效的最关键因素,并不是只有高级管理人员才是管理者,所有负责行动和决策而又有助于提高机构工作效能的人,都应该像管理者一样工作和思考。

《查令十字街 84 号》

这本被誉为“爱书人圣经”的书信集,记录了纽约女作家海莲·汉芙和伦敦马克斯与科恩书店的书商弗兰克·德尔之间的书缘情缘。世间已无查令十字街 84 号的旧书店,但英国文学、古本图书、伦敦巷陌,书中的这些话题仍不断激起后来者的思念和共鸣。它被译成数十种文字流传,广播、舞台和银幕也钟情它,那家书店的地址——查令十字街 84 号已经成为全球爱书人之间的一个暗号,每年都有世界各地的书迷到伦敦查令十字街朝圣。三十多年人们读它、写它、演它,在这段传奇里彼此问候,相互取暖。

《穿越人海拥抱你》

每个人都有这样的时刻:孤独、沮丧、失望,怀疑着自己,对抗着生活……或许世界人潮拥挤,所有人都想拼了命挤上一辆开往好日子的列车,但希望你我都可以接受意外,接受不如意,接受不被人理解……不要为失去而伤心;而是因得到过而知足。梦想遥不可及,路途艰难险阻,希望你我能穿越人海拥抱彼此,继续奔向明日征程。《穿越人海拥抱你》是北大励志双胞胎苑子文与苑子豪 2016 年的全新暖心之作,全书包含 12 个温暖治愈的晚安故事,送给所有饱经磨砺却依然温暖的年轻人。

Recommended Books

“The Effective Executive”

“The Effective Executive” is one of the most famous management writings by Drucker, P.F (the United States). This book expounds how a manager can achieve effective management. The effect of managers is often the most critical factor which determines the effectiveness of the organization work. Not only senior management personal is the managers, but all the persons, who are responsible for actions and decisions and helpful to improve the efficiency of institutions, should work and think like a manager.

“84, Charing Cross Road”

This book of letters is known as the "bible of book lovers", recording the love story between a woman writer Helene Hanff of New York and a bookseller Frank Doel working in Marks & Co. in London. Anyway there is no such secondhand bookstore at 84 Charing Cross Road, but in English literature, ancient books and London alleys, these topics in the book continue to inspire thoughts and resonance of latecomers. It has been translated into dozens of languages, popular on radio, stage and screen. The address of that bookstore-84 Charing Cross Road has become a code word for book lovers all over the world and every year bibliolatry from all over the world come to Charing Cross Road in London for pilgrimage. During the past thirty years, people have read it, written it, and filmed it, greeting and warming each other in this legend.

“Embrace You through the Crowd”

Everyone has such moments: Being lonely, frustrated, disappointed, doubt about themselves and against life...Perhaps this world is crowded, and everyone wants desperately to squeeze on a train heading for happy days, but hope you and me can accept the unexpected, disappointments and being not understood by others...Don't be sad for what is lost; be content with what is got. The dream is distant and the journey is full of hardships and dangers, but hope you and me can embrace each other through the crowd, continuing the journey for tomorrow. “Embrace You through the Crowd” is a heartwarming book of 2016 written by the inspirational twins of Pecking University named Yuan Ziwen and Yuan Zihao. The book contains 12 night stories, making you feel warm and healed, which are all given to the young who are suffering from hoops but still warm.

征稿启事

《今日长飞》以提升长飞品牌形象、宣传长飞企业文化、配合长飞品牌管理为宗旨，是联系长飞公司本部与各控股公司的纽带、各控股公司发声的渠道和窗口。为丰富本刊内容，贴近员工生活，现特向长飞集团全体员工征稿，具体如下：

一、征稿内容

1、**新闻报道**：一是要闻，报道集团内发生的重大新闻事件，影响力能够覆盖到整个集团；二是简讯，宣传集团内发生的有一定影响力的事件，反映公司在生产、经营等方面的最新情况。

2、**行业聚焦**：整合行业内的重大新闻事件，传递业内相关动态。

3、**技术/产品**：各员工可以针对其岗位所涉及的专业知识进行分享，展示公司的科研成果，同时向员工普及知识。文章最好能够深入浅出，让非技术人员起到学习的效果。

4、**管理经验**：传达公司在质量、流程、生产等有关管理方面的最新动态，分享在公司管理过程中的成功经验及思路，值得推广、总结的优秀管理方法。

5、**工作心得**：描述个人成长历程及感悟，可以是工作中成功的经验、失败的教训，也可以是富有建设性的创意构想或建议。

6、**随笔**：与公司有关的叙事类、抒情类文章，尤其是生产一线趣闻；来自生活的感悟、游记等等各种类型的文章，题材不限，散文、诗歌、小说均可。

二、注意事项：

1、所有稿件必须为原创，须提供英文翻译，做到语句通顺流畅、无错别字，内容积极、健康、向上，文体不限。

2、所有稿件一经采纳，将支付一定稿酬予以鼓励。

3、所有稿件以电子文档形式投稿，须注明所属中心（公司）、真实姓名及有效电话;所提供的图片资料像素清晰（300dpi），文件大小1M以上，以jpg格式作为附件发送。与公司生产、管理、技术等相关的稿件，需在投稿前经主管领导审核批准。

4、凡本刊采用的稿件和图片，战略与市场部亦有权在公司官网、官方微信号等自媒体平台上发表。

5、投稿邮箱：jinrichangfei@yofc.com

联 系 人 ： 黄巧

联系方式：027-67887452　huangqiao@yofc.com

Contributions Invited

YOFC Today aims to promote YOFC brand, popularize enterprise culture and complement for its brand management, it serves as a bond between headquarter and holding branches and a voice channel for the latter. In order to enrich its contents and make it close to life of our staff, contributions are invited from all staff of YOFC, as follows:

I. Forms

1. News Report: First, important news. Contributions can be significant news of YOFC, with influence covering the whole Group. Second, news brief, contributions may cover influential events within YOFC and reflect the latest production and operation status.

2. Industry-focused News: Contributions may integrate news about major events in the industry and convey latest trends.

3. Technologies/ Products: All staff may share professional knowledge of their posts, demonstrate achievements in scientific research and popularize knowledge. Articles are encouraged to be simple in language and in-depth in content to serve as learning materials for non-technical personnel.

4. Management Experience: Contributions may convey latest trends in management-related aspects such as quality, processes and manufacturing, share experience and ideas in corporate management and excellent managing methods that worth popularizing and making conclusions from.

5. Job Experience: Contributions may tell individual development process and thoughts related. Successful experience, lessons from failure and constructive and creative ideas and suggestions are all welcomed.

6. Informal Essays: Contributions may be narrative or lyrical essays, reflections from life, travel notes, etc. Front-line interesting news are especially welcomed. There is no limit for literature forms.

II. Points for Attention

1. All contributions must be whole composition and translated into English, with clear and coherent sentences, positive and healthy contents and no wrongly written characters. There is no limit for literature forms.

2. All contributions, once adopted, will be awarded contribution fees as encouragement.

3. All contributions should be electronic documents, giving clear indication of center (branch), real name and effective cellphone number. All pictures should be in high pixel (300dpi), jpg, over 1M and be sent as attachments. Contributions related to manufacturing, management and technology shall be examined and approved by leaders in charge before submission.

4. Strategy and Marketing Department is entitled to publish all articles and pictures, once adopted, on YOFC website and our Corporate-owned media such as YOFC official WeChat ID.

5. Contribution E-mail:jinrichangfei@yofc.com

Person to Contact: Huang Qiao

Contact Details：027-67887452 huangqiao@yofc.com

手机扫描二维码

长飞光纤光缆股份有限公司
地址：武汉市光谷大道9号（430073）
电话：027-87802541
传真：027-87802534
网址：www.yofc.com