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# 今日长飞

YOFC TODAY



# 2016 CRU
## 世界光纤光缆大会前瞻
WORLD OPTICAL FIBRE & CABLE CONFERENCE


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去年十月，CRU 与长飞公司合作在中国光谷举办了首届亚太地区光纤光缆大会，大会共吸引了 400 余名参会人员，并邀请到中国各大光缆生产商以及各大通讯商的代表。今年十一月初，CRU 再次来到光谷，将大会规模扩展至全球范围，并再一次由 CRU 与长飞公司携手主办。

Last October, CRU and YOFC jointly held the first session of APAC Optical Fibre& Cable Conference in Optics Valley of China, which attracted over 400 attendees and had the participation of all the major Chinese optical cable manufacturers and major Chinese communications figures.

Early this November, CUR will come to the Optics Valley again, and extend the scope of the conference to the world.The event will again be jointly held by CRU and YOFC.

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# 引领行业发展 闪耀世界舞台

## ——写在CRU与长飞联合在汉举办世界光纤光缆大会之际

□ 本刊编辑部

绚秋流光，宾客迎门。

2015年10月，CRU（英国商品研究所）在光纤光缆产业的国际盛会首次来到亚洲，选址中国光谷，以长飞为代表的中国光纤光缆厂商第一次聚焦了全球相关行业从业者的目光。一年后的今天，CRU世界光纤光缆大会闪耀长江之滨，邀国际顶尖专家一同探讨行业发展现状，展望未来发展趋势。

光谷声音，全球回响。

两届盛会选址中国光谷，且CRU选择与长飞联合办会，彰显了中国在全球光纤光缆行业中的重要地位，长飞在全球行业中的影响力也可见一斑。

近年来，全球光纤光缆行业方兴未艾，“中国速度”更是引人注目。2006年以来，世界光缆年安装总量增长了约330%，全球范围内光缆安装总量中有55%位于中国，2016年全球约60%光缆产量来自于中国，长飞公司更是成长为全球第一大光纤预制棒及光纤供应商和全球第二大光缆供应商。得益于市场需求的持续增长以及技术创新能力的不断提升，中国成为全球光纤光缆行业的研发中心、制造中心、销售中心、咨询与服务中心指日可待。

CRU在中国召开行业年度盛会，提供了一个中国光纤光缆厂商与全球业内人士对话的平台，对我国建设“四大中心”将起到积极推动作用。通过CRU大会，大量的国际市场客户、上下游厂商进一步了解关于中国光纤光缆市场的信息，将有利于中国光纤光缆厂商开拓国际市场，迎来新的发展机遇；中国厂商聆听业内专家对行业发展趋势的预测和未来技术发展方向的讨论，获取行业内的前沿信息，也将为中国光纤光缆产业的繁荣发展注入新的活力。

CRU再度选择与长飞合办全球行业盛会，也见证了长飞的市场实力和国际影响力。作为中国光纤光缆行业的龙头企业，长飞始终坚持技术、产品的创新。经过28年的砥砺奋进与不懈努力，长飞已是当今中国产品规格最齐备、生产技术最先进、生产规模最大的光纤光缆产品以及制造装备的研发和生产基地，也是全球最大的光纤预制棒和光纤供应商，全球第二大光缆供应商，长飞产品远销全球60多个国家和地区。

中国生产的光纤光缆获得世界认可，长飞也在改变着世界对“中国制造”的眼光。“联接改变生活！”这是长飞人的历史使命。未来，长飞将携手各大厂商、运营商等产业链上下游机构，在创新上加倍努力，为各类应用提供更好的光纤光缆产品，带动整个产业升级，为全球线缆事业的辉煌做出新的贡献！



# Lead Industry Development and Shine on World Stage

## ——At the World Optical Fibre & Cable Conference co-held by CRU and YOFC

□ The Editorial

In the coming of autumn, all guests are welcome.

In October 2015, CRU came to Asia for the first time at the international festival of optical fibre and cable industry and located itself in Optics Valley of China. And Chinese optical fibre and cable manufacturers represented by YOFC attracted the attention of the employees of relevant industries in the world for the first time. Today, CRU comes to the shore of Yangtze River again at the world optical fibre and cable conference and invites international leading experts to discuss current industry development and look to future development trend.

The sound of Optics Valley echoes in the whole world.

The two conferences were all held in Optics Valley of China and CRU chose to co-hold them together with YOFC, manifesting the importance of China in global optical fibre and cable industry and the influence of YOFC in global industry.

In recent years, global optical fibre and cable industry is still growing and “Chinese speed” is more eye-catching. Since 2006, total annual installation of global optical cable has increased by about 330%, and 55% of the total optical installation in the world is from China. In 2016, about 60% of the optical cable output in the world is from China and YOFC even becomes the largest supplier of optical fibre preform and optical fibre and the second largest supplier of optical cable in the world. Benefiting from sustainable growth of market demand and constant improvement of technical innovating ability, it can be expected soon that China becomes a global R&D center, manufacturing center, sales center, consulting and service center of optical fibre and cable industry.

At the annual industry conference in China, CRU provides Chinese optical fibre and cable manufacturers and global insiders a dialogue platform, which will play a positive role in driving the construction of four centers in China. Through CRU conference, many international market clients and upstream and downstream manufacturers have further understood the information of China’s optical fibre and cable market, which will help China’s optical fibre and cable manufacturers to expand international market and face new development opportunities; by listening to industry experts’ prediction of industry development trend and the discussion of technical development direction in future and acquiring latest industry information, China’s manufacturers will also infuse new vitality for the prosperity of China’s optical fibre and cable industry.

By choosing to hold global industry conference together with YOFC again, CRU witnesses YOFC’s market strength and international influence. As a leading enterprise in China’s optical fibre and cable industry, YOFC has always adhered to technology and product innovation. After 28 years of hard work and efforts, YOFC has become a R&D and production base of optical fibre and cable products and manufacturing equipment with the most complete product specifications, the most advanced production technology and the largest production scale, the largest supplier of optical fibre perform and optical fibre and the second largest optical cable supplier in the world. And YOFC products have been far exported to over 60 countries and regions in the world.

China’s optical fibre and cable have been well accepted by the world and YOFC is also changing the world view of “Made in China”. In future, YOFC will, with its own influence, cooperate with manufacturers, operators and other industrial chain agencies to do more for innovation, so as to provide better optical fibre products for various applications, drive the upgrading of the whole industry and make new contribution to the development of global cable business.




# 长飞公司与中国联通网研院签署战略合作协议

□ 战略中心 柳青

2016年9月18日上午，中国联通网络技术研究院（以下简称“中国联通网研院”）与长飞公司在北京正式签署了战略合作协议，未来双方合作将以光纤光缆产业发展和技术进步为基础，进一步拓展到全光网络、超宽带、5G、物联网、智能制造等新的方向和领域。长飞公司与中国联通网研院的合作由来已久，双方在技术实践、产品验证、标准支持等诸多方面优势互补，相互支持。

2011年，双方便在40G DWDM系统上完成了G.652.D、G.657.A2、超低衰减等系列新型光纤的应用测试，为G.657.A2等新型光纤在管道资源紧张条件下的应用提供了重要的理论支撑。2012年，双方针对分别来自“沪温福广”和“南沿海四号”退役下来的光缆，开展了光缆寿命研究第一期项目，得到了影响光缆使用寿命的关键因素，为后期光缆的设计和运维提供了有力支撑。2013年，中国联通运维部、中国联通网研院与长飞公司一起开展了为期三年的寒区光纤、光缆长期耐受性学术性项目研究，为运营商、设计单位及厂商提供极具参考价值的研究成果。2014年，长飞公司积极配合中国联通集团、网研院和中讯设计院完成了新型光纤在实验室传输100G的测试验证工作，为G.654大有效面积光纤陆地现网应用打下了良好基础。2015年开始，长飞公司积极支持中国联通开展了全球运营商首个大有效面积光纤陆地现网验证，独家提供了低衰减大有效面积和超低衰减大有效面积两类单模光纤，并成功完成了初步验收，为400G高速DWDM系统的部署打下基础。

“独学而无友，则孤陋而寡闻”，企业间的相互合作、取长补短，更容易达到双赢的局面，也更利于企业的成长。1988年成立之初，长飞公司就确立了“诚信经营，科学规划，稳健发展”的企业发展战略，坚持与产业链各方合作，尤其是在技术和产品创新方面，始终坚持与全球光纤研发最前沿的顶尖院校、科研院所和上下游企业紧密合作，紧跟产业发展最新趋势，与包括中国联通在内的运营商密切配合，完成了一系列学术、研发及实践项目，开发出一系列全球领先的产品，有力地支撑了行业的进步和我国通信事业的发展。

签约仪式上，长飞公司副总裁闫长鹃表示，长飞公司将继续发挥自身的示范带头作用，凝聚产业力量，以研发创新先行，携手中国联通网研院及产业各界，打造国际领先的宽带网络，更好地服务客户，最终实现互惠共赢。同时，长飞公司希望产业链上各方都能够充分发挥自己的作用和价值，以开放的心态创造共赢的产业生态。





# YOFC Signed A Strategic Cooperation Agreement with China Unicom Network Research Institute

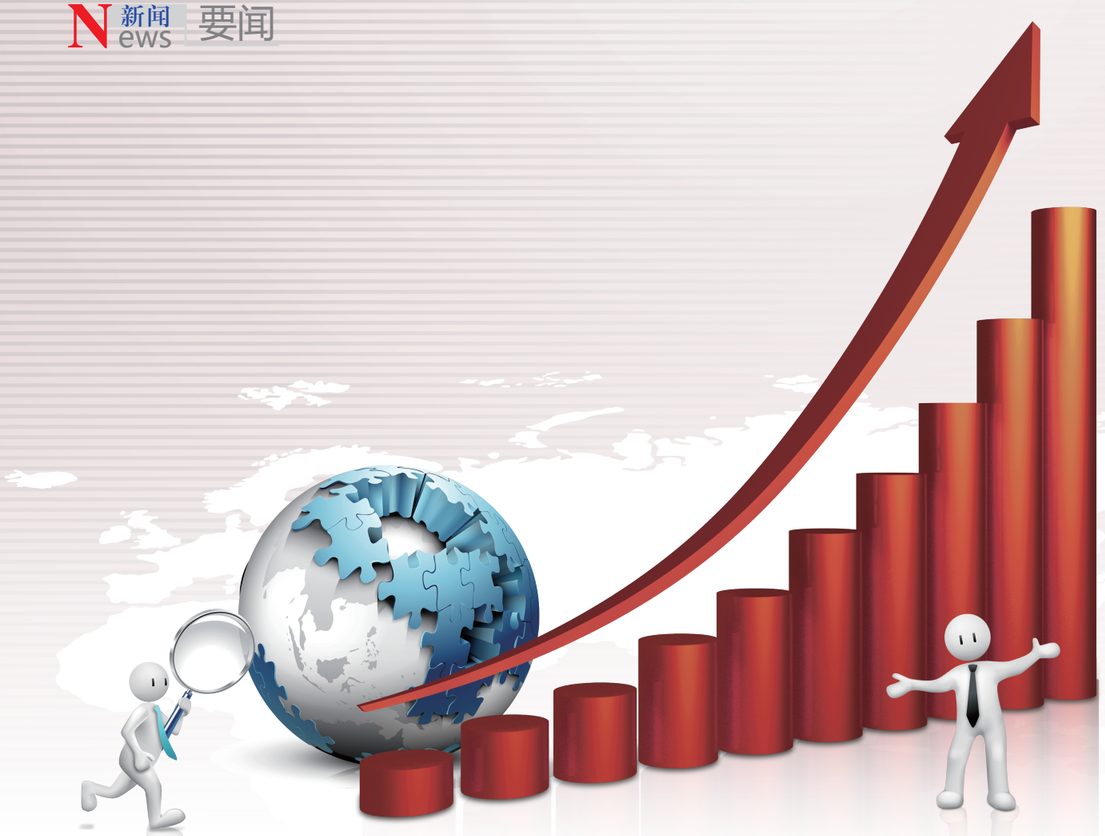
□ Liu Qing from Strategic Center

On the morning of September 18, 2016, China Unicom Network Technology Research Institute (hereafter abbreviated as"China Unicom Network Research Institute") formally signed a strategic cooperation agreement with YOFC, which further expanded the future bilateral cooperation to all optical networks, ultra wide band, 5G, Internet of things, intelligent manufacturing and other new directions and fields on the basis of development of optical fiber and cable industry and technological progress. YOFC and China Unicom Network Research Institute has had a long-standing cooperation with complementary advantages and mutual support in technical practice, product validation, standard support and many other aspects.

In 2011, YOFC and China Unicom Network Research Institute completed G.652.D, G.657.A2, ultra low attenuation and other series of new optical fiber application testing on DWDM 40G system, providing an important theoretical support for G.657.A2 and other series of new optical fiber application under the condition of tight pipeline resources. In 2012, for the cables retired from “Hu Wen Fu Guang” and “South Coast No. Four” respectively, the two sides carried out the first phase of the optical cable life research project and found out the key factors that affect the service life of optical cable,providing a strong support for later design and operation of optical cable. In 2013, China Unicom operation and maintenance department, China Unicom Network Research Institute and YOFC together carried out the three-year cold region optical fiber and cable long-term tolerance academic research project, and provided valuable research results for operators, design units and manufacturers. In 2014, YOFC actively cooperated with China Unicom Group, Network Research Institute and Project Design Institute, completed the new optical fiber testing and verification of 100G transmission task in laboratory, and lay a good foundation for G.654 large effective area fiber land network application. From 2015, YOFC actively supports China Unicom to carry out global operators’ first large effective area optical fiber network verification, exclusive offers two types of single mode optical fibers with low attenuation large effective area and super low attenuation large effective area, and successfully completed the initial acceptance, laying the foundation for the deployment of 400G high speed DWDM system.

Who learns alone without friends will become solitude and ignorant. Mutual cooperation and studying from one another between enterprises can achieve a win-win situation more easily, and is also more conducive to the growth of enterprises. Since the beginning of establishment in 1988, YOFC has determined the enterprise development strategy of integrity management, scientific planning, steady development, adhered to cooperation with the industry chain parties. Especially in terms of technology and product innovation, YOFC always adheres to close cooperation with the world's leading colleges and universities, research institutes and upstream and downstream enterprises with the global development in the forefront of the optical fiber, follows the latest trends in industrial development, closely cooperates with operators including China Unicom, completes a series of academic, research and development and practical projects, develops a series of the world's leading products and strongly supports the progress of the industry and the development of China's communications industry.

At the signing ceremony, YOFC vice president Yan Changkun said, YOFC would continue to play their exemplary role, unite industrial strength, give priority to research and development innovation, work with China Unicom Network Research Institute and other industry sectors, in order to build the world's leading broadband network, better serve clients and achieve mutual benefit and win-win. At the same time, YOFC expects all parties in the industry chain can give full play to the role and value of their own and create a win-win industrial ecology with an open mind.



# 长飞公司举行2016年度中期业绩发布会

## ——收入利润升幅可观 海外业务增势强劲

☐ 财务中心 陈坦

长飞公司于2016年8月30日上午在香港举行2016年度中期业绩发布会，向投资者公布了本年度截至 2016年6月30日的业绩。会上，公司总裁庄丹、第一副总裁Mr. Jan Bongaerts分别就公司发展战略和未来前景、行业概况及市场预测、公司财务经营状况等内容作了全面而详细的介绍，对投资者现场提出的问题作了深入浅出的解答，会场气氛热烈。

公告数据显示，截至2016年6月30日的6个月期间，长飞公司收入约达36.776亿元人民币，较2015年同期增长约20.6%；毛利润约达8.073亿元人民币，较去年同期增长37.3%；净利润约为3.545亿元人民币，较2015 年同期增长约16.3%。按地区分部划分，来自中国客户的收入约为33.203亿元人民币，较2015年同期增长17.1%，占公司上半年总收入的90.3%；来自海外客户的收入约为3.573亿元人民币，较去年同期大幅增长67.1%。海外收益的增长主要是源于光缆和室内布线的增长及长飞公司持续稳定推行的国际化战略。

长飞公司在2016年上半年总收入升幅可观，主要受惠于三大电信运营商继续大力发展4G网络基础建设，以及政府持续推进实施“宽带中国”等国家战略。中国政府在2015年宣布了一系列重大举措，例如“互联网+”、提速降费、强化网络能力保障等，这些因素对光纤和光缆的需求起到促进作用，并带来额外动力。

展望未来，长飞公司将继续在全产业链、多工艺路线、国际化、相关多元化以及智能制造上积极布局，以此来增强市场竞争力，丰富产品以提高收益，从而获得业务上的持续成功。





# YOFC Held 2016 Year Medium-term Earnings News Conference

## ——Considerable Rise in Income Profit and Strong Growth in Overseas Business

☐ Chen Tan from Financial Center

On the morning of August 30, 2016, YOFC held 2016 year medium-term earnings news conference in Hong Kong, and announced this year’s earnings by June 30, 2016 to investors. At the conference, President Zhuang Dan and First Vice President Mr. Jan Bongaerts respectively made a comprehensive and detailed introduction to the company development strategy and future prospects, the industry situation and market forecast, the financial management status of the company and so on. They also gave clear and simple answers to the questions proposed by investors at the conference, which drove the atmosphere warm.

Bulletin data show, during the 6 months period by June 30, 2016, YOFC income amounts to approximately 3 billion 677 million 600 thousand RMB, increases by about 20.6% compared with the same period in 2015; Gross profit amounts to approximately 807 million 300 thousand RMB, increases by 37.3% compared with the same period last year; Net profit amounts to approximately 354 million 500 thousand RMB, increases by about 16.3% compared with the same period in 2015. According to the regional division, revenue from Chinese customers is about 3 billion 320 million 300 thousand RMB, increases by 17.1% compared with the same period in 2015, and accounts for 90.3% of the company's total revenue in the first half; Revenue from overseas customers is about 357 million 300 thousand RMB with a substantial increase of 67.1% over the same period last year. The growth in overseas earnings mainly owes to the growth of optical cable and indoor wiring as well as YOFC sustained and stable implementation of the internationalization strategy.

YOFC’s substantial gross income increase in the first half of the year mainly befits from the three major telecom operators continuing to develop the 4G network infrastructure and the government sustained progress of promoting the implementation of the "broadband China" and other national strategies.The Chinese government announced a series of major initiatives in 2015, such as “Internet plus”, speed up and lower fees, strengthen the network capacity protection, and so on. The above factors play an important role in promoting the demand and bring additional power for optical fiber and cable.

Looking forward to the future, YOFC will continue to work on the active layout of whole industry chain, multi process route, internationalization, related diversification and intelligent manufacturing, etc, in order to enhance the competitiveness of the market, to enrich the products to improve revenue, so as to achieve sustained success in business.

# 长足发展，以“智”取胜

——长飞公司入选湖北省智能制造示范单位




□ 本刊编辑部

9月8日，湖北省智能制造产业发展推进会在美的集团武汉工业园隆重举行，湖北省副省长许克振、省经信委主任欧阳万坤等领导出席会议，长飞公司、美的集团武汉制冷设备公司等来自全省的54家智能制造代表企业和省软件行业协会、省汽车行业协会、湖北广播电视台等协会与媒体参加了本次会议。

省人民政府副秘书长贺盛有主持了本次大会，会上举行了2016年湖北省智能制造试点示范单位的颁奖仪式，继去年入选湖北省唯一也是全国光纤光缆行业内唯一的全国首批智能制造示范试点企业后，长飞公司本次又入选了湖北省智能制造示范单位，并应邀为参会企业作经验交流。长飞公司副总裁闫长鹃以“长飞光纤智能制造之路”为主题，向与会嘉宾介绍了长飞公司试点示范项目的总体结构、项目实施效果、项目经验、推广应用等，阐述了未来长飞公司在智能制造方面的发展规划，并表达了长飞公司在积极参与湖北省内智能制造项目、打造工业“云平台”以服务省内制造类企业等方面的政策诉求。



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。长飞公司积极应对当前制造业发展趋势，自主研制光纤预制棒新型生产工艺和设备，生产设备的智能化、信息化程度不断提高。基于在智能制造方面的未来五年规划，长飞公司将在国家和湖北省智能制造示范试点企业平台的基础上，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”。





# Develop substantially, prevail over “intelligence”

## ——YOFC was selected to demonstrating project of intelligent manufacture in Hubei

□ The Editorial

On September 8, the intelligent manufacture implementation of Hubei was held in Media’ s industrial park in Wuhan. The vice-governor of Hubei province Xu Kezhen , the director of Hubei Economic and Information Technology Committee Ouyang Wankun and other leaders attended the meeting, so did YOFC, Refrigeration equipment of Media Group in Wuhan, 54 intelligent manufacture enterprises as representatives, the association of software industry , the association of auto industry in Hubei, Hubei TV as well as other associations and medias.

He Sheng , the Deputy Secretary-General of the People’ s Government of Hubei Province , presided the meeting, in which the awarding ceremony of demonstrating enterprises of intelligent manufacture of Hubei in 2016 was held. YOFC was selected to demonstrating project of intelligent manufacture in Hubei again and was invited to share experience for enterprises, which was selected to the first batch of demonstrating enterprises of intelligent manufacture last year, the only one in Hubei as well as in the national cable industry. Yan Changkun, the vice-president of YOFC, introduced the overall structure, the effect and experience of implementation, the popularization and application of the project on the subject of “YOFC’ s road of intelligent manufacture” . He also expounded the planning of intelligent manufacture in the future, and expressed policy demands when YOFC took an active part in projects of intelligent manufacture in Hubei and built industrial "cloud platform" to serve manufacture industries.

At present, a new round of industrial revolution represented by intelligent manufacture developed rapidly, and digitalization, networking, intelligentization become the main trend of manufacture industry. YOFC dealt with current developing trend of manufacture industry positively, and developed optical fiber preform and new equipments, what’ s more, the level of intelligentization and informatization of the manufacturing equipment increased continually. Based on the planning of intelligent manufacture in the next five years and the platform of demonstrating enterprises of intelligent manufacture in Hubei, YOFC will enhance the level of intelligent manufacture, construct intelligent factories, and create a set of solutions for intelligent factories in the optical cable industry, so as to promote cable industry in China from "made in China" to “made with wisdom” .

# 长飞印尼公司
# 开业典礼隆重举行

□ 销售中心 孔文韬




9月8日上午，长飞印尼公司在印尼爪哇省卡拉旺市隆重举行了开业典礼。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，由长飞公司与印尼PT MONAS公司于2015年1月19日合资成立，其中长飞公司持股70%，PT MONAS公司持股30%。该项目自成立以来，在不到12个月的时间内完成了光纤工厂的建设、设备的安装和调试，实现了提前投产。

在开业典礼上，印尼工业部副部长Putu先生代表印尼政府做了主旨演讲，对长飞公司在印尼的投资表示赞赏，并期待长飞印尼公司为印尼的经济和通讯事业做出卓越的贡献。长飞公司总裁庄丹代表公司发表了重要讲话，对印尼政府和当地股东在长飞印尼公司建设期间所给予的鼎力支持表示感谢，对长飞印尼团队的辛勤付出和取得的成绩表示肯定，也对长飞公司未来在印尼的发展方向做出了重要指示。印尼电信AKSES公司总经理Warif先生代表印尼电信公司讲话，希望长飞公司在印尼光纤到户国家战略中发挥更大的作用。

近年来，除了立足国内市场外，“走出去”已成为中国光纤光缆企业的共识。从全球光纤光缆市场来看，东南亚和非洲市场空间巨大，也是长飞公司“走出去”的重要阵地。长飞印尼公司作为印尼乃至东南亚唯一一家光纤制造企业，在印尼市场赢得了先机和主动权，如今正式开业亦是长飞公司国际化战略的又一个里程碑。目前长飞以东南亚和非洲为重心，加速布局海外市场，随着相关项目不断落地，长飞公司海外版图轮廓将日渐清晰。





# PT Yangtze Optical Fibre Indonesia Opening Ceremony Was Drandly Held

□ Kong Wentao from Sales Center

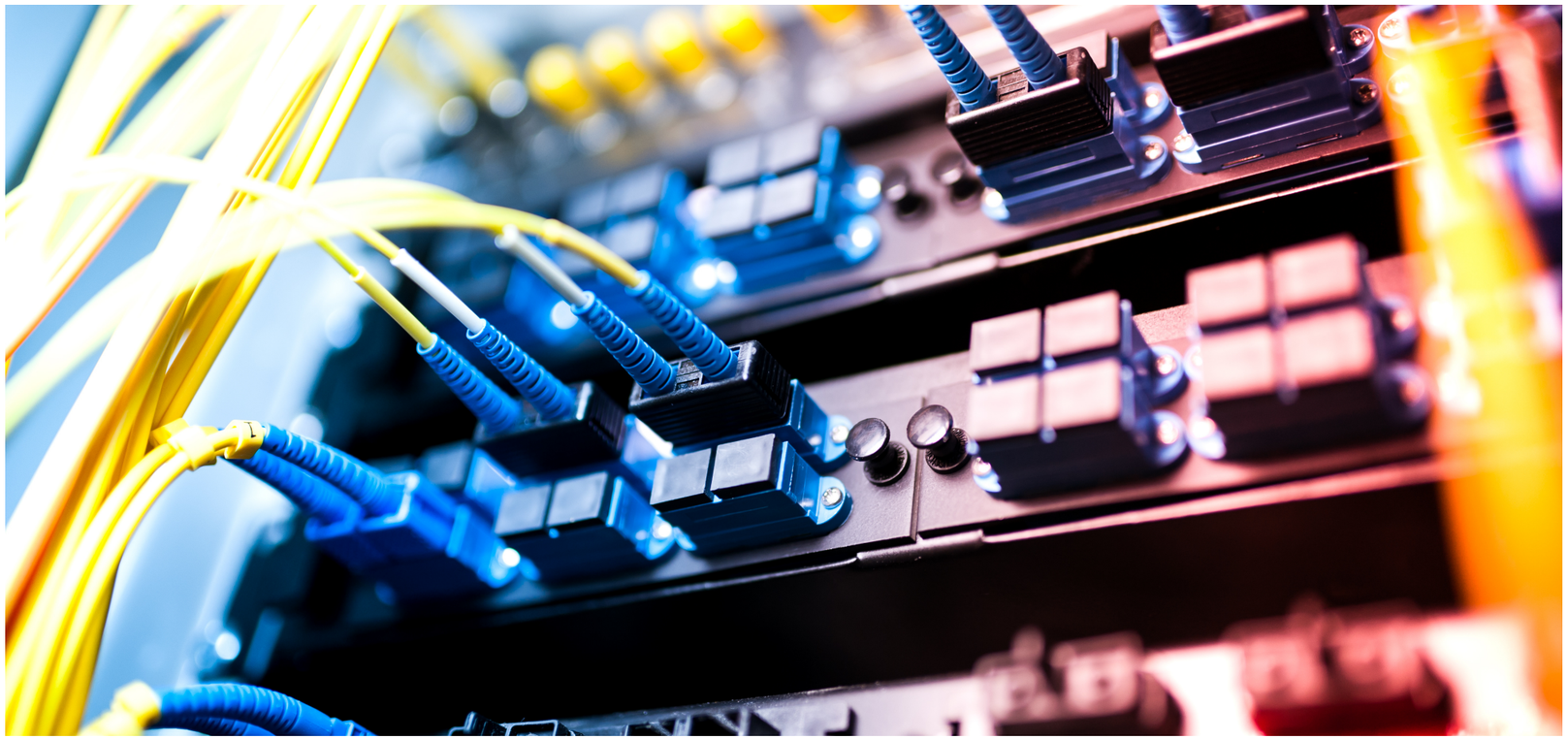
On the morning of September 8, member of YOFC——PT Yangtze Optical Fibre Indonesia(YOFI) opening ceremony was grandly held in Cara Wang, Java, Indonesia. As the first overseas optical fiber manufacturing joint venture project, YOFI, was established as a joint venture by YOFC and Indonesia PT MONAS company on January 19, 2015 with YOFC holding 70% and PT MONAS company holding 30%. Since the establishment of the project, the construction of the fiber plants, installation and commissioning of equipment were completed in less than 12 months, and advance in production was realized.

At the opening ceremony, Mr. Putu, Vice Minister of Indonesia's Ministry of industry, on behalf of the Indonesian government, made a keynote speech. He expressed appreciation for YOFC’ s investment in Indonesia and expected YOFI to make outstanding contributions to the economic and communications industry in Indonesia. YOFC President Zhuang Dan delivered an important speech on behalf of the company. He expressed thanks to the Indonesian government and local shareholders for their full support during the construction of YOFI, expressed affirmation to the hard work and achievements of YOFI team, and made important instructions on YOFC future direction of development in Indonesia. Mr. Warif, general manager of Indonesia Telecom AKSES company, addressed a speech on behalf of the Indonesian telecommunications company, hoping YOFC will play a greater role in Indonesian fiber to the home national strategy.

In recent years, in addition to basing on the domestic market, "going out" has become the consensus of the fiber optic cable companies.From the global optical fiber cable market,the huge market space of Southeast Asia and Africa, is also an important position for YOFC "going out". As the only one fiber manufacturing enterprise in Indonesia and Southeast Asia, YOFI wins the initiative in the Indonesian market, and its grand opening is another milepost in YOFC's internationalization strategy. At present, YOFC keeps Southeast Asia and Africa as the focus, accelerates the layout of overseas markets, and its overseas territory outline will become increasingly clear with related projects continuing landing.







# 长芯盛公司参与有源光缆国际标准制定

□ 长芯盛公司 李玲

9月7日，应USB IF（通用接口业界联合组织）邀请，长飞子公司——长芯盛公司出席了USB IF在美国硅谷英特尔总部举办的有源光缆工作组首次会议。USB IF是英特尔公司在1995 年与业界同行成立的一个非营利性组织，致力于推广并发展USB技术，提供标准的传输接口规格，方便计算机与外围设备间连接。目前，该组织董事会成员包括惠普、英特尔、巨积、微软、瑞萨电子、恩法半导体等电子行业领头企业。

随着信息技术的快速发展和传输带宽的急剧增长，有源光缆将成为下一代计算机互连技术的重量级产品。有源光缆工作组致力于制定有源光缆的技术指标、功能特性、测试办法、兼容性要求等相关标准，并在全球范围内推行。该工作组仅邀请了两家中国企业成为其成员，长芯盛公司作为国内仅有的两家成员单位之一，将和英特尔、苹果公司等科技业巨头一道参与有源光缆相关标准的讨论与制定，为标准的推广和应用作出积极贡献。

长芯盛公司自2013年年底成立后，一直致力于有源光缆、高速光通信芯片、模组、光互连技术的研发和制造,目前已形成了高速通信相关光电芯片、光电集成电路板、有源光缆、USB3.0 SuperTT集线器、零客户端和基于USB3.0的零客户端、机器视觉、数字标牌超高速连接解决方案等多个系列的产品，是当前世界上在USB领域具有领先水平的有源光缆产品和解决方案供应商，也是目前亚洲唯一一家掌握850nm波长10G SFP+高速通信光电芯片技术的公司。2016年，长芯盛公司在技术创新上取得了突破性的进展，公司自主立项研发的10G SFP+高速通信芯片开发/产业化项目参与了国家工信部2016年工业强基工程–高速光通信器件项目的投标并成功中标，同时也被湖北省发改委认定为省级企业技术中心。目前长芯盛公司已与英特尔、微软、IDS、海信等国际上多家有源光缆应用领域领先的客户企业形成了合作关系，得到了客户的高度肯定。





# EverPro — Setter of AOC International Standards

□ Melody Li from Everpro

On 7th Sep 2016, invited by USB IF, member of YOFC—— EverPro Technologies Company Ltd. attended the kick-off meeting of active optical cable (AOC) workgroup, which was held at the headquarter of Intel in Silicon Valley of U.S. As a non-profit organization, USB IF was held by Intel and other enterprises in 1995. It was dedicated to the promotion and development of USB technology, and providing standard transmission interface standards for the convenient connection between computer and peripheral equipment. Members of BOD includes HP, Intel, LSI, Microsoft, Renesas and ST-Ericsson.

With the development of information technology and the rapid growth of the transmission bandwidth, AOC would be the key products with the next-generation of computer interconnection technology. The AOC workgroup is committed to setting relative standards of technical indicators, functional characteristics, test methods, and compatibility requirements, and implements the standards to the world. This time, only 2 enterprises from China was invited by the workgroup and EverPro is in. EverPro, with tech tycoon like Intel and Apple, would participate in the discussion and setting of the AOC standards, and contribute to the standards promotion and application.

Since the Establishment in 2013, EverPro focused on the R&D and production of AOC, high-speed optical telecommunication IC, Module, and optical interconnection technology. At present, the company formed series of products on optoelectronic IC, Photoelectric integrated circuit board, AOC, USB3.0 SuperTT Hub, zero clients and super high-speed connection solutions based on USB3.0, like zero clients, machine vision, and digital signage. EverPro is the advanced AOC products and solution supplier in USB fields, and also the only one who had mater the technology of 10G SFP+ High-speed optical telecommunication IC with 850nm wavelength. In 2016, EverPro made a breakthrough in technology innovation. The independent-research-and-development 10G SFP+ high-speed telecommunication IC development/industrialization project attended the public bidding of 2016 Strong Base Industrial Project—high-speed optical telecommunication project, which is held by Ministry of Industry and Information Technology, and EverPro won the bidding. Meantime, EverPro was recognized as provincial enterprise technical center by Hubei provincial development and Reform Commission. At present, EverPro cooperated with leading enterprises in AOC fields, such as Intel, MS, IDS, Hisense, and achieved positive feedbacks from them.




# “三连冠”
# ——长飞公司再获 ICQCC 金奖

□ 战略中心 田巧丽

8月23—26日，2016年ICQCC 国际质量管理小组会议在泰国曼谷成功举办，长飞公司制造中心光纤部北极星QC小组携“降低光纤划伤报废率”课题参会，经过紧张激烈的角逐，该小组获得了本次会议的最高奖——金奖。至此，长飞公司也在该奖项上取得了三连冠的优异成绩。

本届ICQCC 国际质量管理小组会议共有来自日本、韩国、马来西亚、印度、印尼等12个国家的311个小组约1500人参加。此次会议的主题是“增强劳动力和组织绩效”，会议分14个会场进行了成果发表、会议成果材料、成果发表和提问交流环节。在大会上，长飞公司QC代表团介绍了小组课题成果，与会评委一致认为，长飞公司QC小组逻辑清晰地介绍了如何查找关键原因和改善过程，尤其对小组成员运用集体智慧和QC活动程序，创新测试工具和自动控制设计方法表示赞赏。

此次获奖是长飞公司继5月分别获得年度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）两项国际质量大奖后的又一殊荣。一直以来，长飞公司都非常重视质量管理，积极组织开展了“长飞质量年”、“质量知识竞赛”等一系列活动。公司将QC小组活动作为提高产品质量、提升员工创新能力和业务水平的有效抓手，围绕企业的经营战略、方针目标和现场存在问题，以改进质量、降低消耗、提高人的素质和经济效益为目的，运用质量管理的理论和方法开展生产经营活动。正是由于对质量管理精益求精的追求，长飞人在不同的岗位上以始终以高度的责任心为产品质量保驾护航，打造了享誉全球的“长飞”品牌。





# “Triple Crowns” – YOFC Regains ICQCC Gold Award

□ Tian Qiaoli from Strategic Center

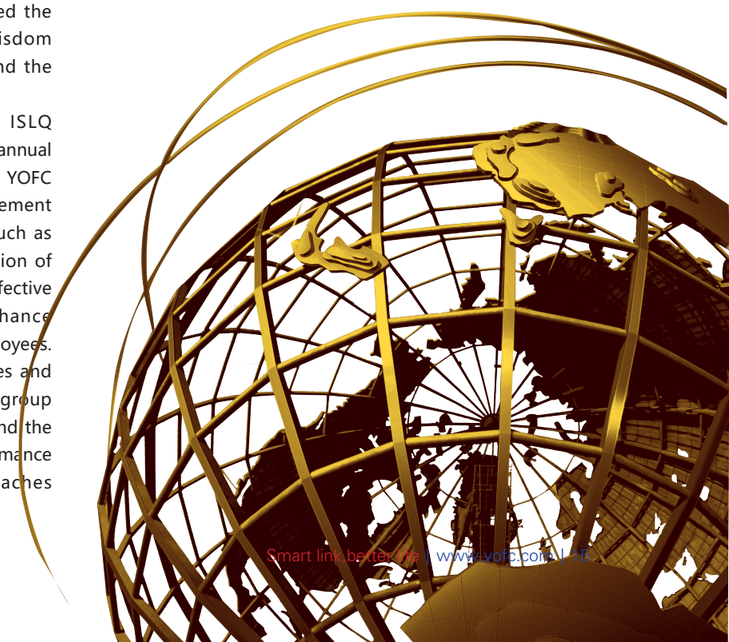
From August 23 -26, 2016 International Convention on Quality Control Circles (ICQCC 2016) was successfully held in Bangkok, Thailand. The North Star QC group from the Optical Fiber Department of Manufacturing Center of Yangtze Optical Fiber and Cable Joint Stock Limited Company (YOFC) took part in the convention with the subject of “Reducing the Scrap Rate of Optical-fiber Scratch”. After fierce and intensive competitions, the group gained the highest award of the convention – the Gold Award. YOFC has already gained the award for three times consecutively.

311 groups composed of 1,500 participants from 12 countries, such as Japan, Republic of Korea, Malaysia, India, and Indonesia, attended the convention. With the theme of “Improving the Performance of Labour and Organization”, the convention was held in 14 conference halls and divided into achievement release, materials of conference achievements, achievement publishing and question and answer sections. During the convention, QC delegation of YOFC introduced the achievements of group subject, and the judges of the convention unanimously agreed that the group explained how to search for key reasons and improve the procedures logically. They highly complimented the group members since they applied collective wisdom and QC event system to innovate testing tools and the automatic control design approaches.

This award is another honour following ISLQ (International Star for Leadership in Quality) and the annual BIZZ EUROPE – PEAK OF SUCCESS award gained by YOFC in May. As always, YOFC emphases quality management and has actively organized a series of activities, such as “YOFC Quality Year” and “Knowledge Competition of Quality”. The company regards QC group as an effective supervisor to improve product quality, and enhance innovation ability and business performance of employees. Revolving around the business strategies, principles and targets and onsite problems of the company, the group sets quality improvement, consumption reduction and the improvement of human quality and economic performance as the targets, and applies theories and approaches




of quality management to conduct production and operation activities. It is the pursuit of perfection in quality management that makes YOFCers ensure the quality of the products in various positions with their sense of responsibility, thereby creating the brand of “YOFC” which is renowned around the globe.






长飞公司荣获“市场竞争力奖——2015–2016 年度中国通信智能制造领军企业”

# 长飞公司荣获
# 2015–2016中国通信产业榜多项大奖

□ 战略中心 曾云飞

9月21日，2015–2016中国通信产业榜(第十届)年度榜单在北京国际信息通信展正式发布。本届中国通信产业榜以“互联网+的能力与创新”为主题，经过市场影响力、规模与利润、大连接与网络重构能力与创新、大连接技术与商业能力、用户满意度、商务信赖度以及社会责任指标等综合评定，评出2016中国通信产业榜中国地方运营商50佳、中国通信技术设备商50强、中国互联网企业50佳、中国虚拟运营商20佳和2016年度产业贡献奖、年度产业创新奖、市场竞争力奖、年度技术和产品奖。

在本届榜单中，长飞公司荣获“市场竞争力奖——2015~2016年度中国通信智能制造领军企业”和“产业贡献奖——2015~2016年度中国通信产业社会责任贡献企业”；长飞公司远贝®超强超低衰减大有效面积G.654光纤荣获“2016中国国际通信信息展最具竞争力产品”。同时，长飞公司展台还荣获了“2016中国国际通信信息展微信评选最具人气展台”。

本届通信产业榜的评选在有关部门指导下，由工信部赛迪研究院、通信产业报社主办。作为通信产业唯一一个第三方产业评价体系，通信产业榜以“树标杆、提品质、促发展”为目的，已连续发布九期，已经成为产业链发展的晴雨表。据介绍，通信产业报编辑部为本届榜单设计了较为完备的指标评价体系，主要因素包括了用户影响力、收入影响力、解决方案的定制水平、面向大连接承载的产品和技术能力、用户满意度、商务信赖度以及社会责任，在结合专家意见基础上，由专业的编辑团队独立打分评出。一年一度的通信产业榜评选的意义，在于为通信产业树立优秀标杆、提升企业发展品质、促进行业发展。





# YOFC Gains Several Big Awards in 2015–2016 Chinese Communications Industry List

□ Zeng Yunfei from Strategic Center

On September 21, the annual list of 2015-2016 Chinese Communications Industry List (the 10th) was announced at the PT/EXPO China Beijing. With the theme of “the Capability and Innovation of Internet Plus”, this year’s Chinese Communications Industry List was produced after all-round evaluations including the market influence, scale and profits, the reconstruction ability of large connection and the Internet, technologies of large connection and business abilities, customers’ satisfaction, business reliability and social responsibility index. Top 50 local operators, top 50 equipment manufacturers of communication technologies in China, top 50 internet companies in China, top 20 virtual operators in China and annual Contribution Award, Innovation Award, Market Competition Award, Technology and Product Award are selected in 2016 Chinese Communications Industry List.

In this year’s list, YOFC was awarded the “Market Competition Award—2015-2016 Chinese Communications Intelligence Manufacturing Pioneering Enterprise” and the “Industry Contribution Awards-2015-2016 Annual Social Responsibility Contribution Enterprise in Chinese Communications Industry”; Farband® Ultra G.654 optical fiber with ultra-low attenuation and large effective area of YOFC gained the award of the “Most Competitive Product in PT/EXPO China 2016”. Meanwhile, YOFC also gained “Most Popular Stand of PT/EXPO China 2016 Selected through WeChat”

Under the guidance of related departments, the making of the Communications Industry List is organized by China Center for Information Industry Development under Ministry of Industry and Information Technology and Communications Weekly newspaper office. As the only third party evaluation system in communications industry, Communications Industry List sets “establishing models, improving quality and promoting development” as the goals and 9 lists have been released, becoming a yardstick for the development of industrial chain. According to the introduction, the editorial department of Communications Weekly sets complete index evaluation system for this year’s list, the main factors of which include customers influence, income influence, the designing level of solution schemes, the products and technological abilities facing large connection, customer satisfactions, business reliability and social responsibility. The awarded companies are selected by professional editorial team independently after considering the experts’ opinions. The meaning of producing annual communications industry list is to establish models in the communications industry, improve the development quality of enterprises and promote industry development.






# 长飞公司喜获“2015 年度信息通信行业社会责任优秀企业奖”

□ 运营管理中心 张光华

9月21日，由工业和信息化部与中国通信企业协会联合举办的首届“信息通信行业社会责任年会”在北京隆重召开。长飞公司喜获“2015年度信息通信行业社会责任优秀企业奖”，长飞公司编写的案例《新一代高效、环保的预制棒制造技术》被评为“企业社会责任最佳绿色环保实践案例”。

作为光纤光缆行业的龙头企业，长飞公司一直将推动行业的健康可持续发展视为己任，在商业道德规范、节能减排、绿色制造、阳光采购、员工关爱、创新责任、社会公益、和谐社区等方面勇担责任，积极行动。2015年底，长飞公司成为行业第一家荣获"中国最佳企业公民评选年度综合大奖"的企业。




# YOFC Wins the Award of “2015 Excellent Information Communication Enterprise in Performing Social Responsibility”

□ Zhang Guanghua from Operration and management Centre

On September 21, the first “Annual Meeting of Social Responsibility in China’s Information Communication Industry” jointly organized by Ministry of Industry and Information and China Association of Communication Enterprises was held in Beijing. YOFC has won the award of “2015 Excellent Information Communication Enterprise in Performing Social Responsibility”, and the case “A New Generation of High-efficiency and Environmentally-friendly Preform Manufacturing Technology” prepared by the company has been honored as “the Best Green and Environmentally-friendly Practical Case of Enterprises Performing Social Responsibility”.

As the leading enterprise in China’s optical fiber cable industry, YOFC has regarded it as its own duty to promote the healthy and sustainable development of the industry, shouldered the responsibility and taken positive actions in such aspects as commercial code of ethics, energy conservation and emission reduction, green manufacturing, sunshine purchase, employee care, innovative responsibility, social welfare and harmonious community. By the end of 2015, YOFC has become the first enterprise in the industry to won the “Annual Comprehensive Award of China’s Best Enterprise Citizens”.





# 长飞公司精彩亮相第十八届中国国际光电博览会

□ 战略中心 高晓蕊

第十八届中国国际光电博览会于9月6日至9月9日在深圳会展中心隆重举行。本届光博会主要划分为光通信展、激光红外展、精密光学展、LED技术应用展等7个分展，并同期举办各类丰富多彩的学术、产业峰会。

此次光博会，长飞公司集中展示了超低衰减大有效面积G.654光纤、宽带多模光纤、多芯光纤等新型光纤，并展示了光纤周界监测、光纤测温、采用有源光缆的高清数据传输、数据中心布线等多种解决方案。这些产品充分体现了长飞公司在光纤光缆领域的技术实力和相关多元化的丰硕成果，吸引了大批嘉宾与观众前来参观咨询。盛装亮相的长飞公司也引起了媒体的广泛关注，公司特种产品事业部总经理童维军与各大媒体记者就长飞公司特种产品及光纤光缆行业的未来发展进行了深入交流。

此次光博会现场也筹备了许多参与度高、互动性强的活动，包括2016买家采购对接会、VIP买家计划、新产品新技术发布会、光电人才墙、360°球幕电影体验互动、天文爱好者之约等。

# YOFC Appears at the 18th CIOE

□ Gao Xiaorui from Strategic Center

The 18th China International Optoelectronic Expo (CIOE) was grandly held in Shenzhen Convention & Exhibition Center from September 6 to September 9, 2016. The expo consisted of 7 exhibitions (optical communication, laser & IR, precision optics, application of LED technology, etc.). Colorful academic and industrial summits were held during the expo.

During the expo, YOFC exhibited new-type optical fibers (G.654 optical fiber (with ultra-low attenuation and large effective area), broadband multi-mode optical fiber, multi-core optical fiber, etc.) and multiple solutions (optical fiber circumferential monitoring, optical fiber temperature measurement, high-definition data transmission via active optical cable, cabling of data center, etc.) collectively. Attracted by these products and solutions, which fully demonstrate YOFC’s technical strength and diversified, substantial achievements in the field of optical fiber cable, a lot of guests and audiences visited and consulted YOFC’s booths. Furthermore, YOFC’s attractive appearance drew broad attention of media. Tong Weijun (GM of Special Products Department of YOFC) communicated with the reporters from mainstream media on the future development of YOFC’s special product and optical fiber cable business, in depth.

Many high-involvement, high-interactivity activities were also organized on the site, such as “Buyer-Seller Partnering Meeting 2016”, “VIP Buyer Plan”, “New Products and Technologies Presentation”, “Photoelectric Talent Wall”, “360° Fulldome Experience and Interaction” and “Amateur Astronomer Assembly”.




# 从信息通信展看长飞的技术创新

□ 本刊编辑部

**编者按：**

**一年一度的中国国际信息通信展览会于9月20日在北京中国国际展览中心开幕，今年展会主题为“网聚万物，融合创新”，吸引了来自十余个国家和地区的400余家知名企业参展，全面展示了宽带网络建设、互联网发展、信息化应用、网络与信息安全等领域的新产品、新技术，特别是信息通信业在“中国制造2025”、“互联网+”等方面取得的突破。作为光纤光缆行业的领军企业，长飞公司携多款重磅产品及解决方案精彩亮相此次展会，展现了整个集团完整的产品系列和相关多元化成果。**

## 展会概览：

本届中国国际信息通信展着力聚焦和展示我国在新一代信息通信技术、宽带网络建设、互联网发展、信息化应用、网络与信息安全等领域的新产品、新技术、新业务、新模式，特别是信息通信业在支撑和服务“中国制造2025”、“互联网+”、“大众创业、万众创新”等方面取得的阶段性成果，主要展示内容涵盖移动通信（5G）、SDN/NFV、物联网（IOT）、云计算、大数据、虚拟运营、互联网+、智慧城市、智能家居、智能终端、信息安全、车联网、工业互联网、各类新型互联网应用及智能硬件等。在连接无处不在的今天，互联网已经渗入各个行业。人与人相连、人与物相连、物与物相连的“万物互联”时代，将对人们的生活、社会的发展带来深刻的变革。“网络”和“联接”也成为2016中国国际通信信息展上的热门关键词。





## 长飞参展

长飞公司此次参展以“联接改变生活为主题，运用现代时尚的国际化设计风格将各种产品利用声、光、电综合方式立体呈现在观众面前，展示了长飞公司完整的产品系列和相关多元化的成果。本次展会，长飞公司集中亮相了在通信光纤领域的最新成果：超低衰减大有效面积G.654光纤、宽带多模光纤、多芯光纤、少模光纤等。多种解决方案的集中展示体现了长飞公司正在向解决方案提供商和服务商大步迈进，这些方案包括：数据中心、隐形缆室内布线、分布式基站布线、农村光网、城市路由、基于全光网的智慧园区等解决方案。其中，长飞公司iCONEC®数据中心解决方案为顺应全球特别是中国市场的大数据、云计算、高带宽的全新网络基础链路需求大趋势，提供一揽子解决方案。iCONEC®数据中心全套布线解决方案以其高带宽、高密度、高可靠性、高扩展性等特点，受到与会用户的高度认可。





## G.654 光纤，拓宽信息大动脉

移动应用的广泛兴起和大数据业务的逐步成熟带来了数据流量的迅猛激增，而“全光网省”的全面推进则将信息通信的瓶颈从接入网转向骨干网。100G的商用已在全国铺开，400G成为未来发展的主要方向，超低损耗大有效面积G.654光纤的诞生则为400G的发展带来了“及时雨”。

长飞公司早在2010年就已洞悉了这一发展方向，并开始着手研究相关技术。2015年4月，长飞正式发布了远贝®超强超低损耗大有效面积单模光纤，成为国内首家、全球第三家生产大有效面积超低损耗光纤产品的厂商。经过一年多的研发，长飞G.654光纤工艺参数得到进一步优化，这款光纤已经用于中国联通哈密–巴里坤和济南–青岛干线建设，并有部分产品已出口印尼用于海底光缆上陆站到市区机房之间的连接，也即将被用在中国移动北京–南京的干线建设中。

## 宽带 OM4 多模光纤，助建超速数据中心

云计算、大数据的兴起直接带动了数据中心的高速发展，内部通信的速率会对数据中心对外服务的能力产生直接影响，使得多模光纤和数据中心布线成为近年来业界关注的热点。

长飞是为数不多的可以生产多模光纤的厂商之一，其最新推出的超贝®宽带OM4多模光纤则凭借优良的性能在高速数据中心的建设中被广泛关注。与只能用于850和1300纳米波段的普通OM4光纤不同，超贝®宽带OM4多模光纤在850nm–950nm波段范围内都具有高带宽，采用短波长波分复用（SWDM）技术，单根光纤可以进行100G传输。目前，宽带OM4光纤的IEC标准仍在讨论中，而长飞的这款光纤已经实现了量产。

## 有源光缆，让 VR 真正“零距离”

在今年的通信展上，VR是最火的应用之一。无论是在运营商的展台，还是在互联网厂商的展台，都能看到VR的身影。而VR成为长飞今年的展品之一，则是因为要让消费者真正零距离地感知VR，长飞的有源光缆将充当起“幕后英雄”的角色。众所周知，VR对网络传输速度有着极为苛刻的要求。玩游戏时一旦出现延时就会产生跳帧，就会真的出现“让子弹飞一会儿”的情况，用户体验会非常差。而长飞的有源光缆则能很好地解决这一问题。

有源光缆是长飞子公司——长芯盛的主打产品，具有传输速率高、传输距离长、能耗低、使用方便等诸多优点，是数据中心、消费电子等领域理想的传输线缆。通过有源光缆的连接，VR应用可以实现高清画面输出，基本实现无延时。同时，长飞还是唯一一家实现远程视频无延时的厂商，此次展出的远程视频双向实时传输教学解决方案就是一个典型应用。

# YOFC's Technological Innovation Seen from the PT/EXPO CHINA

☐ The Editorial

Editor's Notes:

**The annual PT/EXPO CHINA opened in China International Exhibition Center in Beijing on September 20. With "Internet Gathering the Universe and Integrated Innovation" as the theme, the Exhibition has attracted more than 400 well-known enterprises from over 10 countries and regions, and displayed the new products and technologies of such fields as broadband network construction, Internet development, application of informatization as well as network and information security in an overall manner, especially the breakthroughs made by the information communication industry in "Made in China 2025" and "Internet plus". As the leading enterprise in China's optical fiber cable industry, YOFC has made a splendid appearance on the Exhibition with many blockbuster products and solutions, which has revealed the complete products series as well as related diversified results made by the whole Group.**

## Exhibition Profile:

The PT/EXPO CHINA of this year has focused on and displayed China's new products, technologies, businesses and models of a new generation in such fields as information and communication technology, broadband network construction, Internet development, application of informatization, network and information security, especially the staged achievements made by the information communication industry in the process of providing support and service for "Made in China 2025", "Internet plus" and "Mass entrepreneurship and innovation". The main contents displayed on the Exhibition cover mobile communication (5G), SDN/NFV, Internet of Things (IOT), cloud computing, big data, virtual operation, Internet plus, smart city, smart home, intelligent terminal, information security, car networking, industrial Internet as well as all kinds of new-type Internet applications and intelligent hardware. In today's world of connectivity, the Internet has integrated into different industries. The age of "Internet of Everything" when people and people are connected, people and things are connected, and things and things are also connected will bring profound changes to people's life and the social development. "Internet" and "Connection" have also become the hot keywords on the PT/EXPO CHINA 2016.

## YOFC Taking Part in the Exhibition

With "Connection Changes Life" as the theme, YOFC has taken part in the Exhibition and presented all the products to the spectators with modern and fashionable international design style in a comprehensive and three-dimensional way of sound, light and electricity, which has revealed the complete products series as well as related diversified results made by YOFC. On this Exhibition, YOFC has focused on and displayed the latest achievements in the field of communication optical fibers including G.654 optical fiber with ultra-low attenuation and large effective area, wideband multimode fiber (WBMMF), multicore fiber and few-mode fiber. The centralized exhibition of a variety of solutions has embodied that YOFC is striding forward to become a solution provider as well as a service provider, and the solutions are involved with data center, invisible cable indoor wiring, distributed base station wiring, rural optical network, urban routing as well as the smart park based on all-optical networks, of which the YOFC iCONEC® data center solution will provide package solutions in order to follow the demand trends of new network basis links of big data, cloud computing and high bandwidth all over the world, especially in the Chinese market. With such features as high bandwidth, high density, high reliability and high expansibility, iCONEC® data center full-set wiring solution has been highly recognized by the participants.

## G.654 Optical Fiber Will Broaden the Information Artery.

The extensive appearance of mobile applications and the gradual maturity of big data service have given impetus to the rapid surge of data flow, and the overall promotion of "All-optical Network Provinces" has turned the bottleneck of information and communication from access network to backbone network. The optical fiber of 100G for commercial use has been rolled out across China, the optical fiber of 400G has become the major trend for future development, and the birth of G.654 optical fiber with ultra-low attenuation and large effective area has brought "timely rain" for the development of 400G optical fibers.

YOFC knew the development trend clearly as early as




2010 and has set out to research on related technologies. In April 2015, YOFC officially released Farband® ultra-strong single mode optical fiber with ultra-low attenuation and large effective area, thus becoming China's first and the world's third manufacturer to produce optical fibers with ultra-low attenuation and large effective area. After more than a year of research and development, technological parameters of YOFC G.654 optical fiber have been further optimized, and this kind of optical fiber has been used for the construction of Qomul - Barkol as well as Jinan - Qingdao main lines of China Unicom. Some products have also been exported to Indonesia and used for the connection between the landing station and urban machine room of the submarine optical fiber cable, and will also be applied in the construction of main lines from Beijing to Nanjing of China Mobile.

## Broadband OM4 Multimode Fiber Helps to Build Ultra-speed Data Center.

The rise of cloud computing and big data has directly promoted the rapid development of data center, and the speed of interior communication will exert direct influence on the ability of external services of the data center, thus making multimode fiber and data center wiring become the focus of attention of the industry in recent years.

YOFC is one of the few manufacturers that can produce multimode fiber, and its latest Maxband® broadband OM4 multimode fiber has been widely recognized in the construction of high-speed data center due to its excellent performance. Different from the ordinary OM4 fibers that can only be used for the waveband of 850nm and 1300nm, Maxband® broadband OM4 multimode fiber has high bandwidth in the waveband range of 850nm to 950nm. With the technology of short wavelength division multiplexing (SWDM), a single fiber is able to realize the transmission of 100G. Currently, the IEC standard of broadband OM4 optical fiber is still under discussion while this kind of fiber made by YOFC has achieved mass production.

## Active Optical Cable Makes VR Really "Zero Distance".

On the Exhibition of this year, VR has become one of the most popular applications, and it can be seen both on the booth of operators and on the booth of Internet vendors. The reason why VR has become one of YOFC's exhibits is that customers can be given the opportunity to experience it really from zero distance, and YOFC's active optical cable will act as the "unsung hero". It is well known that VR has an extremely strict requirement for the speed of network transmission. Frame skip will appear once there is a time delay when we are playing games and the situation of "letting the bullets fly for a while" will then appear, which will lead to very poor user experience. However, YOFC's active optical cable can well solve this problem.

As the featured product of EverPro Technologies, YOFC's subsidiary company, active optical cable proves to be the ideal transmission cable in such fields as data center and consumer electronics with many advantages including high transmission rate, long transmission distance, low energy consumption and convenience to use. Through the connection of active optical cable, an HD image output can be realized by VR applications and basically without time delay. Meanwhile, YOFC is also the only vendor to realize remote video without delay, and the remote video two-way real-time transmission solution exhibited this time is a typical application.

# 长飞公司受邀参加2016华为全联接大会

□ 战略中心 张方海

ICT产业全球性年度旗舰大会—HUAWEI CONNECT 2016全联接大会于8月31日–9月2日在上海举行，本次大会整合了原有的HCC(华为云计算大会)、HNC(华为网络大会)、HDC(华为开发者大会)，是迄今为止华为组织的最大规模的全球盛会，得到了120多个国家的合作伙伴、客户和开发者的积极响应，超过15000名业界精英齐聚上海参与此次盛会。本次大会的主题是Shape the Cloud（塑造云时代），在会上华为发布了云存储、云服务、NB–IoT芯片等9大重量级解决方案。




作为光纤光缆行业的领军企业，长飞公司以“综合线缆解决方案助力ICT产业发展”为主题，携预端接数据中心高密度布线、气吹微管微缆、全干式光缆、分布式基站布线、隐形缆室内布线等解决方案参与本次大会。长飞公司展台现场观众云集，对长飞的线缆解决方案，特别是数据中心高密度布线解决方案兴趣浓郁，不少新老客户到展位观展，并进行深入洽谈，有望增进与华为及华为合作伙伴的进一步深入合作。

在信息化高速发展的今天，全光网的网络覆盖，以及网络设施基础上贴近企业用户的应用与服务，是企业园区/商业综合体的建设发展方向。华为在本次大会上发布了“华为全光园区商业综合体解决方案”，长飞公司网络技术部副经理齐尚波应邀在会上做了题为“智能制造园区的全新ICT建设——长飞潜江科技园部署全光网络”的专题报告，就长飞公司在智能制造园区全光网络建设的成功案例进行了详细分享，同时介绍了长飞园区的ICT建设历程及展望，得到与会嘉宾充分地关注与肯定。

# YOFC Attends HUAWEI CONNECT 2016 on Invitation

□ Zhang Fanghai from Strategic Center

HUAWEI CONNECT is an annual flagship conference of the global ICT industry. HUAWEI CONNECT 2016 was held in Shanghai from August 31 to September 2, 2016. Integrating the original HCC (Huawei Cloud Congress), HNC (Huawei Networking Congress) and HDC (Huawei Developer Conference), HUAWEI CONNECT 2016 has been the largest global conference organized by Huawei, and actively answered by partners, customers and developers from more than 120 countries. Themed by “Shape the Cloud”, it assembled more than 15,000 ICT elites in Shanghai. At the conference, Huawei released 9 major solutions (cloud storage, cloud service, NB-IoT, etc.).

As a leading enterprise of the optical fiber cable industry, YOFC carried the solutions including high-density cabling of pre-terminated data center, air-blowing microtubule and micro-cable, totally dry optical cable, distributed base station cabling and concealed indoor cabling to attend the conference, under the title of “boost ICT development with comprehensive cable solutions”. Its booth attracted many audiences very interested in YOFC’s solutions, especially high-density cabling of pre-terminated data center. A lot of new and old customers visited the booth to strengthen the cooperation with Huawei and Huawei’s partners through in-depth negotiation.

In the context of information-based high-speed development, enterprise parks and commercial complexes are being oriented to AON (all optical network) coverage, as well as considerate applications and services for enterprises based on network facility. At the conference, Huawei released the “Huawei AON Park Commercial Complex Solution”. Qi Shangbo (Assistant Manager of Network Technology Department of YOFC) gave a special report titled “New-type ICT Construction of IM Park——Deploy AON in YOFC Qianjiang Science Park” on invitation at the conference to share the successful case of IM park AON construction in detail, and introduce YOFC Qianjiang Science Park’s history and prospect of ICT construction. The report was paid full attention to and highly praised by the attendees.





# 长飞公司参加ECOC欧洲光通讯展

□ 战略中心 张雨昕

一年一度的欧洲光通讯盛会ECOC于当地时间9月19日至9月21日在德国杜塞尔多夫隆重举行，来自世界各地区的300多个光通讯企业参与了此次盛会，包括光纤光缆生产商、光模块制造商、光系统配件产品制造商、相关测试仪器生产商等，同时大会为参会人员提供了丰富精彩的专业论坛。

此次光通讯盛会，长飞公司集中展示了非金属管道缆、骨架带缆等产品及微管微缆、隐形缆布线等解决方案，吸引了不少来自欧洲各国的客户、友商前来洽谈。在“ECOC市场聚焦”论坛环节，大会安排了欧洲和北美行业领先企业的专家给大家带来关于光通讯的精彩演讲，演讲主题包括服务提供商的光传输、光子学集成和数字硅光子学、光网络灵活性和分组光子传输、光纤接入、云计算中的光学等。



# YOFC Attends ECOC

□ Zhang Yuxin from Strategy Center

From September 19 to September 21, 2016 (local time), the annual European Conference on Optical Communication (ECOC) was grandly held in Dusseldorf, Germany, and attended by more than 300 optical communication enterprises from different parts of the world, including optical fiber cable manufacturers, optical module manufacturers, optical system fittings manufacturers, test instrument manufacturers, etc. The conference provided colorful professional forums for the attendees.

At the conference, YOFC exhibited products (non-metallic pipe cable, skeleton belt cable, etc.) and solutions (microtubule and micro-cable, concealed cabling, etc.) to attract many customers and partners from European countries. At the “ECOC Market Focus” forum, experts from leading enterprises of Europe and North America were arranged for to make colorful speeches on optical communication. The speeches were themed by optical transmission of service provider, photonic integration, digital silicon photonics, optical network flexibility, photonic packet transmission, fiber access, optics in cloud computing, etc.



# CRU世界光纤光缆大会
# 吸引行业领军人物齐聚中国光谷

□ 本刊编辑部

去年十月，CRU与长飞公司合作在中国光谷举办了首届亚太地区光纤光缆大会，大会共吸引了400余名参会人员，并邀请到中国各大光缆生产商（如长飞公司、烽火、富通、亨通、中天科技）以及各大通讯商（中国移动、中国联通、中国电信及有线电视）的代表。

今年十一月初，CRU再次来到光谷，将大会规模扩展至全球范围，并再一次由CRU与长飞公司携手主办。本届大会不仅为行业专家提供了宝贵的年度交流机会，丰富的会议议程及市场分析内容也将帮助全球光纤光缆行业各公司更好地制定未来发展战略。今年的大会将有更多国际光纤光缆生产商及消费者（包括Sterlite，康宁，普睿司曼集团，日本电报电话公司）以及熟稔电讯业消费趋势的国际专家的莅临，预计将有超过600名来自国际光纤光缆产业链及电讯行业的参会代表出席。大会议程除市场战略以外，还将包括光纤光缆设计制造方面的最新科技发展与成果，将由来自信越、帝斯曼、Photon Kinetics、j-fiber以及赫劳斯等领先技术创新公司的代表进行演讲。与会代表在大会上不仅能够聆听行业领军人物的重要见解，还能与行业重要决策者建立沟通与合作，同时，大会将设立超过30个现场展位，为与会者们生动展示下一代通讯技术将为行业带来哪些重大突破。

未来全球约60%光缆产量将来自于中国，武汉作为中国光纤光缆行业的中心，素有中国“光谷”的美誉，因此武汉成为此会议举办地的绝佳之选。长飞公司作为中国光纤光缆行业的领军企业，拥有全行业内最长的产业链，掌握了多种光纤光缆生产核心技术，因此成为CRU举办此次盛会的首选合作伙伴。

## 关于 CRU

CRU 是矿业、金属、电力、电缆、化肥及化工领域的权威独立咨询机构。CRU 集团创立于 1960 年代，目前聘请超过 200 名行业专家，在伦敦、北京、圣地亚哥、悉尼以及美国主要城市分别设有办事处。

CRU 会展部负责举办矿业、金属以及化肥领域等全球性高端会议 / 展览。CRU 品牌因其权威、独立的行业分析及研究而闻名，其会展服务也以全面细致的研究为基础，为客户提供最可靠的专业意见和最深入的市场分析。





# CRU's World Optical Fibre & Cable Conference Gathers Senior Executives from the Industry in Optics Valley of China

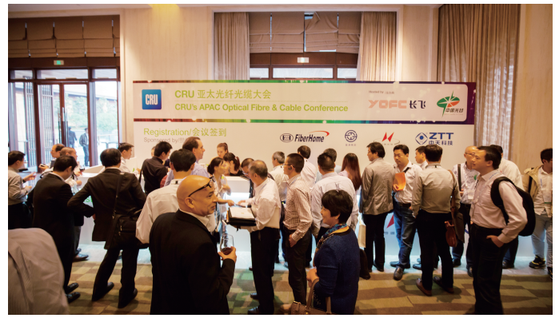
□ The Editorial

Last October, CRU and YOFC jointly held the first session of APAC Optical Fibre& Cable Conference in Optics Valley of China, which attracted over 400 attendees and had the participation of all the major Chinese optical cable manufacturers (such as YOFC, FiberHome, Futong, Hengtong, ZTT) and major Chinese communications figures (such as China Mobile, China Unicom, China Telecom and CATV).

Early this November, CUR will come to the Optics Valley again, and extend the scope of the conference to the world. The event will again be jointly held by CRU and YOFC. This conference provides important annual meetings for professional peers, and its market analysis helps shape future strategy for organizations involved in the global optical fibre and cable industry. The meeting to be held this year will see increasing numbers of international optical fibre and cable producers and consumers (such as Sterlite, Corning, Prysmian, NTT) and international experts in telecoms consumption trends. We expect over 600 attendees from the international optical fibre and cable industrial chain and telecom industry. In addition to market strategies, the programme covers the latest technological advancements in optical fibre and cable design and production, with presentations from leading innovators from around the world including Shin-Etsu, DSM, Photon Kinetics, j-fiber and Heraeus. It is an opportunity to hear directly from the industry leaders and to network with the hard-to reach influencers of the sector. This will be complimented by a lively exhibition of over 30 stands where visitors can see first-hand how next-generation technologies are moving the sector forward.

As 60% of the optical cable to be produced worldwide will be produced in China, and as Wuhan is the centre of this industry and known as China's “Optics Valley”, it is the perfect place for this meeting to be held. As the leading enterprise in the optical fibre and cable industry in China, YOFC owns the longest industry chain in the industry and grasped many core technologies for producing optical fibre and cable. That's why it became the preferred partner of CUR for holding this event.






## About CRU

CRU is an authoritative and independent consultancy group focused on the mining, metals, power, cables, fertilizer and chemical sectors. Founded in the 1960s, the group employs more than 200 experts in London, Beijing, Santiago, Sydney and key centres within the United States.

CRU Events organizes high-quality global conferences and exhibitions in the mining, metals and fertilizer industries. The CRU brand is renowned for producing authoritative, independent research and its events offer the same reliable expert opinion and market insights through carefully researched programmes.

Highlights

# 2016年世界光纤光缆大会精彩活动集锦

□ 本刊编辑部

为期3天的2016世界光纤光缆大会即将拉开序幕，大会期间有什么样的活动安排？行业专家将聚焦哪些热点话题？未来光纤光缆技术创新的方向在哪里？下面，让小编来为您揭秘本次大会的精彩专题活动。

## 中国生产商专题 - 光纤供应 专题1

世界领先制造商代表探讨全球光纤光缆市场供应所面临的挑战与机遇

- 新增预制棒产能现状如何？
- 当前国内及出口市场重点。未来在出口市场所扮演的角色？
- 为迎接即将到来的5G网络时代应采取何种长期战略？

**专题主持**：人民邮电报社总编辑 武锁宁

**专题成员**：中国 长飞公司 总裁 庄丹
中国 烽火通信科技股份有限公司 总裁 戈俊
中国 富通集团 总裁 肖玮
中国 亨通集团 董事长 钱建林
中国 中天科技集团 总裁 薛驰

## 消费商的观点 - 光纤需求 专题2

聆听电信运营商、公共设施、广播电视等机构对于下一代光纤光缆需求的预期。

- 固定宽带及光纤入户等网络建设的全球发展趋势如何？4G网络需求是否趋于稳定？
- 未来科技发展是否会进一步带动数据传输需求，对光纤消耗又有何影响？

**专题主持**：中国 长飞公司 副总裁 闫长鹋

**专题成员**：中国联通 网络建设部副总经理 曲保忠
中国电信研究院 副院长 张成良
中国移动研究院网络研究所 副所长 李晗
中国国家电网公司信息通信运维技术重点实验室 专业负责人 贾小铁
中国建设银行武汉数据中心 主任 徐彤
中国质量协会 副会长兼秘书长 段永刚

## 全球光纤光缆供应与需求 专题3

光纤光缆制造方面有哪些新增产能？中国以外哪些市场存在较大增长潜力？

- 世界范围有哪些通讯及基础设施项目需要生产商做足准备？
- 随着全球供需平衡变动，光纤光缆贸易流将如何变化？
- 若要在其他市场取得成功，中国的商业模式需进行怎样的适应性调整？

**专题主持**：中国长飞公司 第一副总裁 杨帮卡

- **印度光纤市场机遇与挑战**
印度 斯特雷德科技有限公司，电讯产品部 总监 Ankit Agarwal
- **CRU观点：全球光纤光缆市场现状及展望**
英国CRU 高级咨询师 潘裕亚
- **聚焦俄罗斯光纤光缆市场**
俄罗斯 INCAB CEO Alexander Smilgevich
- **聚焦拉美及加勒比地区电讯市场发展**
圭亚那 Telkom Caribe集团 董事长 Mike Singh

## 全球光纤入户建设进展 专题4

**专题主持**：CRU–美国 铜/电线电缆组 首席咨询师 Richard Mack

- **欧洲、美洲以及中东市场动向**
荷兰 普睿司曼集团 市场信息部经理/ 欧洲光纤入户理事会 市场信息委员会会长/ 中东北非光纤入户理事会成员 Jan Schindler
- **亚太地区市场增长潜力**
马来西亚 亚太光纤入户理事会 副会长&财务部长 / Three–OPP (M) Sdn. Bhd.公司CEO Shajahan Iqbal
- **日本光纤入户项目经验分享**
日本 NTT公司 战略计划部 总经理 Eiichi Satou







## 下一代光纤光缆应用 专题5

- 绿色联动未来的光纤需求如何？行业应如何应对？

**专题主持**：中国 长飞公司 第一副总裁 杨帮卡

- **更美好的全联接世界**
中国华为技术有限公司2012实验室线缆与连接器首席专家 方炜
- **下一代光纤在高速传输系统中的应用**
中国联通网络技术研究院 网络技术研究部主任 王光全
- **电讯市场全球发展趋势**
意大利 普睿司曼集团 副总裁–电讯服务 Antoni Bosch
- **印度及世界其他国家“智慧城市”项目**
印度 Reliance 通信, IT业务咨询及实践部 部长 Ashwin Jaiswal
- **光纤的数据中心互联应用**
英国 康宁光通信公司 市场及技术开发经理 Sergei Makovejs
- **光钎未来是否将取代铜线电缆？**
中国 康普公司 技术总监 吴健
- **下一代光纤光缆需求所在？行业应如何应对？**
CRU 美国 铜/电线电缆组 首席咨询师 Richard Mack

## 原材料展望 专题6

预制棒产能是否跟得上需求？

- 短期及长期内市场基本面将如何变化？
- 何时何处将出现瓶颈以及行业应如何应对？

**专题主持**：CRU 美国 铜/电线电缆组 首席咨询师 Richard Mack

- **未来促进预制棒产能增长的因素**
日本 信越 总经理 Hiroyasu Sasho
- **光纤及预制棒需求是否将持续增长？**
德国贺利氏 执行副总裁 Jan Vydra
- **提高光纤拉丝效率的创新型涂层技术（更快更节能/节省原材料消耗）**
美国 迪索特种化学 全球技术市场总监 Pratik Shah
- **预制棒及光纤生产技术发展趋势**
奥地利 Nextrom 董事总经理 Alain Giraud

## 网络技术发展催生新型光纤 专题7

光纤及光缆技术哪些发展将打破现有市场？

- 制造商应如何提高光缆质量并开发高性能应用，来适应更先进的网络发展？
- 为实现价值最大化，光纤及光缆制造商应把研发重点放在何处？

**专题主持**：中国 长飞公司 副总裁 闫长鹋

**四类光纤——G.657, G.654, 200-um and WBMMF现有标准及应用领域一览**
美国 奥维信 光纤系统&标准部 技术经理David Mazzarese
**多模光纤市场发展**
德国j–fiber公司 常务董事 Ulrich Lossen
**光纤传感技术在架空输电线路上的应用**
中国，深圳市特发信息股份有限公司 技术中心 主任 伍历文 博士

## 光纤及光缆制造设备研发 专题8

光纤生产技术如何适应下一代终端用户需求？

- 光纤制造工艺的经济核心将如何变化？
- 最新生产工艺的合理应用将如何提高生产商利润？

**专题主持**：中国 长飞公司 副总裁 闫长鹋

- **光纤供应链上的回收利用**
比利时 优美科 锗矿全球商务总监 Wim Geens
- **以扩大产能为目的的光纤测试战略**
英国光动有限公司, 销售总监 Barry Gill
- **通过光纤高速圈标实现生产成本降低**
德国多米乐 工业部主管 Frank Dubbins

Highlights

# Highlights of World Optical Fibre and Cable Conference 2016

☐ The Editorial

The three-day World Optical Fibre and Cable Conference 2016 is around the corner. What is the schedule? What will industrial experts talk about? What is the future of optical fiber and cable innovation? Now let me show you the highlights.

## Chinese producer panel on optical fibre supply — Session 1

The world' s leading manufacturers discuss the challenges and opportunities ahead for supplying global fibre and cable markets.

- What is the update on new preform capacity?
- Current domestic vs. export focus. Potential future role in export markets
- What is the longer term strategy in preparation for the arrival of 5G networks?

Session Chairman: Suoning Wu, Chief Editor, People' s Posts and Telecommunications News

Panellists:Zuang Dan, President, YOFC, ChinaGe Jun, President, Fiberhome Telecommunication Technologies Co., Ltd., China Wei Xiao, President, Futong Group, China Jianlin Qian, Chairman, Hengtong Group, ChinaChi Xue, President, ZTT, China

## Demand insights from the major consumers — Session 2

Hear telecom operators, utilities and broadcasters outline what they forecast will be their next generation of optical fibre and cable needs.

- What are the global trends in network construction of fixed broadband and FTTx deployment? Is 4G demand stabilizing?
- Will further development of advanced technology increase demand for data-transmission and how will this affect fibre consumption?

Session Chairman: Changkun Yan, Deputy President, YOFC, China

Panellists:Qu Baozhong, Deputy General Manager of Network Construction Department, China Unicom

Zhang Chengliang, Vice President, China Telecom Research Institute, ChinaLi Han, Deputy Director, Network Research Department, China Mobile Research Institute, China

Jia Xiaotie, Professional Director, System Maintenance Technology Lab of State Grid Information & Telecommunication Branch, China

Xu Tong, Director, China Construction Bank Wuhan Data Center, China

Duan Yonggang, Vice-chairman & Secretary-general, China Quality Control Association

## Global fibre and cable supply and demand — Session 3

What fibre and cable manufacturing capacity expansions are planned and which markets outside of China show the greatest growth potential?

- What are the communications and infrastructure projects around the world that producers should prepare for?
- How will fibre and cable trade flows shift as the global supply and demand balance evolves?
- How do Chinese business models need to be adapted in order to ensure success in other markets?

Session Chairman: Jan Bongaerts, First Deputy President, YOFC, China

- Opportunities and Challenges in the Indian Optic fibre market

Ankit Agarwal, Director, Telecom Products, Sterlite Technologies Ltd, India

- CRU VIEW: Overview and outlook on global optical fibre and cable markets

Yuya Pan, Senior Consultant, CRU, UK

- Spotlight on the Russian optical fibre and cable market

Alexander Smilgevich, CEO, INCAB, Russia

- Focus on Latin America and the Caribbean basin telecom developments

Mike Singh, Chairman, Telkom Caribe Group, Guyana

## Global FTTH Development — Session 4

Session Chairman: Richard Mack, Principal Consultant, Copper/ Wire & Cable, CRU, USA Developments in the European, US and Middle East markets

- Session Chairman: Richard Mack, Principal Consultant, Copper/Wire & Cable, CRU, USA

Developments in the European, US and Middle East markets

Jan Schindler, Manager Market Intelligence, Prysmian Group, Chair Market Intelligence Committee, FTTH Council Europe and Board Member, FTTH Council MENA, Netherlands

- Growth potential in the Asia Pacific markets

Shajahan Iqbal, Vice President & Treasurer, FTTH Council Asia-Pacific and CEO, Three-OPP (M) Sdn. Bhd., Malaysia

- Lessons learnt from Japanese FTTH campaigns

Eiichi Satou, General Manager, Strategic Plant Planning Department, NTT East Corporation, Japan

## The next wave of optical fibre and cable application — Session 5

- What are the fibre needs for a green and connected future? How should the industry react?

Session Chairman: Jan Bongaerts, First Deputy CEO, YOFC, China

- A Better Connected World

Fang Wei, Chief Cable &Connector Expert of 2012 Labs, HUAWEI Technology, China

- Applications of next generation fibre in high speed transmission system

Wang Guangquan, Director of Network Technology Research Department, China Unicom Network Technology Research Institute, China

- Global trends in the telecom market

Antoni Bosch, Vice President Telecom Solutions, Prysmian Group, Italy

Smart Cities in India and other countries around the world

Ashwin Jaiswal, Head - IT Business Consulting & Practice, Reliance Communications, India

- Optical fibers for Data Centre Interconnects

Sergei Makovejs, Market and Technology Development Manager, Corning Optical Communications, UK

- Will Fibre Ever Replace Copper Cable?

Jian Wu, Technical Director, CommScope, China

- Where is the next generation of optical fibre and cable demand coming from? How should the industry react?

Richard Mack, Principal Consultant, Copper/Wire & Cable, CRU, USA

## Raw material outlook — Session 6

Is preform capacity keeping pace with demand?

- How are the market fundamentals shifting from the short to the long term?
- Where and when will bottlenecks appear and how can the industry prepare?

Session Chairman: Richard Mack, Principal Consultant, Copper/ Wire & Cable, CRU, USA

Factors that can enable preform capacity increase in the future

Hiroyasu Sasho, General Manager, Shin-Etsu, Japan

Will fiber and preform demand continue to grow?

Jan Vydra, Vice Executive President Photonics, Heraeus, Germany

Innovative coating technology for higher fiber drawing efficiency (higher speed and lower energy/material consumption)

Pratik Shah, Global Technical Marketing Director, DSM, USA

Preform & Fiber Manufacturing Technology Trends

Alain Giraud, Mananging Director, Nextrom, Austria

## New fibre types for advanced networks — Session 7

What advances in optical fibre and cable technology will disrupt the market?

- How can manufacturers enhance the quality of cable for advanced networks and other high-performance applications?
- Where should optical fibre and cable manufacturers focus R&D in order to add maximum value?

Session Chairman: Changkun Yan, Deputy President, YOFC, China

- A review of standards status and application areas for four fiber types: G.657, G.654, 200-um and WBMMF

David Mazzarese, Technical Manager, Optical Fiber Systems & Standards, OFS Optics, USA

- Developments in multimode fibre markets

Ulrich Lossen, Managing Director, j-fiber GmbH, Germany

- Optical fiber sensing technologies of overhead power lines

Dr. Wu Liwen, Director of Technical Center, SDGI, China



## Fibre and cable-making equipment R & D: — Session 8

How is the optical fibre-making production technology adapting to the next generation of end-use demands?

- How are the core economics of the optical fibre manufacturing process evolving?
- How can proper application of the latest production processes improve margins?

Session Chairman: Changkun Yan, Deputy President, YOFC, China

- Recycling opportunities in the optical fiber supply chain

Wim Geens, Global Commercial Director Germanium, Umicore, Belgium

- Optimal Fiber Test Strategies for Expanding Production Capacity

Barry Gill, Director of Sales, Photon Kinetics, UK

- Reduction of production cost by high speed ring marking on optical fibres

Frank Dubbins, Head of Industrial Sector, Domino, Germany




# 2015年亚太光纤光缆大会回眸

□ 本刊编辑部

2015年10月14-16日，CRU和长飞公司联合主办2015亚太光纤光缆大会，这是CRU首次将全球性光纤光缆会议安排在亚洲、在中国举办，也是其唯一专注于光纤光缆市场的会议。来自政府部门、电信运营商、设备商、行业组织以及研究机构的嘉宾，与全球顶尖行业专家在内的400余位代表共聚一堂，深入探讨了亚太地区，尤其是中国光纤光缆市场的发展态势。大会主席、长飞公司总裁庄丹在致辞中表示，这次会议将是光纤事业发展史上一次重要的会议，对于促进各国宽带战略的实施，推动光通信产业链的合作共赢，实现光纤光缆行业的蓬勃发展，具有极其重要的意义。

## 领导致辞

在大会开幕式上，武汉市委常委、常务副市长贾耀斌致欢迎词并宣布大会开幕。贾副市长表示，光电子信息产业是光谷代表国家参与全球竞争的主力，在这里诞生了中国第一根光纤，建成了中国最大的光纤光缆研发生产基地，光纤光缆产销规模全球第一，长飞光纤光缆股份有限公司、烽火科技集团等光纤光缆企业全球知名。贾副市长认为，CRU亚太光纤光缆大会来到武汉正当其时，大会是全球光纤光缆行业的盛会，也是促进武汉光纤光缆产业发展的盛会，是全球光纤光缆产业相关同仁欢聚的盛会，为光纤光缆业的发展谱写了浓墨重彩的篇章。

## 尖峰对话

会上，中国通信产业的权威主导媒体——人民邮电报社总编辑武锁宁主持尖峰对话环节，中国五大光纤光缆企业领军人物——长飞公司总裁庄丹、烽火公司总裁何书平、亨通公司董事长钱建林、富通集团法定董事总裁肖玮、中天科技集团总裁薛驰展开思想碰撞，共同探讨中国光纤光缆市场的发展现状和前景。庄丹表示，信息化建设、“一带一路”倡议、“宽带中国”战略、“中国制造2025“都将为行业发展注入持续动力。中国光纤光缆企业面对时代赋予的新机遇，需加快转型升级步伐，提升技术创新能力，加快”走出去“的步伐，在国际市场上扮演更为重要的角色。

## 长飞在会

长飞公司总裁庄丹在会议期间接受了媒体采访，在采访中庄总表示，随着目前运营商加快建设超宽带，100G和超100G的不断部署，在光纤技术研发领域，（超）低损耗、大有效面积光纤已经成为目前业界研发的重点。长飞公司在超低衰减大有效面积光纤方面的研发走在行业前列，尤其是在决定光纤性能的预制棒制造技术上，长飞已经掌握了VAD和OVD工艺，是全球唯一一家同时拥有三种预制棒技术的公司。





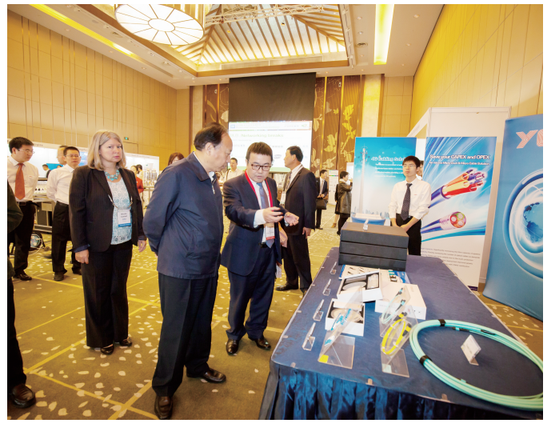
# Review of 2015 Asia-Pacific Optical Fibre and Cable Conference

□ The Editorial



From October 14 -16, 2015, CRU and YOFC co-held 2015 Asia-Pacific Optical Fibre and Cable Conference, which is the first time for CRU to arrange a global optical fibre and cable conference in Asia, in China and the only conference focusing on optical fibre and cable market. Guests from government departments, telecom operators, equipment manufacturers, industry organizations and research institutions and over 400 representatives including global leading industry experts gathered together to have a deep discussion of the development trend of optical fibre and cable market in Asia-Pacific Region, especially in China. Chairman of the conference and YOFC president Zhuang Dan expressed in her speech, this conference would be an important conference in the development history of optical fibre business and of extremely





important significance to promoting the implementation of broadband strategy in different countries, driving the cooperation and mutual benefit of optical communication industry chain and realizing the flourish of optical fibre and cable industry.

### Leader's speech

At the opening ceremony of the conference, the standing member of Wuhan Municipal Committee of CPC and executive vice mayor Jia Yaobin gave a welcoming speech and announced the conference was open. Vice mayor Jia expressed, optoelectronic information industry was the main force that Optics Valley participated in global competition on behalf of China and here the first piece of China’ s optical fibre was manufactured and the largest R&D and production base of optical fibre and cable in China was constructed, with the largest production and sales scale of optical fibre and cable in the world. Optical fibre and cable enterprises, such as YOFC and Fiberhome Technologies Group, are all globally renowned. Vice mayor Jia thought, Asia-Pacific Optical Fibre and Cable Conference held in Wuhan by CRU was just fine and it was a festival of global optical fibre and cable industry and would become a festival promoting the development of optical fibre and cable industry in Wuhan as well as a festival of union of relevant colleagues in global optical fibre and cable industry, and it would also absolutely write an essential chapter for the development of optical fibre and cable industry.

### Summit Dialogue

At the conference, authoritative leading media of China’ s communication industry –chief editor of People’ s Posts and Telecommunications Publishing House Wu Suoning presided over the summit dialogue. Leaders of five optical fibre and cable enterprises in China ---YOFC president Zhuang Dan, Fiberhome president He Shuping, Hengtong president Qian Jianlin, Futong Group’ s legal director and president Xiao Wei, Zhongtian Technology’ s president Xue Chi made the collision of ideas and jointly discussed current development and prospect of China’ s optical fibre and cable market. Zhuang Dan expressed, information construction, the “ Belt and Road Initiative” , “Broadband China” strategy and “Made in China 2025” will always infuse power for development of the industry. Facing the new opportunities granted by the era, China’ s optical fibre and cable enterprises shall accelerate transformation and upgrading, improve technical innovating ability and accelerate the pace of going out, in order to play a more important role in international market.

### YOFC at the conference

YOFC president Zhuang Dan accepted media interview during the conference and expressed in the interview, along with operators’ efforts in accelerating the UWB construction and constant deployment of 100G and super 100G, in the R&D field of optical fibre technology, optical fibre with (ultra) low loss and large effective area has become the focus of industry R&D now. YOFC walks in the forefront of the industry in the optical fibre with (ultra) low loss and large effective area, especially in the preform manufacturing technology that decides optical fibre performance, YOFC has mastered VAD and OVD process and become the only company that has three preform technologies in the world.





# FT-Dry全干式光缆的开发与应用

□ 制造中心 刘为

作为光纤光缆行业的龙头，长飞公司始终坚持以人才、机制、观念作为公司创新文化的重要元素，不断推进产品的技术创新，并积极开拓新的市场，保持核心技术的领先。FT-Dry全干式光缆系列产品正是长飞公司在持续创新进程中的又一力作，其优异的产品性能和便捷的施工体验，在光通信网络建设中获得了市场认可，成为引领行业发展潮流的代表。

## 1. FT-DRY 全干式光缆的开发背景

阻水性能是光缆的一项重要指标，也是光缆设计、生产中需要重点考虑和控制的因素。目前国内市场上的松套管结构光缆按阻水方式可分为全填充式、半干式两种，全填充式是指松套管内填充纤膏、缆芯间隙填充缆膏（如图1a）；半干式是指松套管内填充纤膏，而缆芯间隙使用阻水纱和阻水带等干式阻水物来达到阻水的要求（如图1b）。

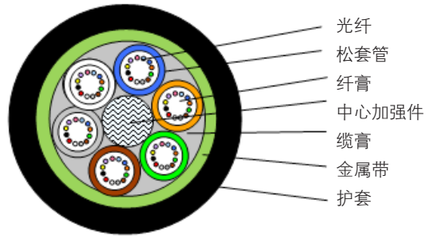



图 1a 全填充式结构

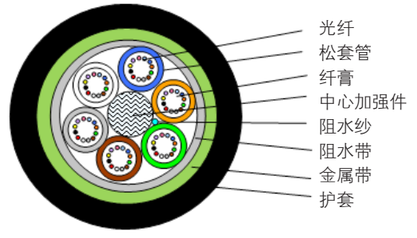



图 1b 半干式结构

在传统的松套管结构光缆中，套管内的所有空间填满了纤膏，因其具有优良的触变性和阻水性，可以对光纤起到很好的缓冲作用、防震和防水效果，所以在野外光缆中全填充式和半干式光缆得到了大范围的应用。但随着接入网建设的不断深入，光纤到户变得越来越普遍，由于传统松套管光缆都含有油膏，施工过程中需要借助清洁剂对光缆芯及光纤进行清洗，这在接头繁多的配线光缆和入户光缆的施工中显得尤为麻烦，另外还有清洁剂和清洁纸的污染，增加施工时间和施工费用等问题。

技术的发展和应用的需要，使得无油膏填充的全干式松套管光缆应运而生，这种光缆完全摒弃了传统的油膏填充阻水方式，在光缆松套管和缆芯中均采用干式阻水材料，具有环保、重量轻、免油膏擦拭、易开剥、易接续等诸多优点，可满足各类网络施工要求，并大幅提高施工接续效率。

## 2. FT-DRY 全干式光缆的开发

所谓全干式光缆，自然是不含油膏的光缆，而且通常是指室外光缆或室内外两用光缆；广义而言，除了无油膏填充的松套管结构光缆，采用阻水带阻水工艺的骨架式光缆也可归属于此类，而紧套光缆一般不在讨论范围内。早在十多年前，长飞公司就在国内独家推出了全干式的骨架式光纤带光缆，并结合市场实际先后研发出六芯带系列、FTTH系列等独具特色的产品，广泛应用于城域网和接入网，得到了用户的充分认可。

近年来，长飞公司的研发人员切合市场需求，潜心进行全干式松套管光缆的工艺研究，在前期成功推出全干式PBT松套管光缆的基础上，又引进了新型材料，开发出具有良好抗弯折性能的干式套管，并对光缆结构进行了系列优化，由此推出更为先进、柔软性更好的FT-Dry全干式光缆，成为国内首家成功研发并采用国产设备批量供货的光缆厂家。

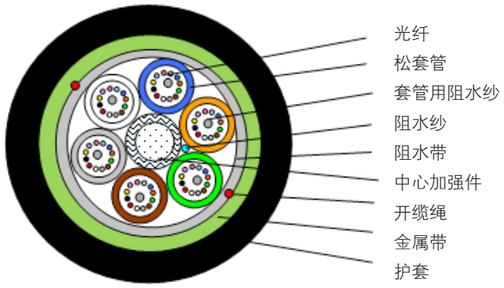



图 2.FT-DRY 全干式光缆结构图

FT-Dry全干式光缆在容纳光纤的松套管内放置特殊的遇水膨胀型阻水纱线，能以均匀而细小的线径提供极强的阻水能力。它是一种细腻的超吸水性粉末与树脂基体的混合，在和水接触时会迅速膨胀，可以吸收其自身重量50~100倍的水分，从而阻止水的进一步渗透和迁移，保证光缆的阻水性能。而如何在没有油膏填充的情况下保证套管的直径和圆整度，以及稳定的光纤余长控制就成了干式松套管生产工艺的难点，也是我们开发FT-Dry全干式光缆需要解决的主要问题。

由于松套管冷却速度快，结晶不完整，在冷却以后会有回缩现象，这在没有油膏填充时情况更为明显，因此造成套管中光纤余长控制的困难，尤其在采用后收缩较大的材料生产套管时这一问题更为突出。为此，我们在主牵引和机头之间设置了辅助牵引，这个牵引的速度略高于主牵引的速度，使套管在热状态下受到压缩，材料结晶更充分，在冷却以后不会收缩，很好地控制了套管中光纤的余长。同时采用气体填充，可以很好控制松套管的直径。

FT-Dry全干式光缆的缆芯阻水沿用了半干式光缆的成熟工艺，即在缆芯外包扎阻水带，而在加强芯上直放和绕放阻水纱，阻水带和阻水纱上的阻水粉颗粒遇水膨胀后在缆芯圆周截面上形成封闭的阻水仓，可有效保证加强芯与套管之间、套管与套管之间、缆芯与护套之间的空隙不渗水，这些都是经过长期检验、稳定可靠的阻水工艺。





## 3. FT-DRY 全干式光缆的性能及应用

FT-Dry全干式光缆通过精确的余长控制，确保当套管随着温度的变化出现伸缩时或是光缆受到拉力负荷时，光纤不会受到过大应力。依照IEC60794、Telcordia GR-20、YD/T 901-2009等行业标准以及光纤光缆的通用要求测试全干式光缆的各项性能，均达到或超过相关标准要求。下表为我们开发的FT-Dry全干式光缆GYFS(FT-DRY)-72B1.3的各项测试数据。

| 序号 | 检测项目 | 检测条件 | 检测结果 |
|---|---|---|---|
| 1 | 拉伸 | 长期拉力 600N | 应变 0.01%，附加衰减 0.005dB |
| | | 短期拉力 1500N | 应变 0.08%，附加衰减 0.025dB |
| 2 | 压扁 | 1000n，10min | 光纤附加衰减 0.01dB |
| 3 | 冲击 | 450g，1m，5 点，每点 3 次 | 光纤附加衰减 0.001dB |
| 4 | 反复弯曲 | 150n，±90°，30 次 | 光纤附加衰减 0.017dB |
| 5 | 扭转 | 150n，±180°，10 次 | 光纤附加衰减 0.013dB |
| 6 | 温度循环 | -40℃～+70℃ | 1550 波长附加衰减＜ 0.02 dB/km |

FT-Dry全干式光缆的干式阻水技术提供了更加高效且更为友好的使用体验，使用者只需要用剪刀就可以很快并且很简便的将光纤取出，如将光纤穿过缓冲套管再进行端接，由于光纤表面没有油膏而不会在分叉过程中相互贴合在一起，接续操作也得到了简化，安装准备、光纤光缆的准备工作及清理工作所需的时间都会得到显著缩短。

在楼道竖井安装、架空安装以及有阻燃要求的场合，无油膏填充也有着得天独厚的优势，如我们开发的全干式ADSS光缆与传统油膏填充的ADSS光缆相比，不仅施工接续方便、清洁环保，光缆的重量和负载也得到了降低，能更好地保证其性能稳定和安全使用。




图 3.FT-Dry 全干式光缆中的干式套管的弯折情况

除此之外，FT–Dry全干式光缆相比一般的光缆更为柔软，尤其是套管有着更好的抗弯折性能，其最小弯曲半径小于10mm（如图3），大约是普通PBT套管的一半左右，可直接在接头盒中盘绕而不会有PBT套管容易出现的弯折情况，能很好地满足客户在接续操作中对这方面的较高要求。




机房 1



机房 2

全干式光缆在国外尤其是欧美国家已被广泛用于以前油膏填充型光缆所常用的各种室内外场合。在国内市场，人们通常还习惯于采用传统的油膏填充光缆，全干式光缆的应用还需要更多的宣传推广。长飞公司在这方面已经做出了一些努力，我们生产的FT–Dry全干式光缆除了出口国外市场，在国内也与运营商合作进行了若干试点（以上图片为机房场景）。曾经鲜为人知的骨架式光纤带光缆如今已在国内主流市场占据一席之地，我们相信应用前景更为广阔的全干式松套管光缆也会有更大的发展空间。





# Development and Application of FT–Dry Totally Dry Optical Cable

□ Liu Wei from Manufacture Center

as the leader of the optical fiber and cable industry, YOFC has always taken talent, mechanism and concept as important elements of the corporate culture of innovation. It has been promoting technical innovation and actively exploring new markets, to keep its leadership in core technology advancement. FT-Dry Totally Dry Optical Cables are another masterpiece presented by the Company in its incessant innovation process. The products, featureing excellent properties and easy usage have been recognized by the market of optical communication network and have become an indicator for the industrial development.

## 1.Development Background

Water-resistance performance is a key index of optical cable, and is also an important factor for major consideration and control during optical cable design and production. Loose tube structured optical cables on today’ s domestic market can be divided into fully-filled type and semi-dry type by water resisting forms, and the former means that the loose tube is filled with fiber gel and the space in the cable core is filled with cable gel (as shown in Fig. 1a) ,while the latter means that the loose tube is filled with fiber gel, with the space in the cable core provided with water blocking yarn, water blocking tape and other dry water blocking material (as shown in Fig. 1b) for achieving water resistance.

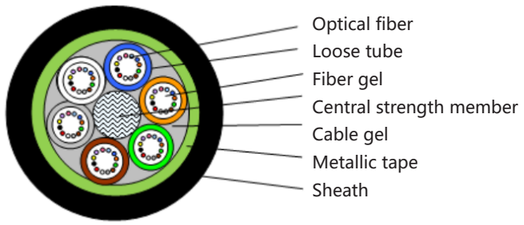



Fig. 1a “Fully-filled Structure”

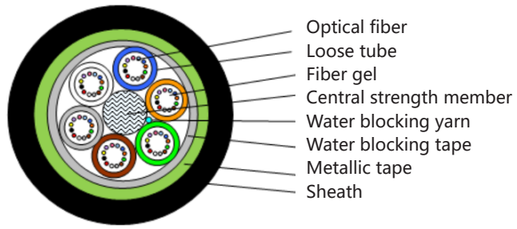



Fig. 1b “Semi-dry Structure”

In the conventional loose tube structured optical cables, all the space in it is filled with fiber gel. Due to its excellent thixotropy and water resistance, perfect buffer, shockproof and waterproof functions of the optical cables can be achieved. Therefore the gel is extensively applied in fully-filled and semi-dry optical cables for field use. However, with more access network projects and industrial growth, the access optical fiber has become more and more popular. Since conventional loose tube optical cables contain gel, it is necessary to wash the optical cable cores and fibers with detergents, bringing great troubles in the construction of the distribution and access optical cables with many joints. In addition, there are other problems such as pollutions caused by detergents and clean paper, and increase of construction period and costs.

With the technical progress of technolofies and requirements of applications, the gel-free totally dry loose tube optical cable has emerged, abandoning the conventional gel-filled water-resisting method and adopting dry-type water-resisting materials in optical loose tubes and cable cores. Furthermore, it is also environment friendly, light, gel-free application, easy in stripping, and convenient for connection and re-laying and can meet demands of all network construction and dramatically improves the splicing efficiency.

## 2.Development

By its name, the totally dry optical cable contains no gel and is mainly for outdoor use or both indoor and outdoor use. In a broad sense, besides gel-free totally dry loose tube optical cable, slotted core fiber ribbon cable using water-resisting technology can also be called a totally dry optical cable, while the tight-jacketed cable is usually not in the scope of the discussion. As early as some 10 years ago, the Company first launched the totally dry slotted core fiber ribbon cable in China. And in consideration of the market conditions, it has successively developed 6-core tape series, FTTH series and other unique products later, which have found wide applications in MAN (metropolitan area networks) and access networks and have fully been recognized by users.

In recent years, the Company researchers and developers have, according to the market demands, devoted themselves to the development of totally dry loose tube optical cable. And after the successful launch of totally dry PBT loose tube optical cables in the earlier stages, they have introduced new materials and developed the dry tube with perfect anti-bending performance and optimized optical cable structure, and on such basis, they launched more sophisticated and more flexible FT-Dry Totally Dry Optical Cable, making the Company the first in China successfully developed and produced optical cables in batches with domestic equipment.

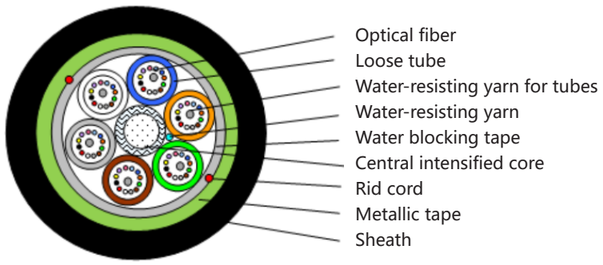



Fig. 2 Structural chart of FT-DRY Totally-dry Optical Cable

FT-Dry Totally dry Optical Cable is provided with water-resisting yarn that will swell in water in the optical fiber loose tube, and the yarn has a very small and even size and mesh that can resist water. The yarn is a combination of ultra-fine super absorbent powder and resin base that will swell once getting in touch with water. It can absorb an amount of moisture 50-100 times of its dead weight and can easily resist further water percolation and migration, thus guaranteeing the water-resisting performance of the optical cable. The difficulties facing the dry-type tube production are how to guarantee the tube diameter and roundness without filling the gel and how to achieve stable control of exceeded length of optical cables, and they were also challenges for our Company during our development of the FT-Dry Totally Dry Optical Cable.

The difficulty in achieving stable control of exceeded length of optical cables is the results of the quick cooling speed, incomplete crystallization and contraction after cooling-down (which will become even more obvious and severe in the case of no application of gel) of loose tubes, especially when materials with great contraction after cooling-down are adopted for tube production. For this, we have provided an auxiliary traction between the main traction and the headpiece, with the speed of auxiliary traction lightly higher than the main traction, thus making the tube contracted in thermal state. By doing this, the materials crystallization has become more sufficient without contraction after cooling-down, and finally the exceeded length of optical cables can be bettered controlled. Meanwhile, gas filling has also been adopted to efficiently control the loose tube diameter.

The cable core water-resistance of FT-Dry Totally-dry Optical Cable follows the mature technique used for semi-dry optical cable, i.e. a water-resisting tape is wrapped outside the cable core and a water-resisting yarn is directly placed or winded on the intensified core, with the water-resisting particles on the water-resisting tape and water-resisting yarn swelling after coming in contact with water and forming an enclosed water-resisting sump on the circumference cross area, of the cable core thus effectively guarding against occurrence of seepage in the interspace between intensified core and tube, between tubes and between cable core and tube. These are the water-resisting techniques proved to be reliable after long-term testing.





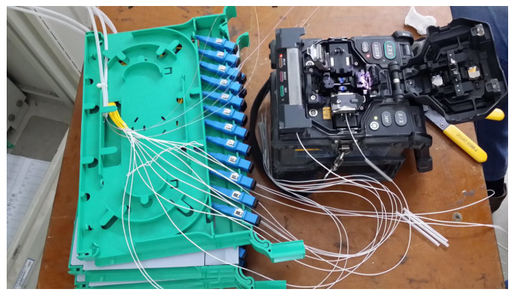
## 3.Properties and Applications

With accurate exceeded length control, FT-Dry Totally Dry Optical Cable ensures that optical fiber will be subject to no excessive stress when tube contracts with temperature variations or optical cables under tensile loads. All properties of totally dry optical cable shall be tested in accordance with IEC60794, Telcordia GR-20, YD/T 901-2009 and related industrial standards and general requirements for optical fibers and cables, and shall meet or even exceed those standard requirements. The Table below shows various test data of the FT-Dry Totally-dry Optical Cable GYFS(FT-DRY)-72B1.3 developed by us.

| S/N | Test Item | Test Condition | Test Result |
|---|---|---|---|
| 1 | Stretching | Long-term tensile force 600N | Strain 0.01%, excess attenuation 0.005dB |
| | | Short-term tensile force 1500N | Strain0.08%, excess attenuation 0.025dB |
| 2 | Flattening | 1000N,10min | Excess attenuation of optical fiber 0.01 dB |
| 3 | Impact | 450g,1m,5 Point, each point time | Excess attenuation of optical fiber 0.01 dB |
| 4 | Alternating bending | 150n , ±90° ,30Time | Excess attenuation of optical fiber 0.017 dB |
| 5 | Twisting | 150n , ±180° , 10Time | Excess attenuation of optical fiber 0.013 dB |
| 6 | Temperature cycling | -40℃ ~+70℃ | 1550 Excess attenuation of wavelength ＜0.02 dB/km |

Dry Totally-dry Optical Cable

Dry water-resisting technique has offered more efficient and user-friendly use experience. The users will be required to only adopt a shear to simply and quickly take the optical fiber out, and for splicing, to pass the optical fiber through the buffer tube for terminating (the optical cable surfaces have no gel and therefore will not bond together in branching). The totally dry loose tube optical cable is characterized by a simple splicing process and much shorter time for installation preparation, optical fiber and optical cable preparation works and cleaning.



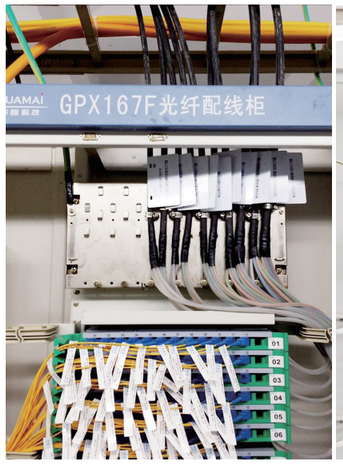
Splicing of FT-Dry Totally Dry Optical Cable in a fusion and distribution box

For projects with corridor shaft installation or overhead installation and other works with flame retardant requirements, gel-filled free cables also enjoy many advantages. For example, our totally dry ADSS optical cable is more advantageous than conventional gel-filled ADSS optical cable. Besides easiness in splicing, totally dry optical cables are also clean and environmentally-friendly, can also reduce the cable weight and load, thus better meeting the requirements on stable performance and use safety.




Fig. 3 Bending conditions of dry-type tube in FT-Dry Totally-dry Optical Cable

In addition, the FT-Dry Totally Dry Optical Cable is softer than other optical cables, and especially its tube has better bending performance, with the min. bending radius of less than 10mm (Fig. 3), just about half of other ordinary PBT tubes, and it can be directly winded in the junction boxes without breaking off the PBT tubes, meeting customers' high demands on bending property in splicing operation..




Machine room1



Machine room2

In foreign countries, especially in Europe and America, totally-dry optical cable is widely used for various indoor and outdoor occasions where the gel-filled optical cables were frequently used. On the domestic market, consumers are used to adopting conventional gel-filled optical cables, and more promotion is required to achieve wider application of totally dry optical cables. YOFC has made its efforts in this regard, and our FT-Dry Totally Dry Optical Cable is not only sold to foreign markets but, through cooperation with operators also put on pilots (the Figure above shows the scenes of its applications in overhead and piping construction works). The slotted core fiber ribbon cable which was rarely known in the past has seized its own market share on domestic mainstream market. We believe the totally dry loose tube optical cable with wider application prospect is bound to enjoy more space for development.





# 静若止水，动如脱兔

## ——长飞公司举行密室逃脱和业余射箭比赛



□ 制造中心 许将峰

长飞公司第三届密室逃脱比赛于9月24日在武汉优果密室成功举办，本届比赛由公司工会、团委和战略中心共同举办，来自公司各个部门的探秘精英们在比赛中沉着冷静，缜密思考，各队的队员协同合作，经过几轮的较量，最终光纤部代表队夺得第一名，研发中心代表队荣获第二名，光缆部代表队名列第三。

与密室逃脱比赛同步进行的公司业余射箭比赛更是掀起了高潮，选手们各个摩拳擦掌，跃跃欲试，在教练刚刚结束讲解，有三位选手就迫不及待的冲上去拉弓搭箭，嗖嗖嗖……几箭下来，靶子上空无一箭。在教练的悉心指导下，大家认真学习射箭的要领和手法，又重新拉弓上阵，大家的箭术迅速提高，现场也响起了阵阵掌声，看来大家离百步穿杨也就一步之遥了。经过教练的评选，光纤部管相、质量保证部叶铭、投资管理部梅沁、特种产品事业部郑林和张承炎荣获前五名。

本届密室逃脱比赛和同步进行的业余射箭比赛，充分展示了长飞人的智慧、团结、拼搏、共进、友爱的精神风貌。从形式上来看，将密室的静与思，射箭的稳与准结合到一起，为今后员工活动的开展拓宽了新的思路，期待我们的活动能够更好的满足广大员工的需求。

# As Quiet As Stagnant Water, As Nimble As Escaping Hare

## —Room Break Competition and Amateur Archery Competition Held by YOFC

☐ Xu Jiangfeng from Manufacturing Center

The third session of YOFC Room Break Competition was held on September 24 at Wuhan YOGO Secret Room. The competition was jointly held by the labor Union, the Youth League Committee and the Strategic Center of the company. The mystery explorers coming from different departments of the company worked together to solve problems, while remaining calm and thoughtful during the competition. After several rounds, the Optical Department Team won the first prize. The R&D Center Team and the Optical Cable Department Team won the second prize and third prize respectively.

While the room break competition was underway, the Amateur Archery Competition held by the company was in full swing. Contestants could not wait for the match. No sooner had the coach explained the rules than three contestants rushed to draw the bow. However, after several shoots, there was no arrow left on the target. Under the guidance of the coach, everyone started to learn the techniques of archery very carefully. They draw the bow once again. Fortunately, it seemed everyone's techniques improved rapidly. They won waves of warm applauses from the audience. It looked that they were not far away from becoming a marksman. Judged by the coach, Guan Xiang from the Optical Fibre Department, Ye Ming from the Quality Assurance Department, Mei Qin from the Investment Management Department, Zheng Lin and Zhang Chengyan from the Special Products Business Department won the top five places.

The room break competition and the amateur archery competition, which were being held concurrently, exhibited YOFC people's wisdom, team spirit, hard work, cooperation and fraternity. From the perspective of the form of the activities, the events combined quiet and thinking required for the break room, with stability and accuracy required for the archery. This is a new idea for the employee activities to be carried out in the future. We expect our activities could meet the demand of employees much better.










# 激发潜能　熔炼团队

## ——长飞沈阳公司棋盘山拓展特训圆满结业

☐ 长飞沈阳公司　赵磊

拓展训练是一种提高团队活力、推动组织成长的户外体验训练，有助于锤炼团队精神、增强员工的归属感。9月初，长飞沈阳公司针对目前公司新员工较多的特点组织了一次棋盘山拓展训练，这是一次挑战自我、熔炼团队的培训，参训人员用他们的精诚合作和出色表现，充分体现出了长飞人的精神面貌。

在拓展教练的指导下，参加拓展的队员很快就分成了四个队伍，分别评选出了队长、队伍秘书和旗手，并确定了队名、队徽、队歌和口号。每个队伍的队员都是来自不同工序和部门，但是大家迅速融入到了新团队，用他们的呐喊声和奋勇向前的精神迎接着未知的挑战。

团队间的竞争从队列展示开始，每个团队在队长的带领下有序地进行团队展示，并接受教练的评分，虽然只是简单的展示，但现场的“火药味”已是很浓！随后由两名教练分别带着两个队伍进行了团队建设的基本项目，作为拓展活动的核心内容，团队协作项目让队员们兴奋不已。在“盲人方阵”活动中，所有队员戴上眼罩，需在40分钟内把培训师准备的绳子围成一个面积最大的正方形，所有人需相对均匀地分布在这个正方形的四边。这个项目是为了培养我们的团队沟通意识和决策能力，每个队员都绞尽脑汁地为自己的团队出谋划策，发挥出自己的力量，在大家的不断努力下，各队都成功地完成了此项挑战。

愉快的午餐之后大家稍作休息，又开始了新的团队挑战项目——“鼓动人心”。在这项活动中，各组队员用一只拴着许多绳子的鼓去接弹在空中的排球，每队学员要在规定时间内尽可能多地完成任务。这是一个团队协作要求非常高的项目，因为靠一个两个人的努力是远远不够的，需要大家齐心协力，相互协调。最后大家都超过了目标数——50个，最厉害的团队竟然做到了200多个，让我们不得不佩服团队了力量了。

在一整天的拓展活动中，教练还带领队员们完成了“七巧板”“空中断桥”、“蛟龙出海”、“翻越毕业墙”等活动，在活动过程中大家相互协作、突破障碍，用他们的勇气和智慧出色地完成了各项挑战任务。在拓展活动的毕业典礼之后，公司为我们准备了丰盛的美食、户外KTV等，大家一起烧烤、欢唱，曾经不熟悉的同事一天下来已像亲兄弟亲姐妹一样，感受着一家人的温暖。

一天的时光转眼即逝，但却是每个人都难忘的一天，通过拓展训练我们拉进了彼此的心，我们懂得了什么是团结、什么是友爱、什么是感恩、什么是拼搏、什么是团队。我们在一起体验、一起感悟、共同成长，为了实现每个人的目标而勇往直前也留下了美好的回忆。

# Inspiring Potential and Forging Teams

## —Outward Training at Qipan Mountain Arranged by YOFC Shenyang Company Successfully Completed

☐ Zhao Lei from YOFC ( Shenyang )

Outward training is a kind of outdoor experiential training for the purpose of improving team dynamics, and facilitating the growth of organizations. It helps to forge team spirit and enhance employees' sense of belonging. In the early of September, YOFC Shenyang Company organized an outward training at Qipan Mountain, as the company had recruited many new employees recently. This was a training that offers challenge to individuals and unites teams. The training participants fully showed the spirit of YOFC people, through sincere cooperation and excellent performance.

Under the guidance of the training coach, the training participants were soon divided into four teams. Then the team leader, secretary and flag–bearer of every team were elected, and the name, logo, song and slogan of every team were confirmed. Team members of every team came from different positions and departments. However, they soon merged themselves into the new team, shouting and forging ahead in the face of unknown challenges.

The competition started with queue display. Under the leadership of a team leader, every team displayed itself in an orderly manner and was judged by the coach. Though it was a simple display, the competition was intense. Then led by two coaches, two teams carried out the basic programs of team construction. As the core content of the outward activity, the team cooperation program made team members thrilled. In the "Blind alignment" activity, all team members were blindfolded. They needed to make the biggest square with a rope prepared by the coach within forty minutes. Everyone should evenly stand at the four sides of the square. This program aimed to cultivate our ability in team communication and decision making. Every team member was racking his brain to find a solution for the team, and making his contribution. Under the relentless effort of everyone, all teams successfully finished the challenge.

After a pleasant lunch, everyone had a short rest. They started the new team challenge program called "inspiring drum". In this activity, team members of every team were using a drum with many attached ropes to catch volleyballs coming from the air. They should catch as many volleyballs as possible within the given time. This was a project in which cooperation is highly required. Because depending on one or two people's efforts was far from enough. Everyone should work together closely to finish the task. In the end, every team exceeded the target of 50 volleyballs. The highest mark was even more than 200, which made us respect the power of teamwork.

In the outward activity during the whole day, led by the coach, team members finished tasks such as "Seven–piece puzzle", "Broken bridge in the air", "Dragon out of the sea" and "Climbing over graduation Wall". During the activity, everyone worked together, and broke through the barriers. With courage and wisdom, they excellently completed all tasks. After the graduation ceremony of the outward activity, the company offered us good meals and outdoor KTV amusement. All the people were barbecuing, and singing songs. After a whole day, colleagues were no longer strangers to each other and treated each other like brothers and sisters. They were like a big warm family.

A day soon passed, but it was an unforgettable day for everyone. Through outward training, we became closer to each other. We understood the meaning of solidarity, friendship, gratefulness, hardworking and teamwork. We were experiencing and thinking together, and growing together. We forged ahead to achieve our targets. During the process, many happy memories were also left.





# 小小的光辉

☐ 长飞四川公司 许正俊

再小的光，也能透过黑暗，带来希望。抓住哪怕是一点点的光，因为梦想往往就是这样的。

对于刚毕业来到长飞四川公司的我，眼前的一切都似乎显得有些陌生。独自来到完全不熟悉的城市，开始一段属于自己的旅程，我充满了期待，也带着不安。“究竟如何能在公司工作好呢？”困惑中的我望着天花板发呆，陪伴在身边的，只有那把大学开始一直带着的木吉他。打开背包，拨动几下琴弦，真是很久都没有练习了啊！弹起了押尾光太郎的一首《小小的光辉》，感叹之余，我开始了莫名的遐想。

或许每个人在不同的人生阶段，都会为那些所谓理想的东西烦恼吧。一个月前，我还是个象牙塔里的大学生，和大多数人一样幻想着校园外的社会，梦想着奔向大城市，在鳞次栉比的都会森林里飞翔，找寻到那个属于自己的安身的窝。在学校，自己总是以为已经学到了最新的知识和技能，但进入社会才发现，其实现实与理想之间有着一段遥远的距离。曾经骄傲的“理想”被狠狠地拉回到了现实的面前:繁忙的交通，汽车的噪声和匆匆忙忙的人群发出的叫喊声，冷漠的面庞上看不出几分快乐的色彩。人们如同契诃夫笔下的那个装在套子里的人，用都市所特有的伪装，把自己化入这个都市的洪流中。

来到长飞四川公司，认识了很多人事，经历了一些事，让我开始慢慢对这个头脑中的困惑有了答案。在我刚开始接触书面资料时总是觉得简单，然而真正开始接触光纤光缆的生产制造时，才发现困难重重，很多的问题只有在实际的工作中才能发现。比如在着色工序，机组成员都在重复看似简单的上盘、绕线、穿线……在一旁观察的时候，我看着穿线挺容易，就自告奋勇的试了试，结果旁边的师兄已经弄好两盘而我还拿油墨装置没办法。这时候一位师傅走过来，接过我的工作，很快就绕好了。他转过来对我说：“多练才能熟练，而且多关注细节，都是多练嘛~”这让我想起了另一件事。

那是在深圳的日子里，一次和大哥一起在一家广式茶餐厅吃饭，那时已是傍晚的时分，店里宾客满满，大家都在享用属于自己的晚餐。我突然发现一个和我差不多的小工来来回回的端盘、打扫着餐桌，忙得不可开交，但他的脸上却丝毫看不出苦恼和焦虑，偶尔还和同伴相互开着玩笑。我从表哥那里得知，他们每天工作很到晚，几乎全天都不能坐下休息，然而工资却很低。结账的时候，我和他聊了起来。当我问他这样的工作你不累吗，他的回答让我感慨很多：“累啊，怎么不累？哈哈，不过总得把工作做好啊，做好了才就对的起这口饭。才以后有机会攒钱回去自己干！”他是北方农村来的，梦想自己可以在广州挣了钱回去也开个饭店……他似乎给了我答案。

要想实现梦想，就不能只是幻想，不能只顾踌躇犹豫前路



的曲折，而需要真真切切、脚踏实地的去努力。想想来到公司的这些天亦是如此，最开始我对各个工作流程一窍不通，通过经理和师傅们的悉心指导，以及自己不断地实践和总结，才慢慢开始熟悉业务并感觉越来越有动力了。而熟练的技艺必须要磨练，留给我要走的路还很长。经理告诫我“师傅领进门，修行在个人”的道理，让我更加坚信只有不断努力积累才有进步。

来到公司短短的一个月里，看到公司里无论是领导还是员工，大家每天都在全力的做好自己的任务；无论是开始的着色，还是最后的成缆，每个岗位的每个人都很仔细的完成一件又一件看似简单实则精妙的操作。这最终展现在我们面前的每一盘光纤和缆线，其实都长飞梦想中小小的一点。长飞公司，就如同一个团结起来的大家庭，每一个家庭成员都在朝一个梦想去奋斗，大家用辛勤的双手完成每一件产品，如同一点点小小的光辉，慢慢汇聚成了“燎原之火”，这团火焰激励着每一个人不断成长，共同奋进，照亮大家心里的希望和每一个属于自己的梦想。

我想，长飞集团从点点星火发展到现在的规模，与每一位长飞人一点一滴的付出必然是无法分割的，正是这一点点慢慢的积累，最终使集团从小小的光辉变成了照耀光缆行业的光芒，并且它依然在不断凝聚着新的能量，而我也是其中的一点。

# Little Light

□ Xu Zheng' an from YOFC ( Sichuan )

No matter how dim the light is, it still can go through the darkness and bring hope to people. Grasp the little bit of light, you will have your dream come true.

As a college graduate that just entered into YOFC Sichuan Company, I felt alien to everything I saw. I came to a city that I was totally unfamiliar with, and started a journey of my own. I was looking forward to the life ahead, but felt uncertain at the same time. "How can I do a good job in the company?" I asked myself with confusion, staring at the ceiling. Only an acoustic guitar that I have brought with me since the college time is still with me. I opened the backpack and thrummed the strings of the guitar. I suddenly realized I had not practiced it for a long time. I played a song of Kotaro Oshio called "Little Light". Then I lost in brooding.

Perhaps people will always feel vexed by the so called dreams in different stages of their life. Only a month ago, I was an innocent college student. Like most people, I dreamed to go out of the campus and go into a big city, soaring above the row upon row of buildings and finding a place to shelter. In the school, I thought I had learned the latest knowledge and techniques. However, after entering into the society, I found there is a big gap between reality and ideals. The "ideal" that once I was so proud of was mercilessly subdued by the reality. Stern–faced people with no sign of happiness walk among the heavy traffic, beset by noises produced by the vehicles and exclamations from the rushing throng. People disguise and merge themselves into the people flow of the city, just like the man in the case, portrayed by Anton Chekhov.

After entering into YOFC Sichuan Company, I knew a lot of people and experienced a lot of things. Little by little, I found the answer to my confusions. When I was reading written materials, I always thought they were quite simple. However, after I started to learn the production of optical fibre and cable, I faced a great deal of difficulty. Many problems only can be found in the real work. Taking the painting process as an example, employees are repeatedly wheeling, coiling and threading, which seem quite simple. When I stood by observing them, it seemed to me that threading was very simple, so I volunteered for a try. In the end, when the master worker beside me had finished two plates, I still had no idea how to handle the printing ink device. At this time, a master worker came to me and took place of me. He soon finished the plate. He turned around and said to me, "Practice makes perfect. You should pay attention to details and practice more." This reminded me of one thing.

One time when I was in Shenzhen, I went to a Cantonese style tea restaurant with my elder brother. It was at sunset, the restaurant was full of people enjoying their dinner. I suddenly found a young assistant at my age who was busy carrying dishes and cleaning tables. However, his face showed no sign of misery and anxiety. He even made jokes with colleagues from time to time. I learned from my cousin that they work deep into the night every day. They can hardly seat down and have a rest during the whole day, with very low salary. When I paid the bill, I chatted with him. I asked him if he felt tired in the work. He answered, "Of course I felt tired, but I have to do my job well, because the boss gives me pay. When I have enough money, I will go back home and start a business of my own." Coming from a village of North China, he dreamed to go back home and open a restaurant after earning enough money in Guangzhou. It seemed he gave me the answer to my confusions.

If you want to realize your dream, you should not just dream about it, and worry about the difficulties in the road ahead. You should take solid step and work really hard. In those days that I just entered into the company, I had no clue to every work flow. Under the careful guidance of the manager and master workers, based on practice and summary, I gradually became familiar with the work I was doing and I felt more energetic than before. Skills must be practiced every day. I know I have a long way to go. The manager instructed me that "A man can lead a horse to the water but he cannot make him drink", which made me firmly believe that one cannot make progress without hard work.

I have come to the company for only one month. Everyone in the company, whether he is a leader or an employee, is working very hard at his job. Whether it is in the process of painting or cabling, everyone in his position works carefully to finish every seemingly simple but sophisticated operation. Every plate of fibre and cable finally presented in front of us is a little dream of YOFC. YOFC is just like a united big family. Every family member is fighting toward a dream. Every product that comes out from the hands of everyone is like a little light. They gradually turn into heath fire, inspiring everyone to grow and advance, and giving everyone a hope and a dream.

I think, YOFC Group could not become such a big company without the little contribution made by every YOFC people. Owing to the little contribution made by everyone, the Group eventually grew into a shining star in the optics cable industry from a small and humble company. The star is shining more and more brightly. I am proud of to be a part of it.

