AlphaO

Solutions for the Easy and Safe Wire Connections

Aug 2020

CEO: Isaac KC Lee

www.alphao.kr

History

- **2010** First-generation technology (IDMC) development, Establishment of Jowtech
 - Winning a project to support the commercialization of ideas
- **2011** Winning the Grand Prize in the Startup Competition
- **2014** Best Small Business Award of the Year
- **2016** Development of second generation technology (NSEC)
- **2017** Establishment of AlphaO Co., Ltd.
- 2018 Establishment of China's Wuxi Yaobao Branch Corporation
 - Establishment of a Research Institute for Corporate Affiliation
 - Registration of venture companies
 - Headquarter relocation (Hanam City Venture Center)
 - CEO Isaac KC Lee took office
- **2019** More than 30 patents (Korea, China, Japan, U.S, Germany)
 - Development of High voltage Connection technology
 - Launch products on U.S Amazon

Founder Mission

"I've been working on electricity all my life. Since the field of electricity is always dangerous and requires skill, anyone who treats it is at risk or requires a professional handling. We developed IDMC technology, which is the first generation, but it became a high-cost product. This led to the development of NSEC technology, the second-generation technology, that allows people to access wires in an easy and convenient way, without removing their coats so that they can handle electricity in a safe and convenient way. We will continue to develop technologies with a consistent mind, from Alpha to Omega, just like the company name."

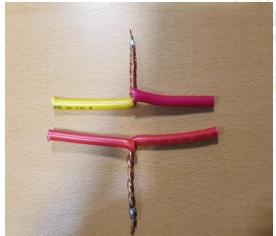
John YH Lee, AlphaO CEO

PROBLEM

When we're connecting electrical wires, we've taken them off, we've twisted them, we've taped them.

This is a risk of electric shock and takes a long time.







Solution

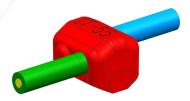
Problems of the current work	Feature	Advantages of the Product
The worker takes the risk	Safety	Prevention of electric shock
Only experts can work	Convenience	Non-expert available
Time-consuming	Rapidness	90% Time Savings
Tape & glue loses its adhesion	Persistence	Permanent Persistence

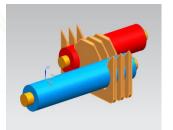






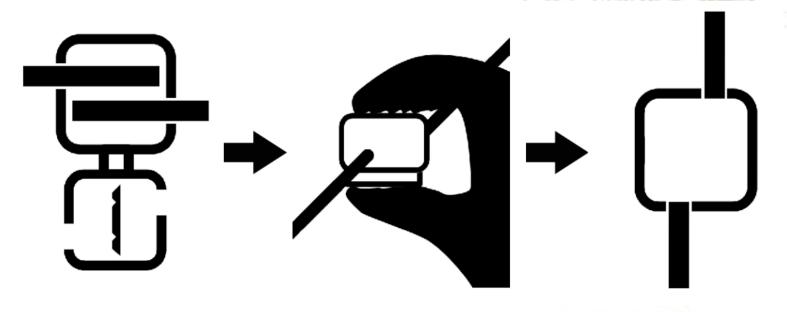






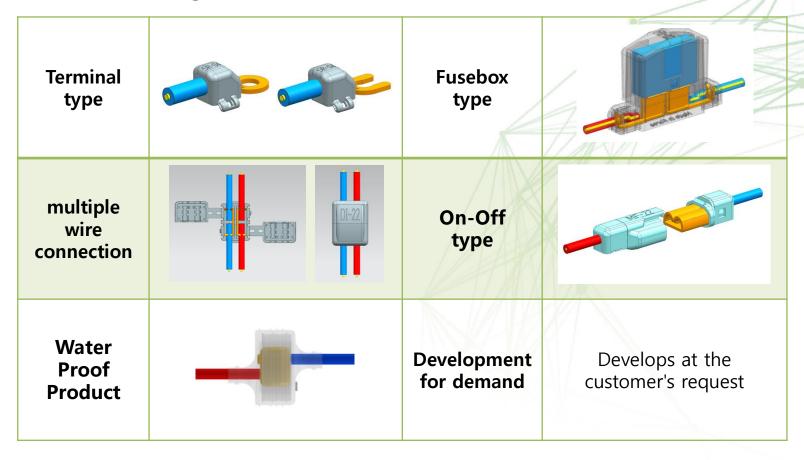
HOW TO USE

Put the wires in the product, close them, and they're connected



PRODUCT Upcoming

NSEC Technology Product



Product Line up

1 Control Line Up (For DC)

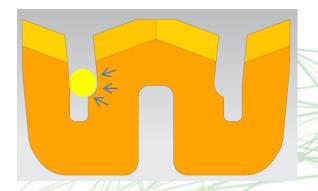
Model		I-11	I-22	T-11	T-22	T-21	T-31	T-32
			Negative Control					
Wire Size	Sqmm	0.2~0.4	0.5~0.75	0.2~0.4	0.5~0.75	0.5~0.75 /0.2~0.4	1.0~1.5 /0.2~0.4	1.0~1.5 /0.5~0.7 5
	AWG	24~22	21~18	24~22	21~18	21~18 /24~22	17~15 /24~22	17~15 /21~18
Со	Color		nite	Grey				
Max. Current (Amp)		6	9	6	9	6	6	9
Weig	ht (g)	0.56	0.88	0.53	0.86	0.67	1.53	1.73
Height	t (mm)	6.2	8.0	6.2	8.0	7.2	9.7	9.7
Width (mm)		8.6	10.6	8.6	10.6	9.8	13.4	14.9
Depth (mm)		9.5	10.6	9.5	10.6	10.6	13.0	13.2

2 Power Line Up (For AC, DC)

	Model		IT-43	IT-44	IT-54	IT-55		
Мо			V	1	X			
Wire	Sqmm	1.0~1.5	2.0~2.5 /1.0~1.5	2.0~2.5	3.5~4.0 /2.0~2.5	3.5~4.0		
Size	AWG	17~15	14~13 /17~15	14~13	12~11 /14~13	12~11		
Со	Color		Yellow		Orange			
	Max. Current (Amp)		17	24	24	32		
Weig	Weight (g)		1.48	1.71	1.89	2.33		
Heigh	Height (mm)		10.1	10.3	11.1	11.3		
Width	Width (mm)		13.6	14.8	14.9	16.0		
Depth	Depth (mm)		Depth (mm)		11.7	12,2	12.3	13.9

Core Technology

NSEC TECHNOLOGY (Non-Stripping Extended Connection)

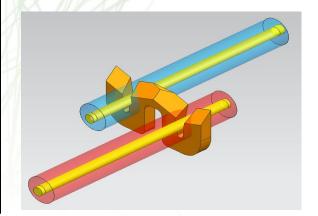


Our Core Technology

NSEC Technology

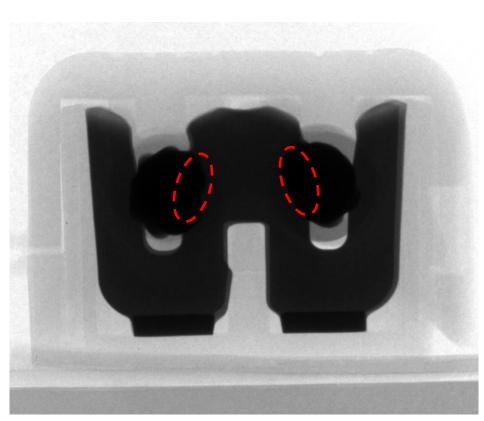
Terminal holds and connect wire from the inside of sheath

Cost effective and Time Saving





X-ray





COMPETITION

Non-Stripping Wire Connect Tech (IDC Technology)

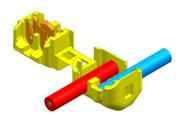


Stripping Wire Connect Tech



Non-Stripping Wire Connect Tech (NSEC Technology)









COMPETITION

IDC vs NSEC

	Others	AlphaO
Technology	IDC	NSEC
Product	Scochlok etc.	AOMY
Material	Tin, Zinc	Bronze
Contact Area	Small	Large
Conductibity	Low	Hight
Resistence	Hight	Low
Price	Expesive	Cheap
Coverage	Low Voltage	Low to High Voltage

Market Trend (I)

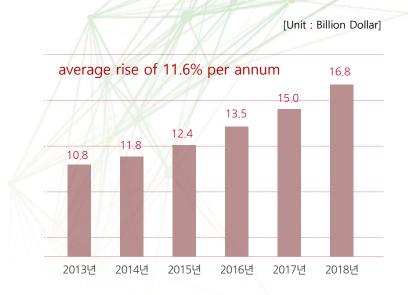
- Connector Market Size

Continuing to grow in the market as a drop in international oil prices continues to reduce the cost of purchasing raw materials, increasing the number of high-quality, low-priced goods

Global Connector Market Size

[Unit : Billion Dollar] 67.6 average rise of 8.4% per annum 61.7 57.2 48.9 2013년 2014년 2015년 2016년 2017년 2018년

Auto Connector Market Size



Source: 아이투자, Bishop & associates

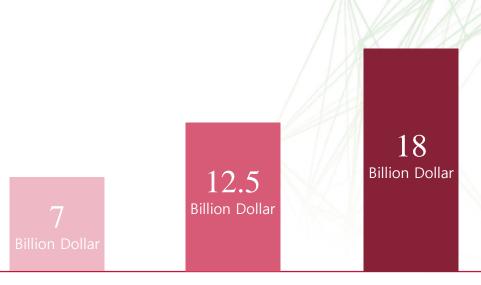


Market Trend (II)

- DIY Home Furnishing Market Size

DIY market is expected to continue to grow as related industries expand their markets from B2B to B2C and provide an environment where props and equipment are readily available

Trends in the Size of Home Furnishing Market in Korea



2008 2015 2023 Source : Statistics Korea



Global Distribution Channel

국가 거래처



- China: Wuxiyaobao (self-owned) stock holding, preparing Taobao and Alibaba.
 - Sales: Shenzhen (Alpao), Shanghai (HUIJUN), Yiwu (TENKYO)



- Japan : TCL(Camping Car, Navigations, Repairs etc.) Stockholdings
 - Sales: TCL branch offices in Nagoya, Tokyo and Osaka



- U.S.: AMAZON B2B, B2C Platform in Sale
 - * Increased end-user purchases (product listing for AC)



- Germany(Europe): Delphi Subsidiary Supply through Hellamantyton Distribution
 - Its own distribution network (branch offices in more than 20 countries)



- India: SAAMAG (Connector distributor such as JST, TE, Molex and Yajaki)
 - More than 40 of its branches in India and preparing for contracts



- Vietnam: Discussing Enstec Distribution Agency (Hanoi) Contracts
 - Preparing to sell as a distributor to Korean, Indian, Vietnamese markets

Business Track Record (I)

다양한 산업군 내 24개 이상의 업체와 거래 경험 보유

산업군	거래처	사업 내용
	ILSHIN Vitron	No.1 Distributor in Lights, Cable, various kinds of electrical subsidiary material
	::: chipsen	Bluetooth, Zigby, Serial Devices, Connector Manufacturing and Third-Party
Electronic	→ MiSUMi	Manufacturing and third-party brands in the field of mechanical parts
Electric Industry	HUIJUN	Plugs and sockets, wires, cable and wire connectors, switches, etc.
	<mark>엑</mark> ½_ 전자부품백화점	The distribution of 1.8 million types of electronic parts
	GƏON	high and medium-pressure power cables, data cables, optical cables, etc.
	M CARMON	Selling new car and parts in-house
Automobile	JIMES DRIVING CENTER	Car Repairs
Industry	Napino	Manufacture of automotive electrical and electronic products
	Ω	

Japan general automobile co.

Business Track Record (II)

다양한 산업군 내 24개 이상의 업체와 거래 경험 보유

산업군	거래처	사업 내용
	amazon	The world's largest online shopping mall
	이룩스 E-Lux	Product design and instrument design, woodworking and prototyping, etc.
	ESENC	Installation of machinery and equipment for buildings
	E DAONTEC	Manufacture and sale of parking control and induction control systems
Distributor,	Distributor, IT, Mechanic, Construction	Manufacturing of AI air purification system, LED winka system, etc.
-		Branding Design Studio
₹ •**	SINTAEYANG DISTRIBUTION BOARD	Fabricate iron, stan, PVC, automatic control panel, fire control, etc.
	samsung 삼성SDS	Door lock, construction electric installation
	GEOGM	Advertising and promotional exhibition agency
	₩ SAMHO	General construction company

TEAM

KOREA TEAM

R&D

Founder: John YH Lee
Inha University majoring
in Electronic Engineering
Korean Air 15 Years
40 years' experience in
the field of electricity

CEO

CEO: Isaac KC Lee Ajou University MBA 5 years' experience in the field of electricity Overseas Marketing Officer

CHINA TEAM

PROJECT MANAGER

Director: Sam Kim
Department of Construction
Management, Oklahoma State
CEO of HUE & R
Director of Korea Karpu

PARTNER

Director: Young Hyun Yoo
Computer Science at Myongji University
Japan's Capital Electrics
century trade service
Han Kwang Electric Service Co.
Working for the local corporation of
China Han Guang Electric Co.