

TOP ENC

TOP ENGINEERING & CONSTRUCTION CO.,LTD

Manufacturing of Fire fighting appatatus
Inspection / Management / Construction / R&D of Fire fighting facilities



TOP ENC CO.,Ltd.

Since its foundation, TOP ENC has been engaged in service businesses such as fire defense facilities management and specialized fire defense facilities construction, aiming to become the best professional company in the field of fire defense.

In addition, we have established a specialized fire defense laboratory in the vulnerable Korean fire defense manufacturing environment, focused on research and development of new technologies and products, commercialized no-panic fire extinguishers equipped with the function of removing safety pins even if they are gripped for the first time in the world, and are currently developing the world's first current-based addressable automatic fire detection system. (CBA System)

As a result of investing in research and development to improve the existing fire and disaster prevention system, the company has grown into a comprehensive fire defense company that has secured a large amount of technology recognized not only in Japan but also in advanced countries such as the United States, Europe.

Company Overview

- Name : TOP ENC Co.,Ltd
- CEO : Malsuk Lee
- Office : 2 floor, 50, Suchul-daero 1-gil, Gumi-si
Gyeongsangbuk-do, Republic of Korea
- TEL : +82-54-462-1190
- FAX : +82-54-462-1197
- Homepage : <http://www.topenc.biz>
- E-Mail : top1190@hanmail.net

Brief Representative's History



CEO

First name : Malsuk
Last name : Lee

■ Education

- B.S., M.S., Ph.D. in Architectural Engineering from Kyungpook National University, Korea

■ Qualification

- Professional Fire Protection Engineer
- Fire Facilities Manager
- Master Craftsman Hazardous material
- Fire Safety Educator
- Engineer Fire Protection System - Electrical
- Engineer Fire Protection System - Mechanical
- Engineer Architecture

■ Career

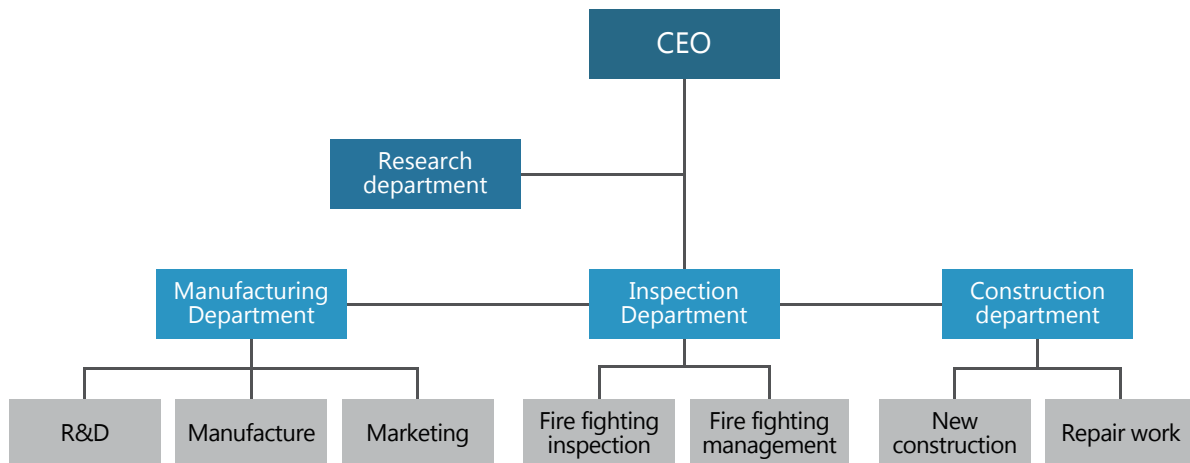
Current

- TOP ENC CEO
- Member of Local Fire fighting Design Review Committee (Daejeon, Gyeongbuk, Daegu)
- Vice-president of Korea Hazardous Safety Association

former

- TOP ENC Architectural Firm Co-Representative Director
- Adjunct professor of Kyungpook Fire Service Academy
- Adjunct professor of Gumi University

Company Organization Chart



Company History

- 2013. 06 - Moved in Gumi Business Incubator, Established TOP ENC.
- 2013. 10 - Been inaugurated as Co-Representative Director of fire fighting department of TOP ENC architectural firm.
Started fire fighting service(management, inspection, construction, R&D).
- 2016. 12 - Separated fire fighting department as spin-off from TOP ENC architectural firm.
Sustained the service as TOP ENC after alienation.
- 2017. 06 - Established a research dedicated department.
- 2018. 11 - Registered the factory.
- 2019. 08 - The NO PANIC fire extinguisher Passed the model approval certification of Korea Fire Institute(KFI).
- 2019. 09 - Attracted the investment as 300 million from Enlight Ventures.
- 2019. 10 - Renewed the Certificate of Venture Business.
- 2020. 01 - Renewed the Certificate of Women Owned Business.



Fire fighting Department

Manufacturing of Fire fighting appatatus
Inspection / Management / Construction / R&D of Fire fighting facilities

Category

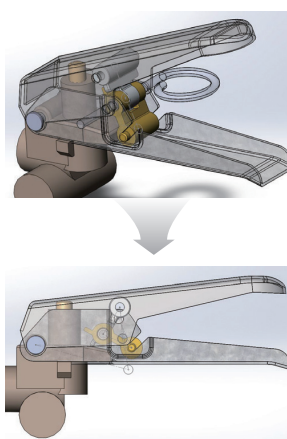
- 01. Manufacturing
of Fire fighting appatatus
- 02. Inspection
of Fire fighting facilities
- 03. Management
of Fire fighting facilities
- 04. Construction
of Fire fighting facilities
- 05. R&D
of Fire fighting

01

Manufacturing of Fire fighting appatatus



■ NO-PANIC Safety fire extinguisher

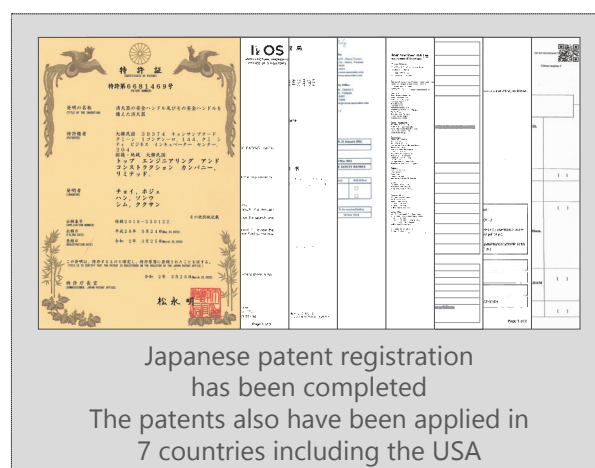


You can remove the safety pin with squeezing the handle under panic

■ NO-PANIC passed the model approval certification of Korea Fire Institute and Status of registration at foreign patent



Passed the model
approval
certification of
Korea Fire Institute
(KFI)



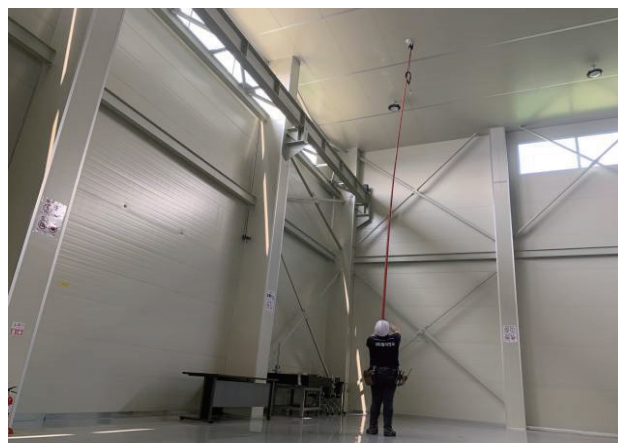
Japanese patent registration
has been completed
The patents also have been applied in
7 countries including the USA

► Inspection of fire fighting

works operational function inspection
and comprehensive precision inspection prescribed by law.



▲ Fire alarm valve test



▲ Fire detector check



▲ Fire alarm facility inspection



▲ Fire pump operation check

► Management of fire fighting

provides maintenance services for overall fire fighting facilities and practice fire fighting etc.



▲ Preparation of a fire fighting plan



▲ Fire extinguisher pressure check



▲ Fire fighting facility maintenance



▲ practice fire fighting

► Constuction of fire fighting

largely includes electricity part of automatic fire alarm detective system and facility part of fire hydrant.



▲ Fire pump facility construction



▲ Fire fighting electric ent construction



▲ Fire fighting Gas facility construction



▲ Construction of new building fire fighting equipment



▶ R&D of fire fighting

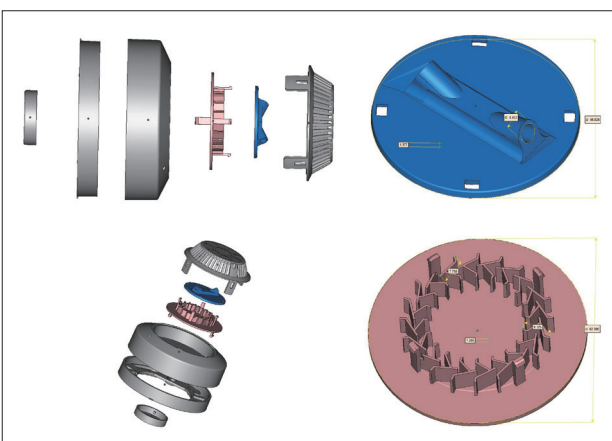
we are always committed to saving the lives and properties of human being with the best techniques developement.



▲ Twin-agent fire extinguisher prototype



▲ NO PANIC fire extinguisher handle prototype



▲ Fire detector prototype



▲ Automatic fire detective system including address based electric current

Product description

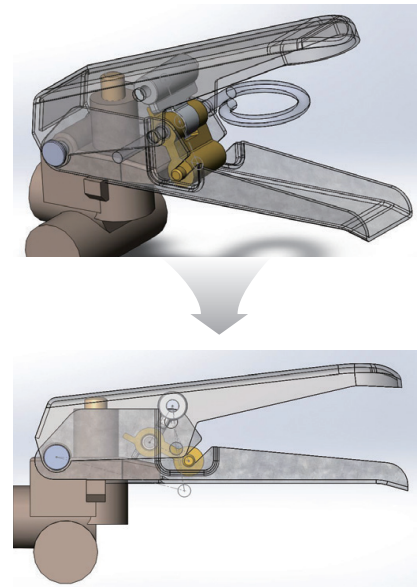
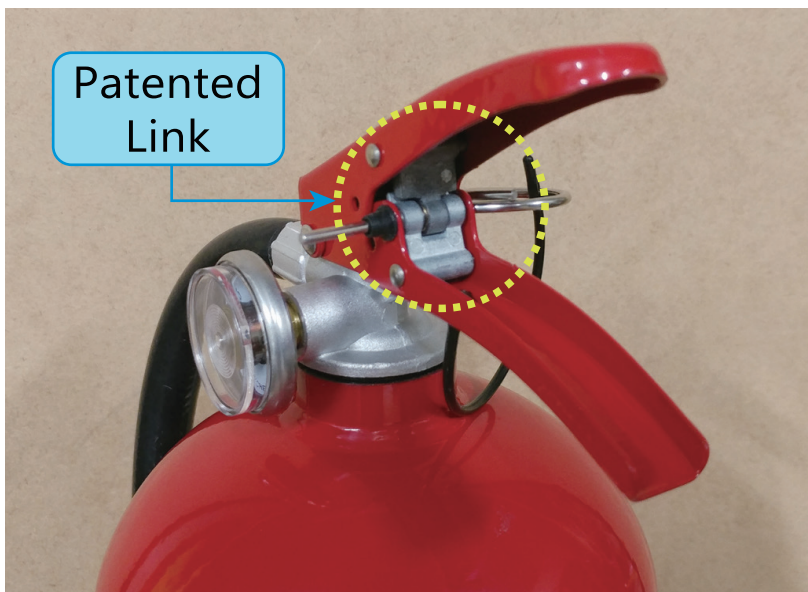


노패닉 NO PANIC

NO PANIC Patent Fire extinguisher
- 3.3kg Dry chemical fire extinguisher



■ NO PANIC Fire extinguisher Patent Technology



You can remove the safety pin with squeezing the handle under panic

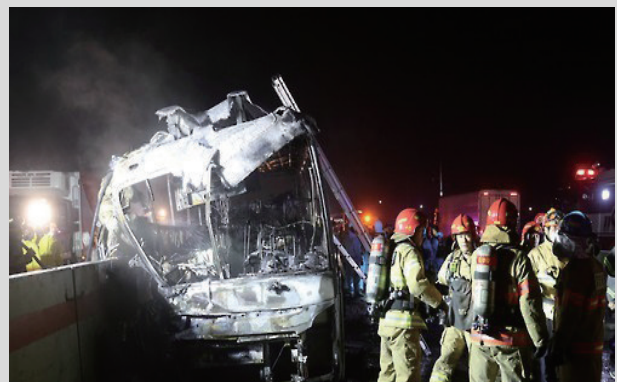
■ Failure cases of using Fire extinguisher

Candle Factory Fire



- A female worker who couldn't remove the safety pin threw the fire extinguisher into the fire

Express Bus Fire



- The bus driver who couldn't remove the safety pin used the fire extinguisher for breaking the window

■ The first, the best Technique - NO PANIC Fire extinguisher

Test of removing safety pin
of general fire extinguisher



■ Test Result

Failed to remove the safety pin even with 12kgf by an adult male

Test of removing safety pin
of NO PANIC fire extinguisher



■ Test Result

Succeeded in removing the safety pin only with 2kgf by an adult male

■ We all know The P.A.S.S Method. But...

The P.A.S.S Method for fire extinguisher



We all know The PASS Method. But it is still hard to make it in urgent situation.

The NO-PANIC fire extinguisher is a patented fire extinguisher that can completely improve the phenomenon caused by the safety pin which does not fall off by the pressure you hold the handle with.

It makes you be able to remove the safety pin even in panic.

It clearly has the advantage of being easy to use for everyone, for anytime.

■ A career in international competition & status of registration at domestic or foreign patent



2016 Malaysia
International Invention
Competition
Silver Award

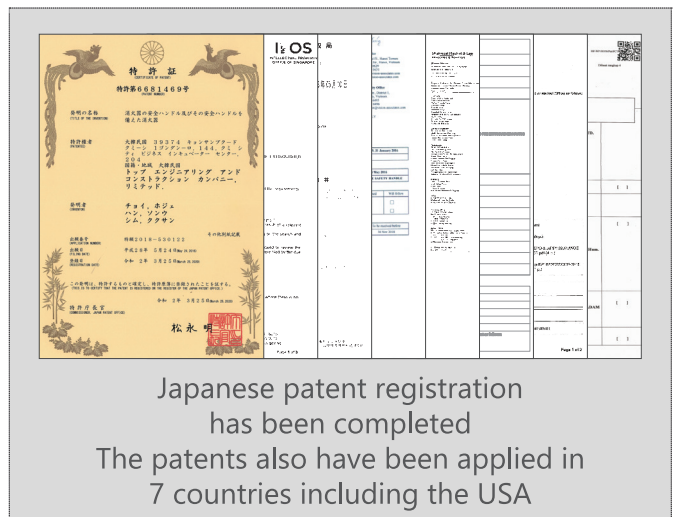


Passed the model
approval
certification of
Korea Fire Institute
(KFI)

■ Status of registration at domestic and foreign patent

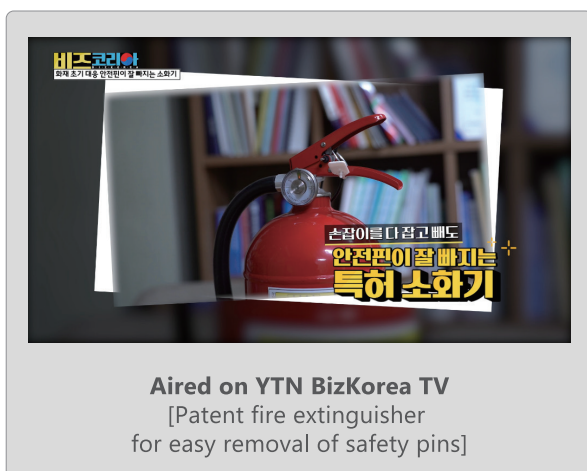


Several patent applied
in Korea



Japanese patent registration
has been completed
The patents also have been applied in
7 countries including the USA

■ Advanced technic of NO PANIC fire extinguisher was introduced through various media



Aired on YTN BizKorea TV
[Patent fire extinguisher
for easy removal of safety pins]



Sanup news
Be published in an article
[Fire Tech Korea]



FPN Daily
Be published in an article
[Hot item in the spotlight]

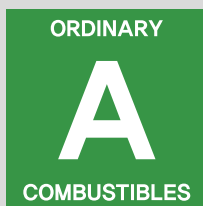
■ NO PANIC Fire extinguisher **specification**



Specification

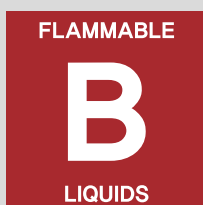
- Product name : NO PANIC Fire extinguisher
- Dry chemical fire extinguisher
- Multipurpose protection: Fights Class A, B, and C fires
- Agent type : $\text{NH}_4\text{H}_2\text{PO}_4$ 80%
- Agent weight : 3.3kg(7.3lb)
- Item weight : 5.2kg(11.5lb)
- Material : Metal etc.
- Product Dimensions : 136 \varnothing x 446(mm)
- Discharge time : 10(s)
- Discharge range : 4~6(m)
- Operating pressure : 0.9 MPa

■ **Multipurpose protection** - Fights Class A, B, and C fires



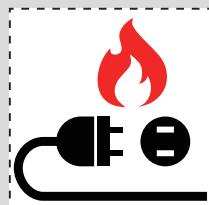
Class A fire

Wood, paper, textiles, and other ordinary combustibles



Class B fire

Flammable liquids, oils, solvents, paints, grease, etc.



Class C fire

Electrical : Live or energized electric wires or equipment.

◆ Other Development

Automatic fire detective system
including address based electric current

A system can determine an address
for each detector by giving
different resistance and current values
to in two wires.

We are always committed to saving the lives and properties of
human being with the best techniques



- Office : 2 Floor, 50, SUCHULDAERO 1 GIL, GUMI-SI, GYEONGBUK, SOUTH KOREA
- Factory : JISANRO 937, GISAN MYEON, CHIL GOK GUN, GYEONGBUK, SOUTH
- TEL : +82-54-462-1190 ■ FAX : +82-54-462-1197 ■ Email : top1190@hanmail.net