

## GOLDEN TIME PATIENT CARRIER

A transport device for moving patients in the shortest time  
with minimal manpower in case of disasters and emergencies

# AIR CAPSULE



Golden Hour Co., Ltd., a company specializing  
in the development of rescue equipment used in disasters



# COMPANY HISTORY

2018 - 2021

07.10

**Business name I** Maker culture expansion project  
**Description I** Implementation of my ideas  
**Institution I** Korea Foundation for the Advancement of Science and Creativity  
**Activity period I** 18.07.10 ~ 18.12.20

01.03

**Project name I** 2019 Innovative Technology Product Manufacturing Startup Partners: President visited  
**Description I** Selected as an innovative technology product of 2019  
**Institution I** Ministry of SMEs and Startups  
**Activity period I** 19.01.03

02.28

**Project name I** Social Entrepreneur Fostering Project  
**Description I** Social Enterprise Promotion Project  
**Institution I** Korea Social Enterprise Promotion Agency  
**Activity period I** 19.02.28 ~ 19.12.31

05.01

**Project name I** Preliminary social enterprise certification  
**Description I** Creative, innovative  
**Institution I** Chungcheongbuk-do  
**Activity period I** 20.05.01 ~ 23.04.30

05.21

**Project name I** Medical device manufacturing and product approval  
**Description I** Product Approval  
**Institution I** National Institute of Medical Device Safety Information  
**Activity period I** 20.05.21

06.30

**Project name I** Selected as Social Impact Changers  
**Description I** Commercialization  
**Institution I** Daejeon Creative Economy Innovation Center  
**Activity period I** 20.06.30 ~ 20.11.31

08.11

**Project name I** Identified as a social venture company  
**Description I** Recognizes as a social venture company  
**Institution I** Technology Guarantee Fund  
**Activity period I** 20.08.11 ~

08.18

**Project name I** Certificate of Company-affiliated research institute  
**Description I** Established Golden Hour Enterprise R&D Center  
**Institution I** President of Korea Institute for Advancement of Technology  
**Activity period I** 20.08.18 ~ 22.10.18

2018

2019

2020

07.29

**Project name I** X-GARAGE Prototype Service  
**Description I** Additional reinforcement of prototype  
**Institution I** Korea University  
**Activity period I** 19.07.29 ~ 19.12.31

10.18

**Project name I** Established Golden Hour Co., Ltd.  
**Description I** Established the company  
**Activity period I** 19.10.18 ~

10.08

**Project name I** Start-up NEST  
**Description I** Acceleration, growth support  
**Institution I** Korea Credit Guarantee Fund  
**Activity period I** 20.10.08 ~

10.14

**Project name I** LG Social Campus Regional Innovator "Local Value Up 3rd Term" 'in Cheongju  
**Description I** Foster young local innovators  
**Institution I** Chungbuk Social Innovation Center  
**Activity period I** 20.10.14 ~ 20.12.11

10.15

**Project name I** KEPCO KDN Social Economy Enterprise, "Global Star Enterprise Fostering Support Project"  
**Description I** Financial and consulting support  
**Institution I** Foundation) Social Solidarity Bank  
**Activity period I** 20.10.15 ~ 20.12.31

11.20

**Project name I** Certificate of Venture company  
**Description I** Technology evaluation assurance company  
**Institution I** Korea Technology Finance Corporation  
**Activity period I** 20.11.20 ~ 22.11.19

12.01

**Project name I** 2020.12 Designated as a venture start-up innovation procurement product (http://www.g2b.go.kr)  
**Description I** Bumper type : 42192201-24130893  
 General type : 42192201-24130892



COMPANY  
INTRODUCTION

Golden Hour keeps the value of life safe and precious above all

The time to save a life when the life is at stake and urgent is called the golden time or golden hour. Effort for those who are called safety-vulnerable at that moment, in our reality, is never easy, while human life itself is precious, so the rescue should never be overlooked.

Golden Hour Co., Ltd was established based on the ideology to value the lives of all of us and to guarantee the human rights of the safety-vulnerable class. While there is a large gap in the budget available for safety facility expansion or safety products, the safety-vulnerable group exists in a similar proportion to the number of people accommodated in each facility. However, the low budget limits evacuation due to the lack of manpower, evacuation facilities, and evacuation products in disasters and safety accidents, which inevitably causes more accidents According to the statistical data of the National Fire Information Center of the National Fire Service, the number of fires in medical facilities is 126,618 and the number of casualties is 7,593 between 2017 and 2019. In the case of fire, it is reported that many human accidents occur due to the lack of manpower to rescue patients who cannot walk on their own due to the nature of medical facilities. Accordingly, while serving as a safety manager, I recognized the problem that 'it is difficult to save lives with existing stretchers through various disaster drills and risk assessments.

Through changes in principles and rescue methods, we have developed disaster relief products that can maximize the effectiveness of rescue activities by reducing rescue time while maximizing rescuers by saving the number of rescue workers.

Starting with the distribution of these products, Golden Hour Co., Ltd. reduces the risk factors of human casualties even in vulnerable evacuation facilities in case of disasters and emergencies, guarantees the right to survive for the vulnerable, and proposes a new paradigm of lifesaving in national or social disaster. We will do our best to grow into a social entrepreneur that values human life more.

CEO of Golden Hour Co., Ltd. | Kim Dae-Jong

TECHNICAL  
COMPETITIVENESS

【Air capsules that have obtained approval for manufacturing and product type of medical devices】

Since the existing stretcher lifts and transports the rescuee, it receives the weight of the rescuee as he/she is, and it takes 3-4 times as many rescuers as one rescuee to distribute and transport the weight. In addition, rescuers have a problem that they may fall during transportation and are exposed to flames and harmful gases. To solve this problem, by adding flame retardant performance to eco-friendly new materials and introducing the principle of dragging and transporting using wheels instead of lifting and transporting, the efficiency of the rescue workforce was increased, and the rescue time was shortened. Furthermore, a safety device was attached, and a cover was used to prevent secondary damage for the rescuer's safety

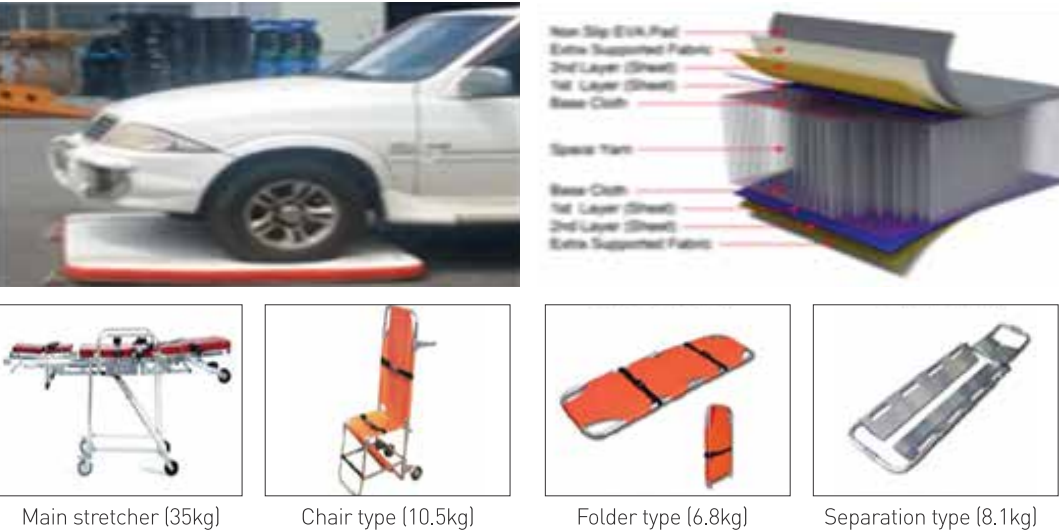
CHARACTERISTICS  
OF MATERIAL

【New flame-retardant and eco-friendly material: secure safety through external shock absorption and buffer action in the form of air rescue system】

- Standard type product weight : 5kg
- Premium type product weight : 10kg

■ Key performances of the product

Evaluation item	New product	Existing product
Product portability	Roll up and store	Foldable storage
Efficiency of patient evacuation (safe & fast)	1 rescuer per 1 rescuee	3-4 rescuers per 1 rescuee
Composite disaster use	Simultaneous application on land, underwater and mountain	Purchase rescue equipment for different situations
Prevention of secondary damage	Prevention of damage caused by falling, inhaling harmful gas, and falling objects	None
price and AS	AS possible with domestic manufacturing, cheaper than existing products	Most of them are manufactured overseas. Expensive compared to similar functions.







## 01 AIR CAPSULE

### PREMIUM BUMPER TYPE

Product ID No. of Venture Nara of PPS  
[Public Procurement Service]  
General type : 42192201-24130893

#### Product specifications

Bag size | 70cm W / 40m L / 30cm H

Manual pump operating time | 40 seconds

Gas operating time | 5 seconds

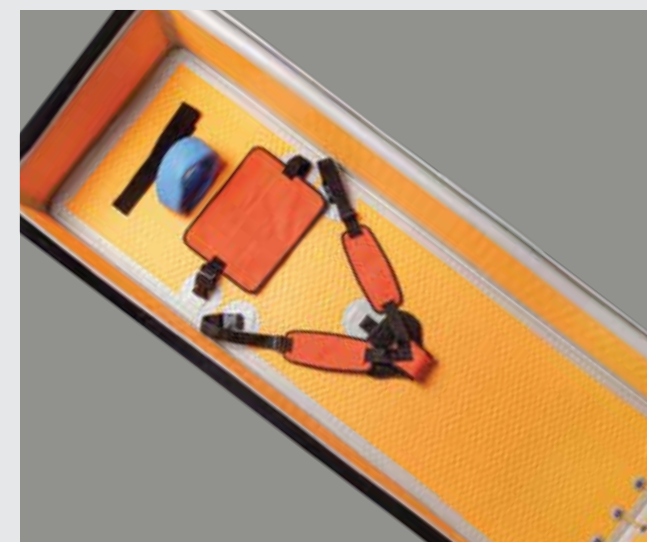
Product Size | Width (outside) 70cm (inside) 60cm

Length (outside) 200cm (inside) 190cm

Height (outside) 35cm (inside) 25cm

Max. working load | 160kg

# PREMIUM BUMPER TYPE







## 02 AIR CAPSULE

### GENERAL TYPE PORTABLE TYPE

Product ID No. of Venture Nara of PPS  
[Public Procurement Service]  
General type : 42192201-24130892

### Product specifications

Bag size | 60cm W / 35cm L / 20cm H  
Manual pump operating time | 15 seconds  
Gas operating time | 2 seconds  
Product Size | Width 60cm, Length 200cm, Depth 5cm  
Max. working load | 160kg  
Average size of conventional stretcher |  
W 50-55cm, Length 190-200cm

**GENERAL FORM  
PORTABLE TYPE**





PRODUCT INTRODUCTION AND HOW TO USE THE AIR CAPSULE

❗

Preparations before use


- ✓ Fully familiarize yourself with how to use the air capsule before use.
- ✓ Tighten the nitrogen gas container valve and the air capsule valve until you hear a 'click' sound.
- ✓ Spread the air mat sufficiently to expedite gas injection.

❗


How to operate

- ✓ Open the bag and spread the air capsule.
- ✓ Connect the gas container valve and the air capsule valve.
- ✓ Turn the gas container to the right to supply air to the air capsule.
- ✓ In the case of a portable air capsule, turn the patient's body to one side to put the patient easily and place the air capsule under the back of the patient to supply air.
- ✓ If the shape of the product is maintained in the form of a stretcher, fix the patient's body with a body anchor and cover with a flame retardant cover.
- ✓ Evacuate the patient to an evacuation area by dragging the string attached to the product.


1




2



3



4



❗

Storage and management after use

- ✓ After use, remove the air completely, wipe it with water or rubbing alcohol, dry it with a dry towel, roll it up and store it in a bag.
- ✓ Do not change or remodel the product at your own discretion.
- ✓ Store in a place that is not affected by atmospheric pressure, temperature, humidity, wind, etc.
- ✓ Do not connect the gas container valve and the air capsule valve before or after use.
- ✓ Once used, gas containers must be filled.
- ✓ Regular maintenance, inspection and maintenance are carried out every 6 months. (Use a hand pump to inspect the product)



A COMPANY THAT LEADS THE EQUALITY OF THE RESCUE

Experience the technology of Golden Hour that leads the industry



- 1

**Air capsule, premium type**  
Has an advantage of being able to move more safely with a bumper-type air capsule.
- 2

**Air Capsule, general type**  
Convenient to carry and the operating time of the manual pump is short, so it can be used quickly and easily.



Multi-disaster relief supply box



70cm W / 40cm L / 115cm H



**Products of Golden Hour Co., Ltd**

[Complex disaster relief and firefighting equipment, etc.] are

**being supplied to Venture Nara of PPS,  
hospitals, nursing homes,  
educational institutions,  
government offices, military bases,  
leisure facilities,  
and group residential facilities.**



**Venture Start-up Innovation  
Selected as the procurement products.**

Air capsules of Golden Hour Co., Ltd were qualified to participate in competitive bidding by the Public Procurement Service, and were registered in the health/medical sector of Venture Nara of the Public Procurement Service

**Bumper type**



Product List No  
42192201-24130893

**General type**



Product List No  
42192201-24130892



## CERTIFICATES AND TECHNOLOGY PATENTS

## AWARDS AND CERTIFICATES

### Reliable Golden Hour

Golden Hour is producing reliable products by acquiring various certificates and technology patents.



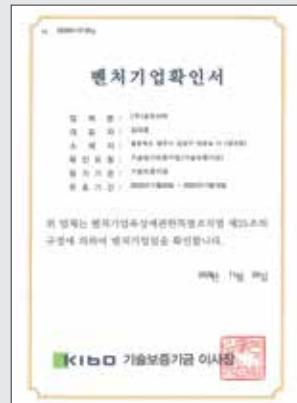
Patient Protection Air Mat  
Patent Certificate  
(KIPO)



Automatic inflatable air mat for patient transport  
patent certificate (KIPO)



Medical device manufacturing  
and product license  
(NIDS)



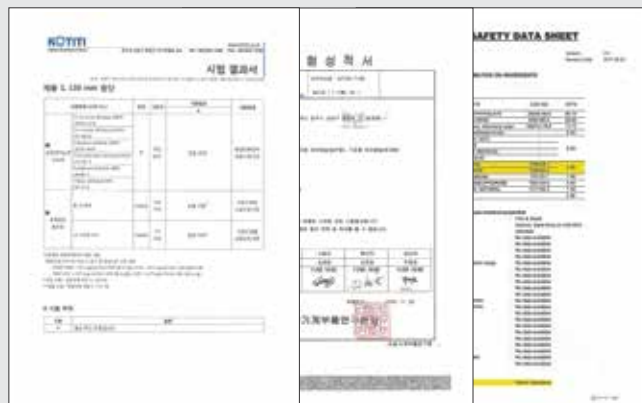
Venture company certificate



Preliminary social enterprise  
Certificate  
(Governor of Chungcheongbukdo)



Corporate research institute  
accreditation  
(KOITA)



Environmental Hazardous Factor,  
Vibration Measurement, Flame Retardant Test Report



US, European and Japanese patents



European design registration

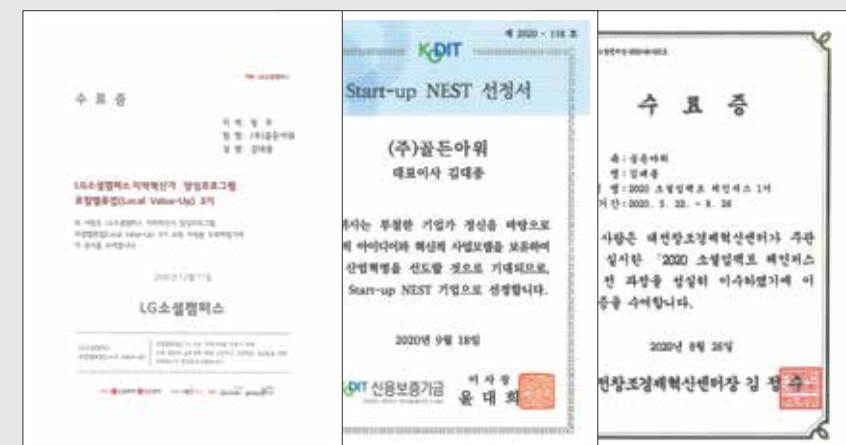
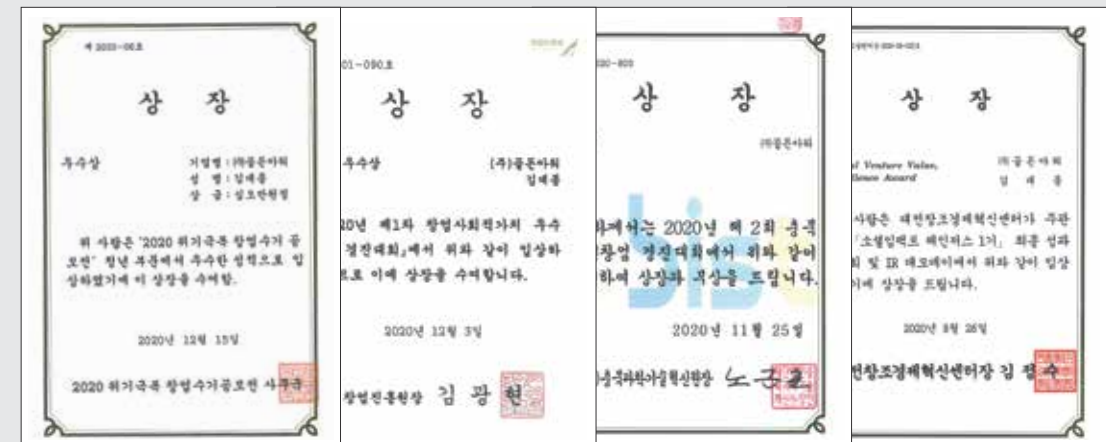


Trademark application

### AIR CAPSULE is

a medical device with increased safety and reliability.

Golden Hour will do its best to grow into a social enterprise that values human life.



- ✓ 2020 Crisis Overcoming Entrepreneurship Handwriting Contest (Host : 2020 Crisis Overcoming Startup Handwriting Contest Secretariat) - Excellence Award
- ✓ 2020 1st Business Entrepreneurship Social Value Best Case Contest (Host : President of Startup Promotion Institute) - Excellence Award
- ✓ 2020 2nd Chungbuk Innovation Startup Contest (Host : Chungbuk Institute of Science and Technology Innovation) - Gold Award
- ✓ Daejeon Creative Economy and Innovation Center [Social Impact Changers 1st Term] Final Achievement Sharing Event and Demo Day Prize
- ✓ LG Social Campus Local Innovator Training Program Local Value Up 3rd Completion Certificate (LG Social Campus)
- ✓ Selected as Startup-NEST (Korea Credit Guarantee Fund)
- ✓ Social Impact Changers 1st Certificate of Completion (Daejeon Creative Economy Innovation Center)