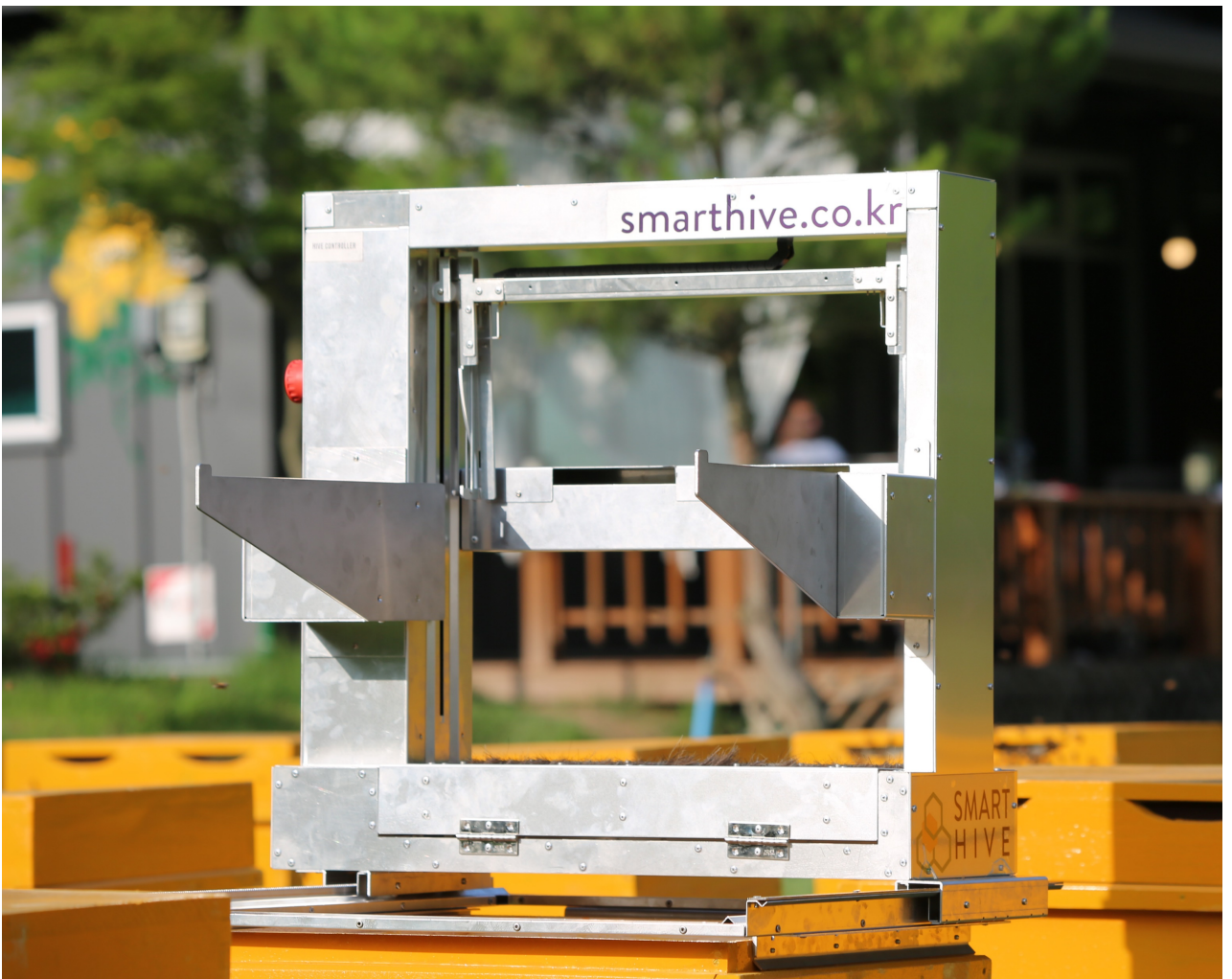


SMARTHIVE

Hive Controller

SMARTHIVE provides a new experience
for innovative beekeeping.



DAESUNG

VISION

“ GLOBAL No.1 COMPANY The automated machine in agriculture ”

**DAESUNG prepares the future that better Life
through Agriculture.**

DAESUNG has been conducting beekeeping research and development under the brand SMARTHIVE.

DAESUNG has been concerned that how to work in a more convenient way with beekeeping, which grows punishments and manages hives.

DAESUNG aims for easy beekeeping.

DAESUNG's engineers who is working by brand "SMARTHIVE" develop and work with beekeeping directly for everyone (non-specialist, men, women) can beekeeping easily.

After the establishment, we would like to showcase various beekeeping automation machine products, starting from the equipment "Hive Controller"

We are doing our best for the development of the beekeeping equipment manufacturer, the beekeeping automation industry.

HISTORY



2016

- Founded with the goal of unmanned automation of beekeeping and agricultural smart farms through robots and automation systems

2016~2019

- Conducted 9 entrepreneurship training

2017~2019

- 9 awards, including the Minister's Award from the Small and Medium Venture Business Department of the Invention Contest
- 1 national start-up support project, 5 small and medium-sized national R & D projects selected by the Ministry of Science and Technology, Ministry of Science and Technology

2018

- Venture certification (Korea Technology Finance Corporation)
- Affiliated research institute (KOITA Korea Industrial Technology Promotion Association certification)

2019

- Jeonju University, Jeonju Technical High School MOU
- PRASARI HONEY BEE ' SPVT.LTD MOU of the Indian Beekeeping Association
- 6 Patent registration, 2 domestic application, 5 overseas application, 3 technology transfer
- 1 Own Patent Technology trust (Korea Technology Finance Corporation)

2020

- Selected as a representative company of Jeonbuk R & D Special Zone Support Barcelona MWC Jeonbuk
- Jeonbuk Wanju-gun Agricultural Technology Center invited beekeeper attended education meeting and confirmed marketability.
- Funding agency contract with kseeder (trade association crowdfunding agency).
- US subsidiary to be established(State of Wyoming)
- Overseas kickstarter, Indiegogo crowdfunding start

HIVE CONTORLLER is easy to use for everyone (beginner to specialist) in beekeeping.



That is automated and portable farm equipment for taking out the honeycomb from the beehive, brushing, and stacking.

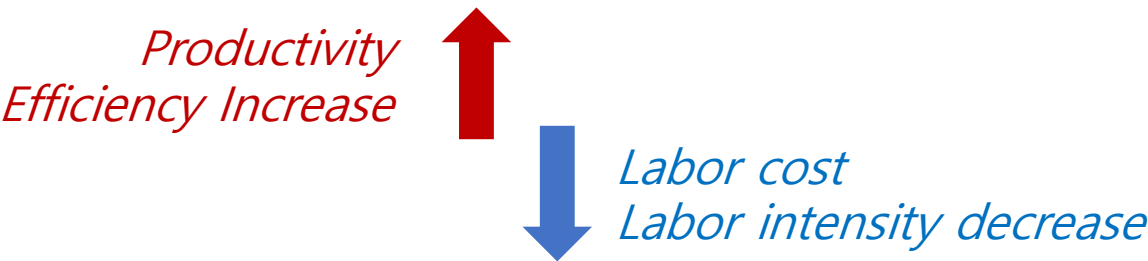
The traditional method is to withdraw the honeycomb from beehive manually, with at least two and up to five people for several days, 800 ~ 1000 honeycombs per 100 beehives. It is hard and inconvenience.







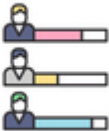

Even beginners of beekeeping can use withdrawing, brushing, stacking, and store the honeycombs at the same time easily and simple by press the button of HIVE CONTROLLER once.



HIVE CONTROLLER makes you to perform that WITHDRAW - BRUSH - STACK & STORE easily at once, with a single process, and automatically with the minimum number of people.

“ With Hive Controller”



| Work standard | Conventional way | Hive Controller |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Required Manpower | 2 people more  | 1 people  |
| Working Time | 120 seconds  | 60 seconds  |
| Labor Intensity | High (handwork)  | Low(automated)  |
| Proficiency | Expert Required Very difficult manpower supply  | Everyone Easy manpower Supply  |

05 Portable device for Beehive management automation



Configuration and Specifications

※ Product specification

Product Name | Hive Controller

Product Company | DAESUNG

Size | 700 x 540 x 680 mm (W x D x H mm)

Weight | 12kg / Power Supply

Voltage | 24V DC Adaptor (Power Supply)
24V DC Battery (Optional)

Material | Aluminum

※ Packaging

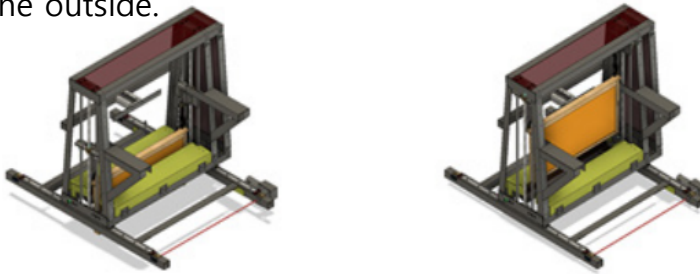
- Body
- Power Supply
- Manual
- Warranty Card
- Battery pack (Optional)

Product Features

“HIVE-CONTROLLER can be used on honeycombs of various sizes through the width adjustment.”

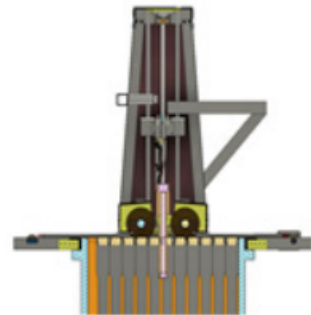
01. Operation to withdraw

Put the honeycomb inside the hive into the hive controller. The sensor detects the order in which the hive is placed and pulls the hive to the outside.



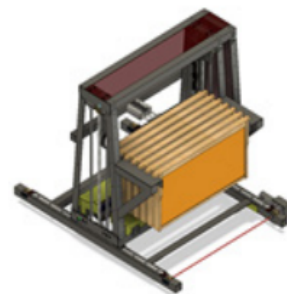
02. Shake off the bee

Each honeycomb is pulled out sequentially using a hive controller. Using two stick brushes rotating at the same time, remove the bees from the honeycomb.



03. Stacking

The honeycomb pulled out from the hive controller is removed and stacked in sequence.



Hive Controller makes
Beekeeping easy.

Product Features

"Even beginners of beekeeping can pull out the honeycomb from the hive and at the same time brushing the bee, beeswax, and propolis."

The honeycomb can be loaded and stored outside the beehive. All this is done with a single button press."



- To perform the operation working time per beehive is about 1 minute.
- HIVE CONTROLLER can be adjusted in width for use with beehives of various sizes.
- HIVE CONTROLLER has been fully implemented, including the ability to adjust the width to allow honeycombs of various sizes to be removed.
- HIVE CONTROLLER weight is as light as lifted with one hand. (Approx. 12kg)

- The battery pack weighs about 2kg.
- You can work in about 50 honeycombs with one battery pack.
- The brush(bee brush) attached to the HIVE CONTROLLER is easy to put on and take off and can be cleaned at any time.

“Your wrists and arms **don't hurt and **hard work** is greatly reduced If you work the same amount of time, you can work with **at least 30%** more beehives than before.”**



How it works

00



Open the cover of the hive and remove the fabric from the hive.

01



Turn on the power switch of the hive controller.

05



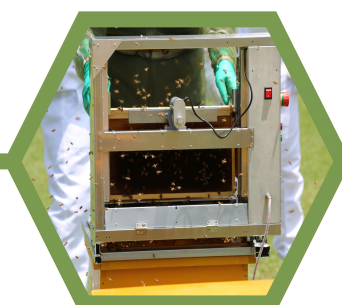
Bees are safely brushed off using two stick brushes.

06



Hive controller works and pulls the hive in the hive vertically.

07



The finished honeycomb is loaded in the direction of the honeycomb hanger of the hive controller.

02



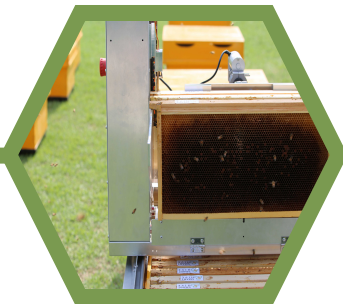
Turn on Hive Controller

03



Press Start button

04



Check the honeycomb loaded on the honeycomb hanger.

08



Collect the loaded honeycomb

09



When the hive controller is finished, a completion alarm sounds.



DAESUNG

TEL. +82 70 4354 4504

E-mail. sales@smarthive.co.kr

WEBSITE. www.smarthive.co.kr

109, Ballyong-ro, Deokjin-gu, Jeonju-si, Jeollabuk-do, Republic of Korea

147, Daehwa-ro, Daedeok-gu, Daejeon, Republic of Korea