

Introduction of Cheonho Industry

“Upcycling energy innovator”

CHEONHO INDUSTRY Co., Ltd.



“The corporation with a share” Cheonho



CHEONHO INDUSTRY Co., Ltd. (Korea)

www.cheonho.co.kr

Address : 574-102, Mado-ro, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea

Company status of Cheonho Industry



Company name

Cheonho Industry Co., Ltd

CEO

KO ILL WHAN

Establishment date

1995 [Corporate conversion on 2005]

Paid-in capital

\$ 500,000

Sales amount

\$ 5,000,000 (by 2017)

Employees

Fifteen (5 office workers, 10 technical staff)

Major business

Food Waste Resource Facility (Fertilizer, feedstuff, Soil amendment, Fuelification)
Used Fluorescent / Home Appliances, Livestock manure, Renewable pellet fuel
plant, Etc.

Address

(Head/Factory) #574-102, Mado-ro, Mado-myeon, Hwaseong-si,
Gyeonggi-do, Korea

Certification

Technology patent 23 cases, Research Institute, INNO-BIZ,
ISO 9001/14001

Web-site

www.cheonho.co.kr

Company Mission

**Build with
Technology and
Finish with
Sincerity**



Greetings of Cheonho Industry



Greetings

We recognize the importance of environment industry early,
With the banner of "A beautiful environment and the pursuit of human happiness through it"

We are an environmental company dedicated to research and development.

Composting of food waste, our representative business, is paramount in the field of environment and resources, and the market is expanding. In particular, it has greatly helped increase the production of healthy human ingredients by producing high quality organic compost and producing organic crops.

As we have unique and unique technologies in this field, we established a joint venture in China and are expanding our technology to Southeast Asia.

Through continued research and development and investment, we will advance into the markets for resources not only at home but also abroad to increase our national interest and to grow as a leading technology-based company.

History of Cheonho Industry



From 1995 to 2000

Start-up
period

Cheonho Industry Establishment (1995.5)

2nd factory registration(Incheon seoknam-dong, 1997.6)

Procurement bid registration (1997.8)

Joined as a machine industry cooperative in Gyeonggi-do(1999.7)

From 2001 to 2010

Leap
period

Signed technology and business alliance with Woojin Tech(2002.8)

Established a joint venture in China (2004.10)

Selected as "100 Best Patent Products of Korea Daily (2004.11)

Selected as a venture company (SMBA, 2005.6)

Corporate conversion to Cheonho Industry Co., Ltd (2005.7)

Obtain R&D dedicated departments (KOITA, 2009.8)

History of Cheonho Industry



From 2011 to 2015

Growth
period

Obtain ISO 14001 and ISO 9001 (2012.2)

Acquired the technology merger with Shinho EC (2013.2)

Completed new factory in Hwaseong city (2013.4)

Establishment of R&D center (2014.4)

Obtain INNO-BIZ (Technological innovation type) (2014.7)

Transfer technology to GY company in China (Export, 2014.12)

Environment Green Award in Gyeonggi-do (2015.3)

From 2016 to 2017

Conversion
period

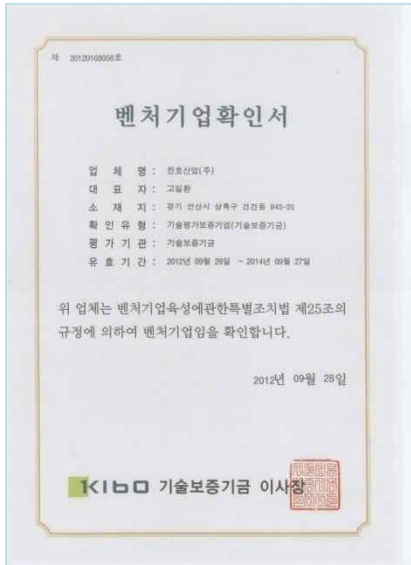
Export of EPC of food waste recycling plant in Dalian, China (2016.10)

Export of EPC of food waste pretreatment facility in Illinois, USA (2017.1)

Export of EPC of wood crushing plant in Illinois, USA (2017.3)

Environment Green Award in Gyeonggi-do (2017.6)

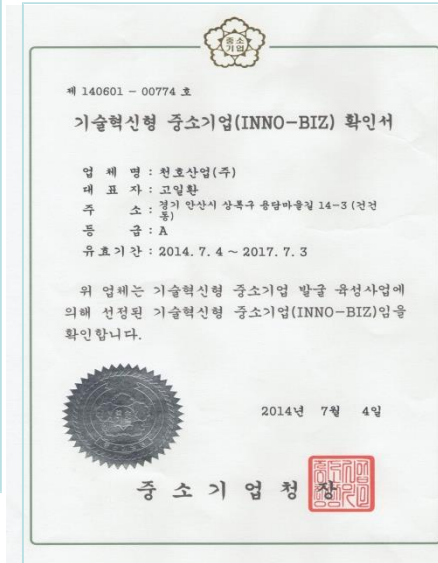
Major Certificates of Cheonho Industry



Venture Business Confirmation(2012)



ISO 9001(2012)
 ISO 14001(2012)



INNO-BIZ(2014)

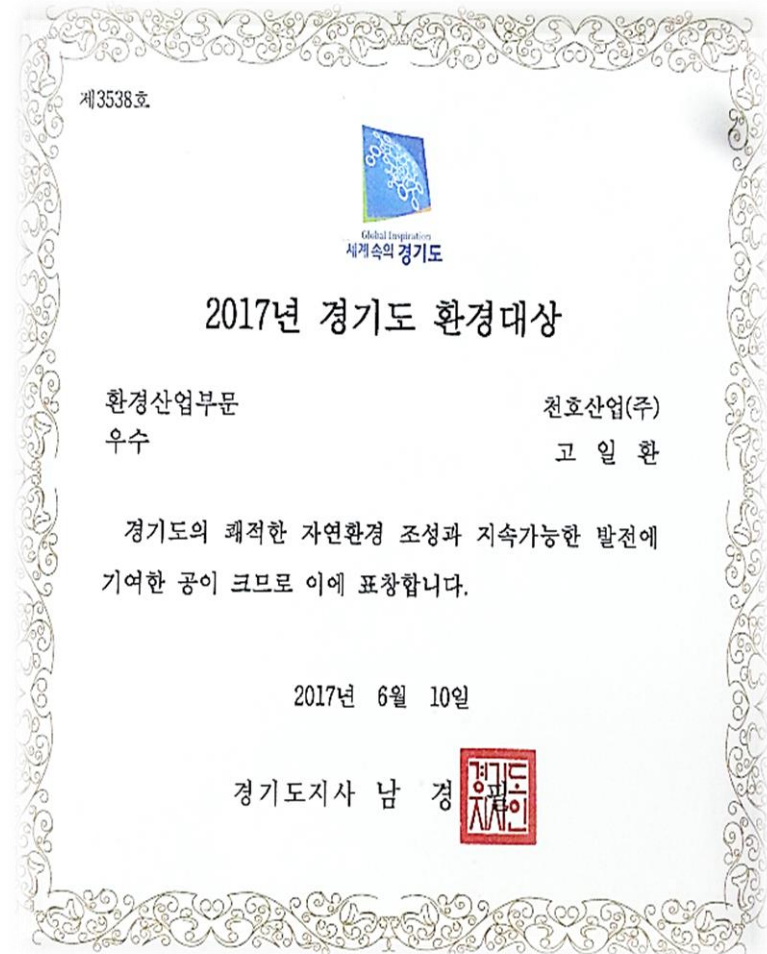


R&D center(2014)

Recent Awards of Cheonho Industry



Environment Green Award (2015)



Environment Green Award (2017)

Patent details of Cheonho Industry

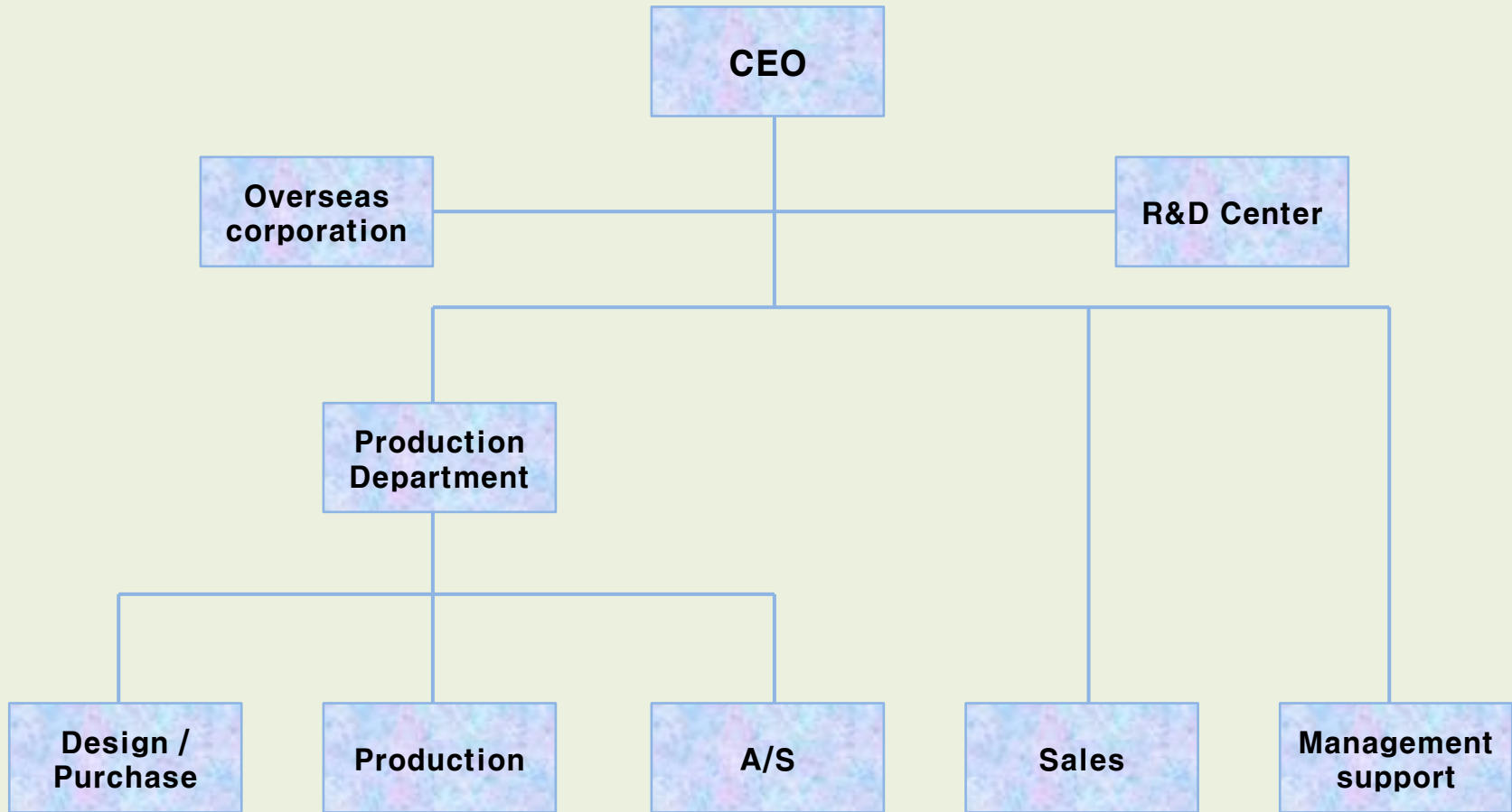


23 patents

No.	Patent Number	Patent title
1	Patent No. 10-0274067	Food waste disposal system
2	Patent No. 10-0581136	Carbonization treatment of food waste
3	Patent No. 10-0324403	Vacuum Filtration Equipment
4	Patent No. 10-1082944	Pump system for food waste transportation
5	Patent No. 10-1082945	Alternative energy system using subway vent
6	Patent No. 10-1116122	Ceramic filter and Manufacturing Method of Ceramic Ball
7	Patent No. 10-1116123	Alternative energy system using building vents
8	Patent No. 10-1101743	Dehydrator that improves dehydration ability by improving sectional area
9	Patent No. 10-1105731	Food waste composting system
10	Patent No. 10-0639569	Synthesis disposal system for waste lighting
11	Patent No. 10-1226551	Pellet type fuel composition
12	Patent No. 10-1226556	Method for producing pellet fuel
13	Patent No. 10-1255044	Hydropower generator
14	Patent No. 10-1255114	Pellet type renewable fuel using sawdust
15	Patent No. 10-1389577	Food waste crusher
16	Patent No. 10-1378583	High intensity panel including food waste
17	Patent No. 10-1422202	Lightweight by sewage sludge drying and jellyfish drying
18	Patent No. 10-1678357	Manufacturing method of Soil amendment
19	Patent No. 10-1669509	Manufacturing method of high calorific fuel using waste
20	Patent No. 10-1702855	Automatic crushing sorter capable of fine crushing
21	Patent No. 10-0022207	High concentration granular sludge agitator
22	Patent No. 10-0126932	Multilayer laminated composting fermenter
23	Patent No. 10-0126942	Vertical composting fermenter without stirring



Organization Chart of Cheonho Industry



※ Personnel Status (A total of 15 perons) : 3 technicians, 7 production worker, 3 salespeople, 2 managers

Major technology of Cheonho Industry



Design / Construction

- Food waste composting / Soil amendment / Feeding / Fueling facility
- Livestock manure purification and recycling facility
- Renewable Energy Pelletization Facility (WOOD , EFB, Food waste, etc)
- Household waste energy facility
- Landfill restoration project
- Waste lighting Included in the waste fluorescent light and hazardous material recycling facility

Product

- Pretreatment system for food waste treatment
(Crusher, Dehydrator, Screw conveyor, Various hoppers, etc)
- Piston pump, Dryer, Compost agitator

Reference (From 2009 to 2017)



**Best
Performance
in Korea**

No.	Year	Customer	Type of supply
1	2009	Clean eco	Food waste recycling facility (Composting)
2	2009	Green Asan	Feed storage hopper, automatic crushing sorter, conveyor
3	2009	Namhae County Office	Feed storage hopper, automatic crushing sorter, conveyor
4	2009	Goseong County Office	Feed storage hopper, automatic crushing sorter, conveyor
5	2009	Seongnam City	Loading storage hopper, dehydrator, storage tank, conveyor
6	2009	Incheon City	Feed storage hopper, automatic crushing sorter, conveyor, dehydrator
7	2009	Yeomyeong Farm	Feed storage hopper, automatic crushing sorter, conveyor
8	2009	Sehwan Industry	Automatic crushing sorter, conveyor, dehydrator
9	2010	Incheon Namdong-gu	Feed storage hopper, conveyor
10	2010	Paju City	Automatic crushing sorter, conveyor
11	2010	Dongducheon City	Feed storage hopper, automatic crushing sorter, conveyor, fine crusher
12	2010	Woosung biofeed	Food waste recycling facility (Feeding)
13	2010	Weed Irum	Liquid fertilizer facility
14	2010	Gwangju City	Screw press dehydrator
15	2010	Air Force x Fighter Wing	Anti-viscid pollution prevention facility
16	2010	Jangwon C&S	Dryer for food waste
17	2011	Haedong Mcell	Solid-liquid separator
18	2011	Hanam City	Fine crusher, automatic crushing sorter, conveyor
19	2011	Yeongdeok CountyOffice	conveyor
20	2011	Incheon Samsan center	Screw press dehydrator
21	2011	Donghae City	Screw press dehydrator
22	2011	Samcheok City	Automatic crushing sorter,
23	2011	Jeju City	Composting agitator

Reference (From 2009 to 2017)



**Best
Performance
in Korea**

No.	Year	Customer	Type of supply
24	2011	Jeju City	Blower for food waste composting facility
25	2011	Paju City	Automatic crushing sorter
26	2011	Bio-energy development	Food waste pretreatment facility
27	2011	NC Busan	Screw press dehydrator
28	2012	Daegu City	Food waste pretreatment facility
29	2012	Gwangju City	Screw conveyor (39 PCS)
30	2012	Anshan market	Vegetable waste reduction facility
31	2012	Paju City	Repairing food waste recycling facilities
32	2012	Shin Sung Engineering	Automatic Clean Net facilities
33	2012	Pohang City	conveyor
34	2013	Doosu Environment	Food waste pretreatment facility
35	2013	Ulsan City	Food waste pretreatment facility
36	2013	Shinhan Technology	Automatic crushing sorter
37	2013	Daein	Automatic crushing sorter
38	2013	CNG Tech	Screw press dehydrator
39	2013	Dobong-gu Office	Dryer for food waste
40	2013	Osan City	Filtration equipment of ecological river
41	2014	Jungang Sewage Plant	conveyor
42	2014	Seogwipo City	Automatic crushing sorter
43	2014	Jungmoon environment	Automatic crushing sorter
44	2014	Seohee Construction	Piston pump (4 PCS)
45	2014	Busan Environmental Co	Fine crusher (2 PCS)
46	2014	Korea PTG	Agglutinative sludge treatment facility
47	2014	Samik Industry	Solid fuel (wood pellet) manufacturing facility
48	2015	Sekwang Industry	Automatic crushing sorter, fine crusher
49	2015	Dongducheon City	Automatic crushing sorter
50	2015	Dongjin Semicom	Non-viscid pollution control facility

Reference (From 2009 to 2017)



Best Performance in Korea

No.	Year	Customer	Type of supply
51	2015	Hansol EM	Organic Waste Recycling Facility
52	2015	Jungil Machinery	Belt and chain conveyor line
53	2015	Daebo Engineering	Automatic crushing sorter (to Ulsan city)
54	2015	I Service	Automatic crushing sorter (to Changwon city)
55	2015	Saehan Environ Tech	Livestock waste treatment pre-treatment facility (to Nonsan)
56	2015	Yeomyeong Farm	Screw press dehydrator
57	2016	JC in China	Food waste recycling facility (USD 4.5 milion)
58	2016	Goseong County Office	Screw conveyor
59	2016	Green Asan	Screw conveyor
60	2016	Blue farm	Screw press dehydrator, conveyor
61	2016	Gwangju City	Screw conveyor
62	2016	Lipko	Food waste disposal pre-treatment facility
63	2016	Tae Hyun ENG	Screw press dehydrator
64	2016	Dongbu environment	Vegetable waste reduction facility
65	2016	Gyeongbuk FRI	Seawater filter equipment
66	2016	Deo Tech	Blowers and Cyclones
67	2016	KMBT	Food waste pretreatment facility (to Illinois, USA)
68	2016	Kolon	Screw press dehydrator (to Namdong-gu, Incheon)
69	2016	Shinhwa Construction	Drum selector (to Ulleungdo)
70	2017	KMBT	Wood crushing facility (to Illinois, USA)
71	2017	Daemyung Corporation	Food waste pretreatment facility (to Suwon)
72	2017	Yeonil	Automatic crushing sorter (to Gwangju)
73	2017	Goseong County Office	Screw conveyor
74	2017	Ganghwa Clean	Screw conveyor
75	2017	Gaia	Automatic crushing sorter (3 PCS)
76	2017	Dae-Ah environment	Screw press dehydrator
77	2017	Green Asan	Automatic crushing sorter , Screw conveyor

Export

Export

Export

Product Photos of Cheonho Industry



■ Crushing and sorting machine (Capa.(Ton/hr) : 2, 8 Usage : Organic waste crushing and sorting)



■ Screw press dehydrator (Capa.(Ton/hr) : 5, 8 Usage : Organic waste dehydration)



Product Photos of Cheonho Industry



■ Fine crusher (Order production)



■ Piston pump (Capa.(Ton/hr) : 3, 5, 7,10)



※ Usage : For transporting highly viscous materials

■ Drum screen (Order production)



※ Usage : For separation of foreign matter in organic matter

Product Photos of Cheonho Industry



■ Loading hopper (Order production)



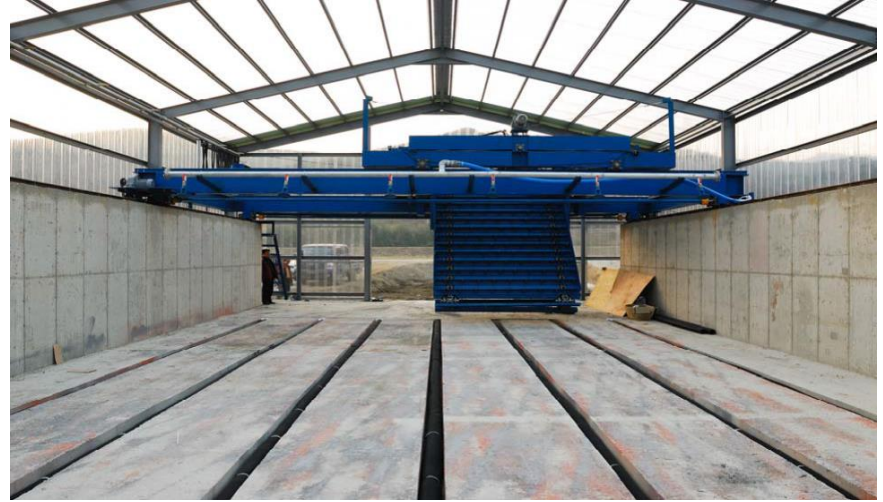
■ Screw conveyor (Order production)



Product Photos of Cheonho Industry



■ Compost agitator (Order production)



※ Usage : For organic fermentation

■ Dryer (Order production)



Product Photos of Cheonho Industry



■ TOWER COMPOST (Production of organic fertilizer through closed-type high-speed fermentation)



■ TOWER COMPOST Size and Spec.

MODEL	DEMENSION (mm)				POWER (Kw/hr)				Capa.(m ³)
	Axis	Effective volume	Bottom	Height	Driver	Rotator	Equally divider	Blower	
CHT-5000	Φ5000	4200	1350	6550	11	0.75	1.5	3.7	75
CHT-5500	Φ5500	4200	1350	6550	11	0.75	1.5	3.7	90
CHT-6000	Φ6000	4200	1400	6700	15	0.75	2.2	5.5	105
CHT-6500	Φ6500	4200	1400	6700	15	0.75	2.2	5.5	125
CHT-7500	Φ7500	4200	1500	6800	21	0.75	3.7	7.5	170
CHT-8000	Φ8000	4200	1500	6800	21	0.75	3.7	7.5	190

※ The above dimensions can be change depending on performance improvement and installation conditions.

Facilities Photo of Cheonho Industry



Food waste recycling facility (Feeding, Composting, Fueling)



Facilities Photo of Cheonho Industry



Food waste recycling facility (Feeding, Composting, Fueling)



Facilities Photo of Cheonho Industry



■ Food waste recycling facility (Feeding, Composting, Fueling)



Food waste recycling facility video



You can watch the video by youtube site link.

<https://www.youtube.com/watch?v=BAI9LobvU>

<https://www.youtube.com/watch?v=GvGLhf7W8hs>

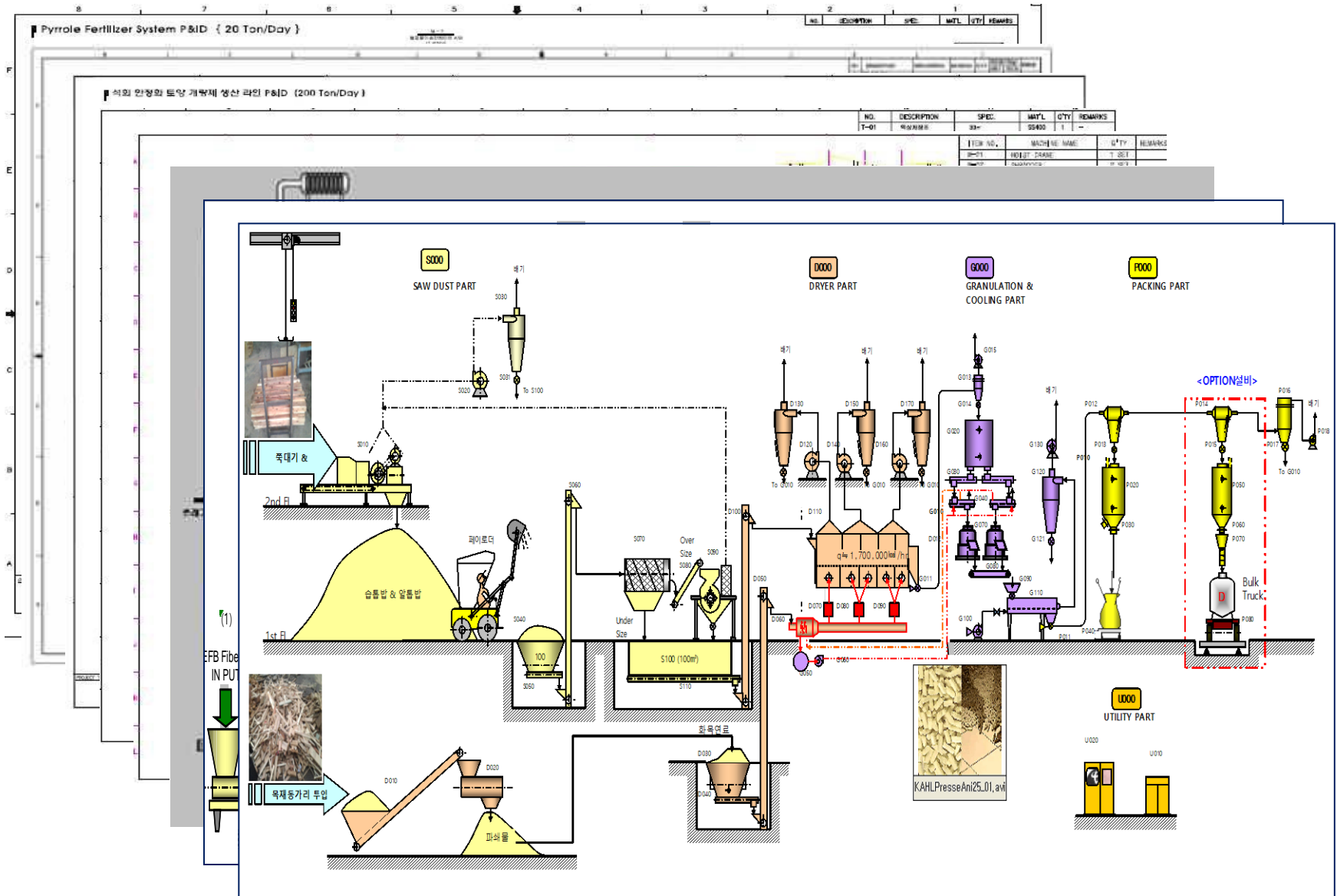
<https://www.youtube.com/watch?v=rmYoGuXyYhU>

<https://www.youtube.com/watch?v=obUyUrDPXhU>

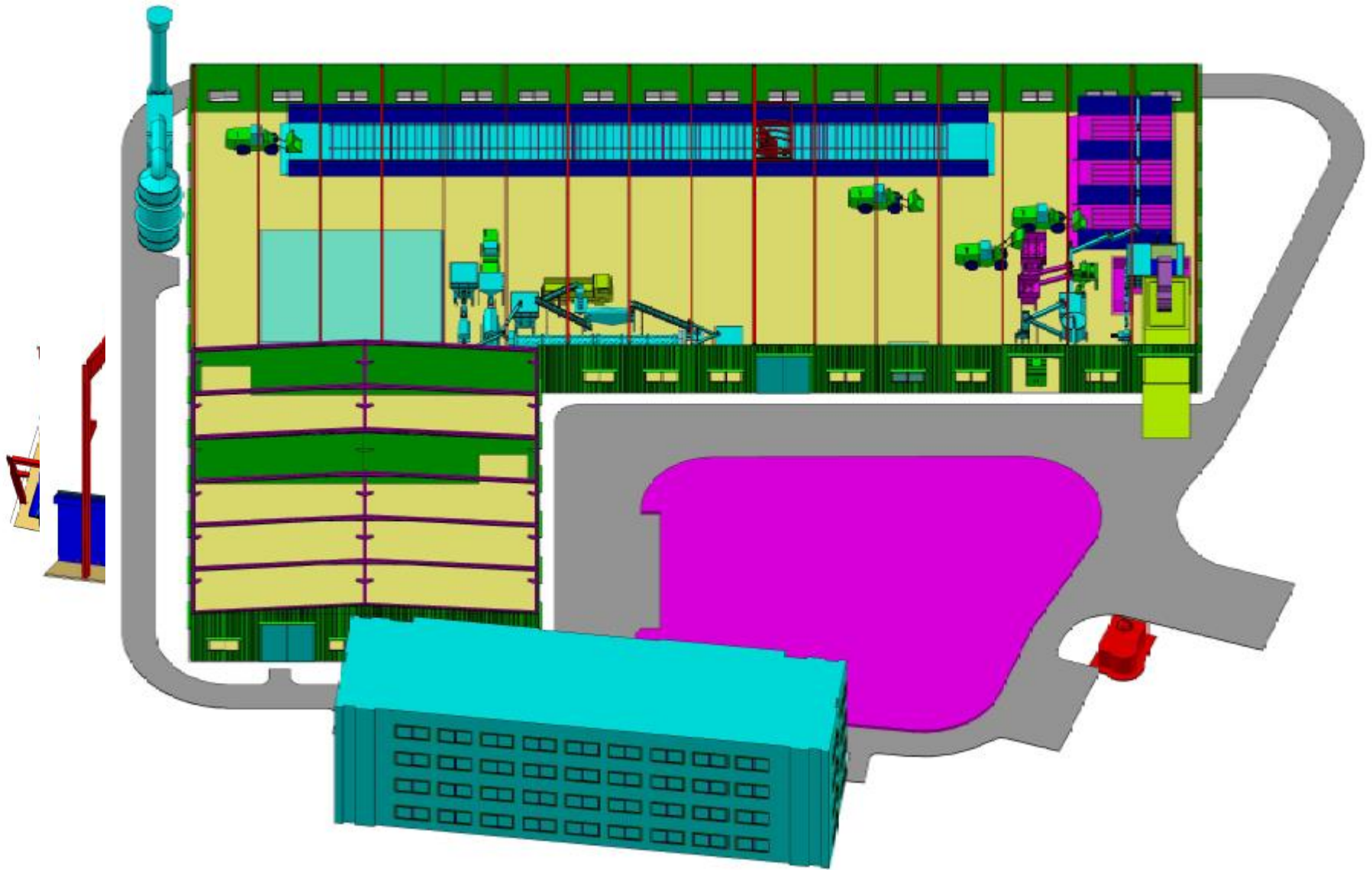


Location of the site : in Dalian, China (2017)

Design and Simulation for EPC



3D Design review



Business procedure



(1) Basic Consultation

Telephone / e-mail / Wechat
Feasibility study



(2) Send our form

Fax / e-mail / Wechat
Question for basic design & estimate



(3) Reply to us

Fax / e-mail / Wechat
Business possibility



(6) Contract



(5) Basic design consultation



(4) Business proposal



Basic Design
PRINCIPLES

Proximity
Alignment
Contrast
Repetition



Domestic and overseas site trips (if necessary)

Basic design
Detailed estimate

Estimate
Mass balance
Economic index
Simplified design

✓ *(5) If the buyer asks to visit the site of domestic or overseas, the buyer has to pay the fee.*

Overseas Business Road Map



BUSINESS SCOPE

CHEONHO
Scope

Design/Production
Technical & Trial running support
Repair parts
Sales Support



PARTNER
Scope

Global Market

Sales,
Supply, Operation,
Installation, Manual,
Education, Trial run

**Customer
satisfaction**

"A beautiful environment and the pursuit of human happiness"

**A global joint
venture**

**Local
reinvestment
of revenue**

**Social
enterprise**

Thank You ☺

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