

소형 에티아 반응로 소개

1. SET-UP 개요

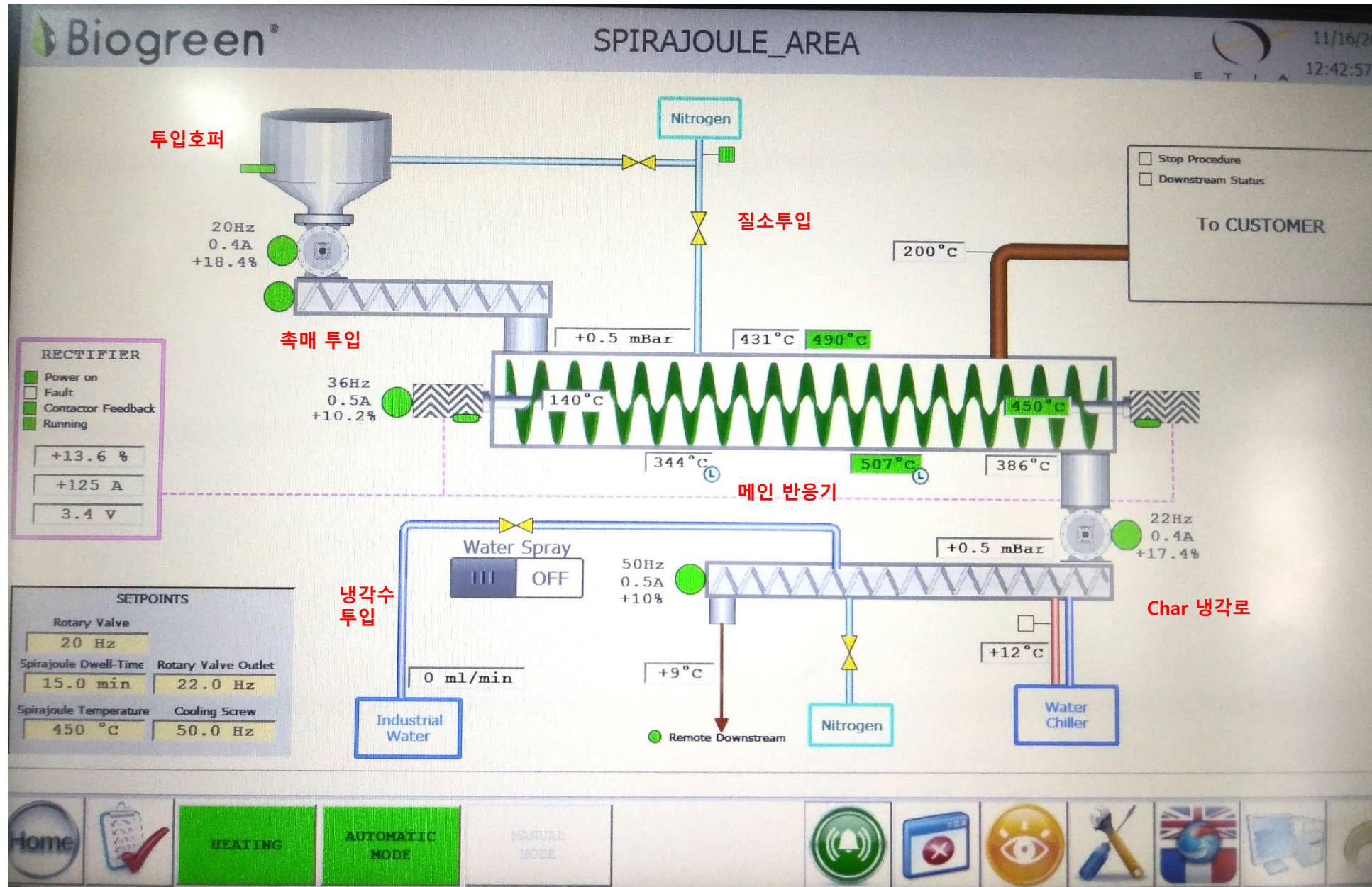
- ▶ 셋업기간 : E사 - 18.11. 5 ~ 11. 16
M사 - 18. 11. 1 ~ 11. 16
- ▶ 참여 엔지니어 : E사 - 기욤(기구) , 시몬(전기)
M사 - 김도일 대표 및 김선중 이사 외 5명

2. E사 Wrap-up

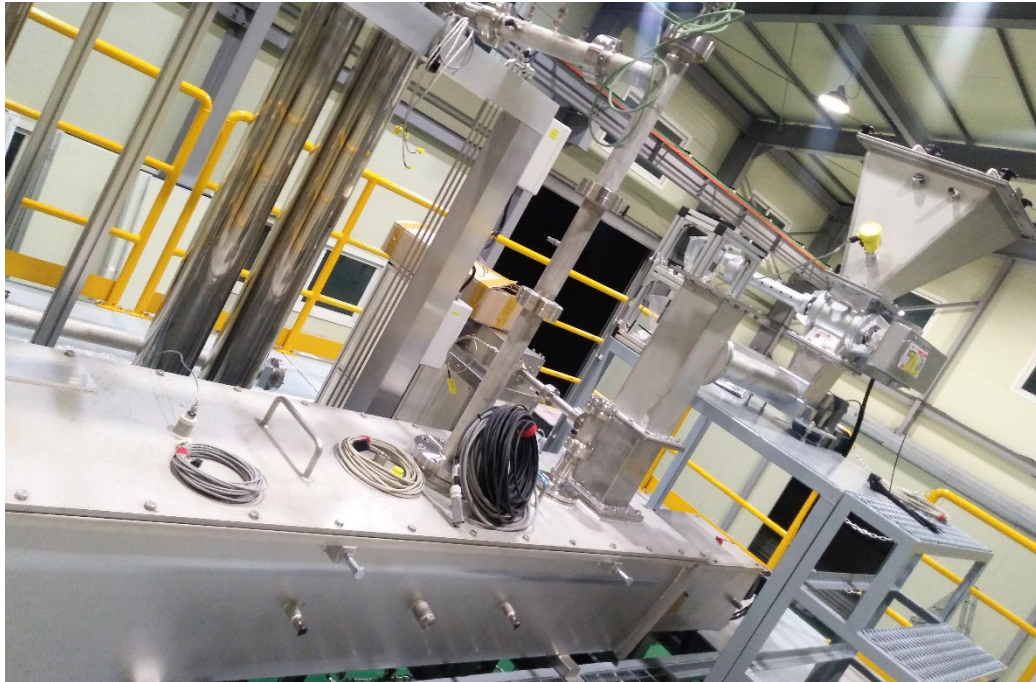
◆ 운전시 주의 사항

1. Operation Manual을 숙지 후 운전에 들어갈 것
2. 운전에 들어가기 전에 배관의 막힘이나 오염 여부를 확인할 것
3. 가능한 Size가 균일한 원료를 사용할 것을 추천함.
4. Spirajoule에서의 운전 압력
 - ① Normal operation pressure : -3mbar ~ +1mbar
Max. allowable operation pressure : -5mbar ~ +2mbar
 - ② 기욤이 알기로는 Gasket의 허용 압력이 3mbar로 알고 있는데 확인해보겠다.
 - ③ 5mbar로 운전이 가능하면 programme을 수정해 달라고 송이사가 요청하였으며, 기욤은 Mail로 질의해달라고 하였음.
5. 원료 투입량 계산
 - ① 기욤이 작성한 표를 메일로 요청하면 보내주겠다고 하였음.
 - ② 미래 김선중 이사 의견으로는 Feedstock에 따라 Rotary v/v의 speed를 바꿔가면서 계량하는 안을 제시하였음.

3. Control panel



셋업
설비
사진
참조

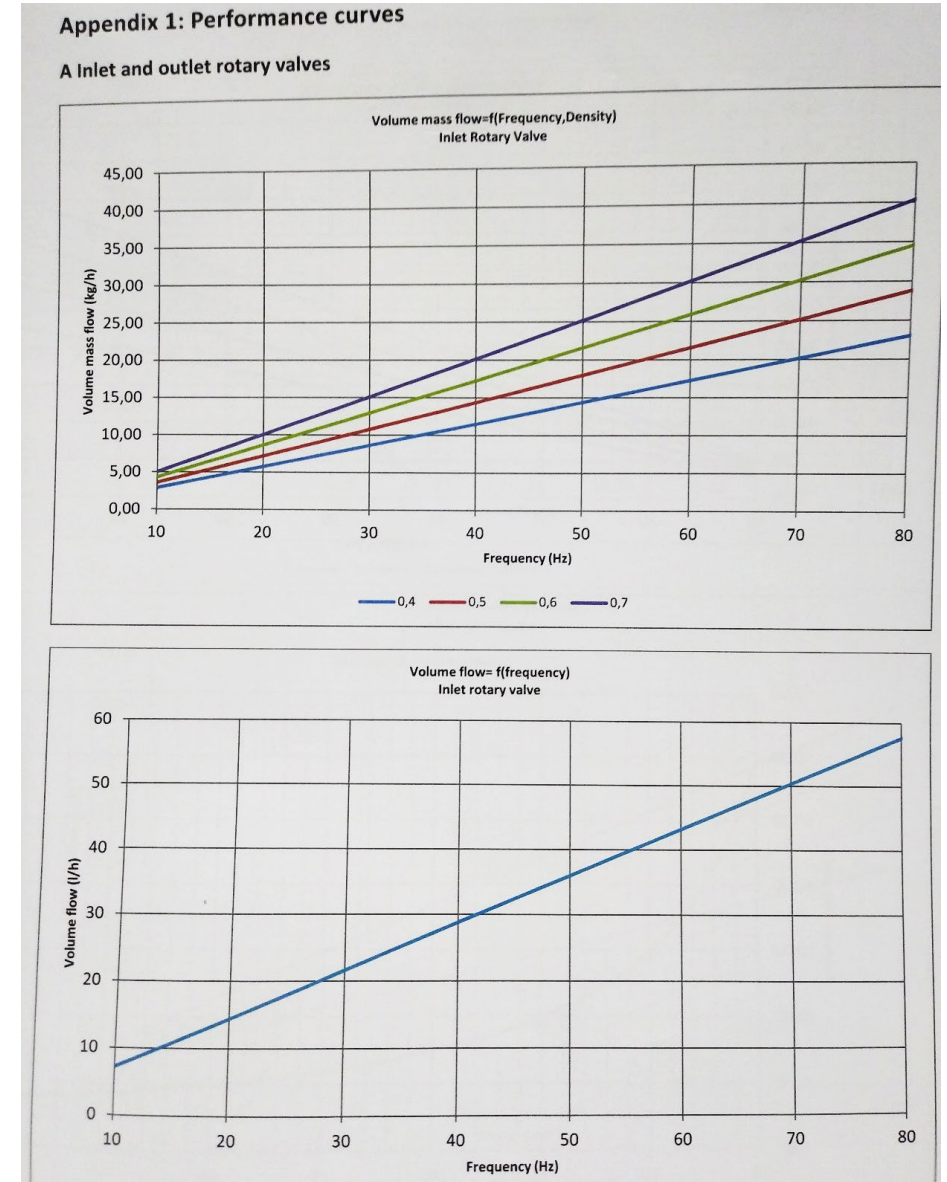
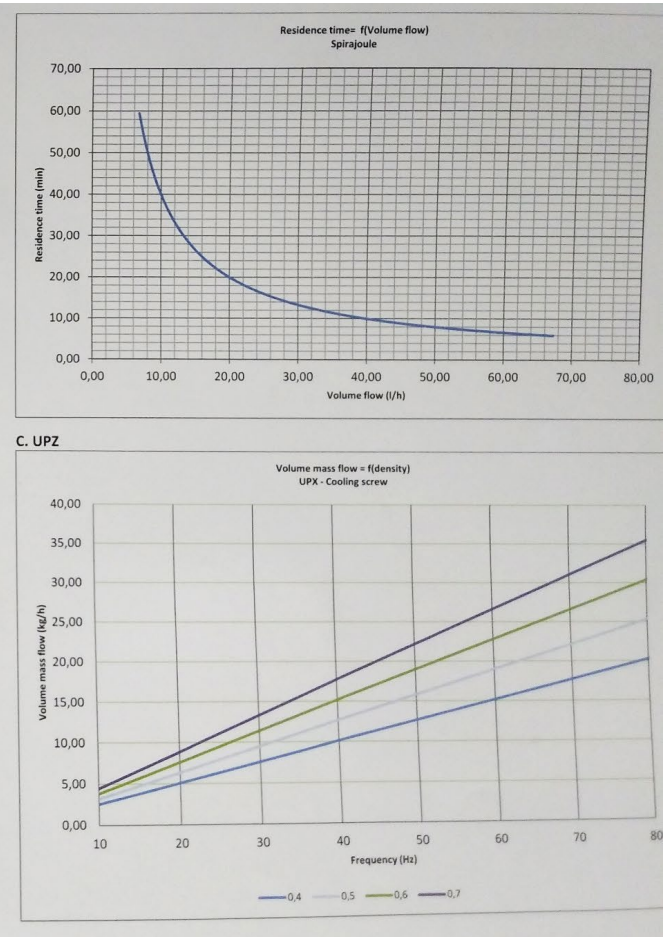
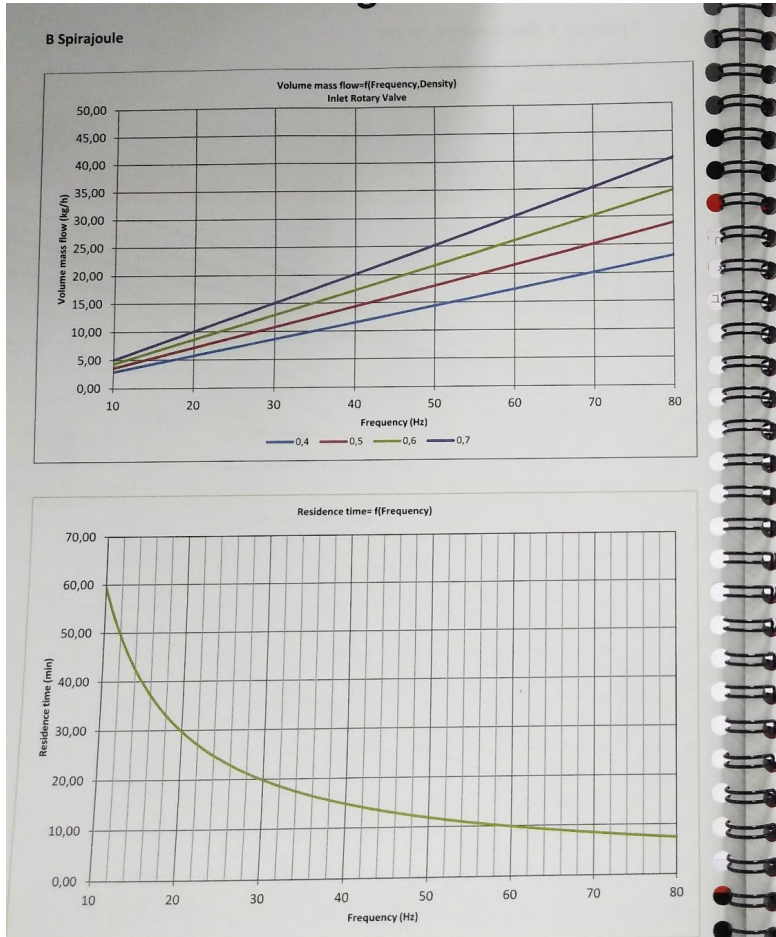




CEP설비소개_1542608517437.211421812

4. Operational Data

- ▶ Sirajoule과 투입 Rotary valve의 투입물에 대한 상관관계 data는 추가 보완해서 창조에서 받기로 함 (~11/25)



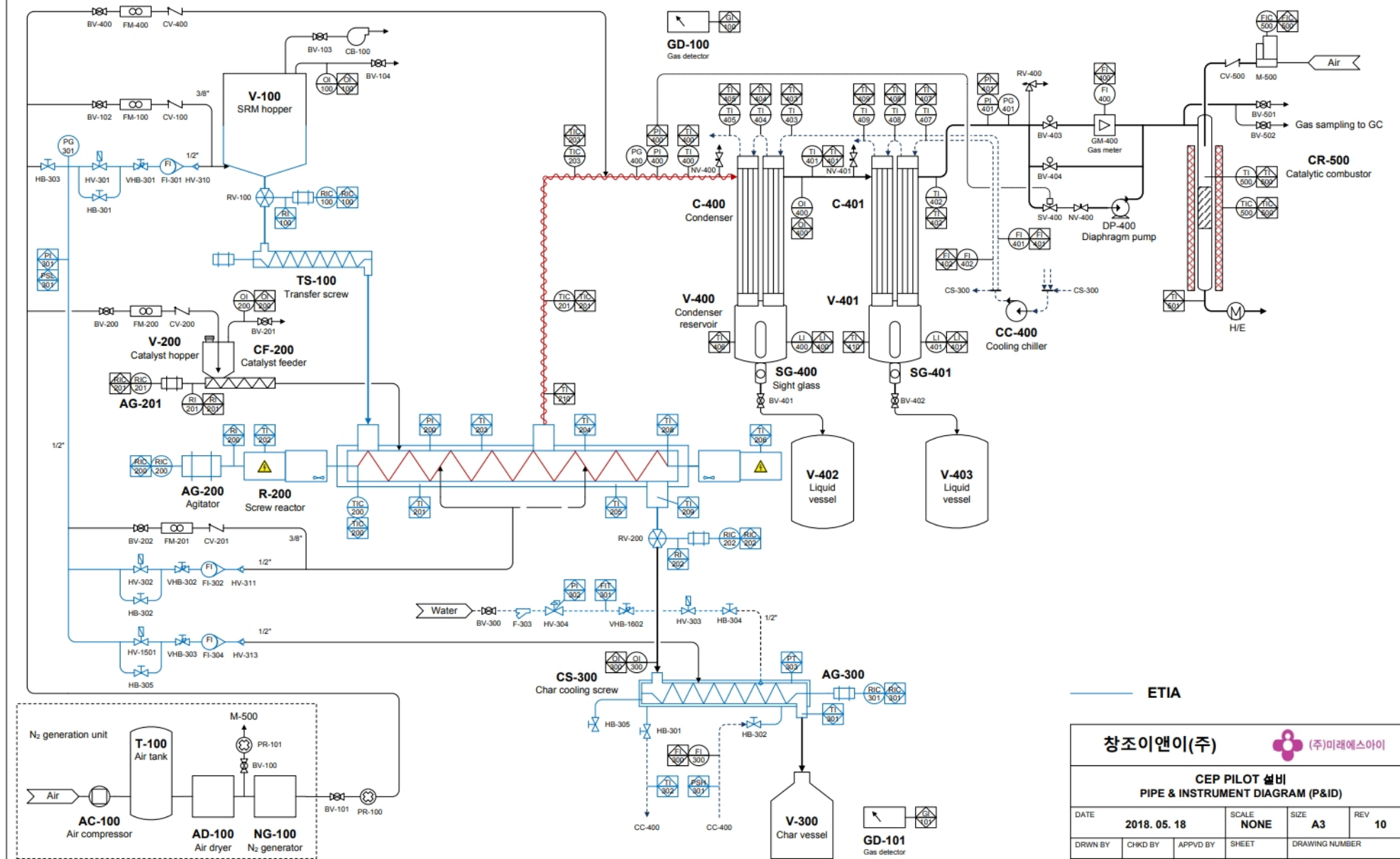
4. Spare parts List

▶ 상세한 스펙
추가 보완해서
창조에서 받기로
함 (~11/25)

Spare parts specifications

Original parts and accessories are designed especially for the machine. Spare/wearing parts that are not supplied by the manufacturer have not been tested and approved by the manufacturer. The installation and/or use of these products may change the specified design properties of the machine in some circumstances and thus adversely affect its safety levels. The manufacturer is not liable for any damage resulting from the use of non-original parts and accessories or from the incorrect installation or replacement of parts.

<i>Description</i>	<i>Quantity</i>
Level sensor Vegavib	1
Complete brush holder for power (1 set for a technical box)	20
Chain for rotary valve	2
Brush holder for temperature signal transmission (kit for 1 SPJ)	2
Kit of graphite braid for shaft sealing	1
Kit for SPJ gasket cover	1
Inductive sensor for rotation control	1
Temperature sensors for product, atmosphere, concrete (Tc K)	6
Temperature sensors for screw (Tc K)	3
Set of concrete for 1 SPJ (Concrete covers, sides, extremities)	1
	1



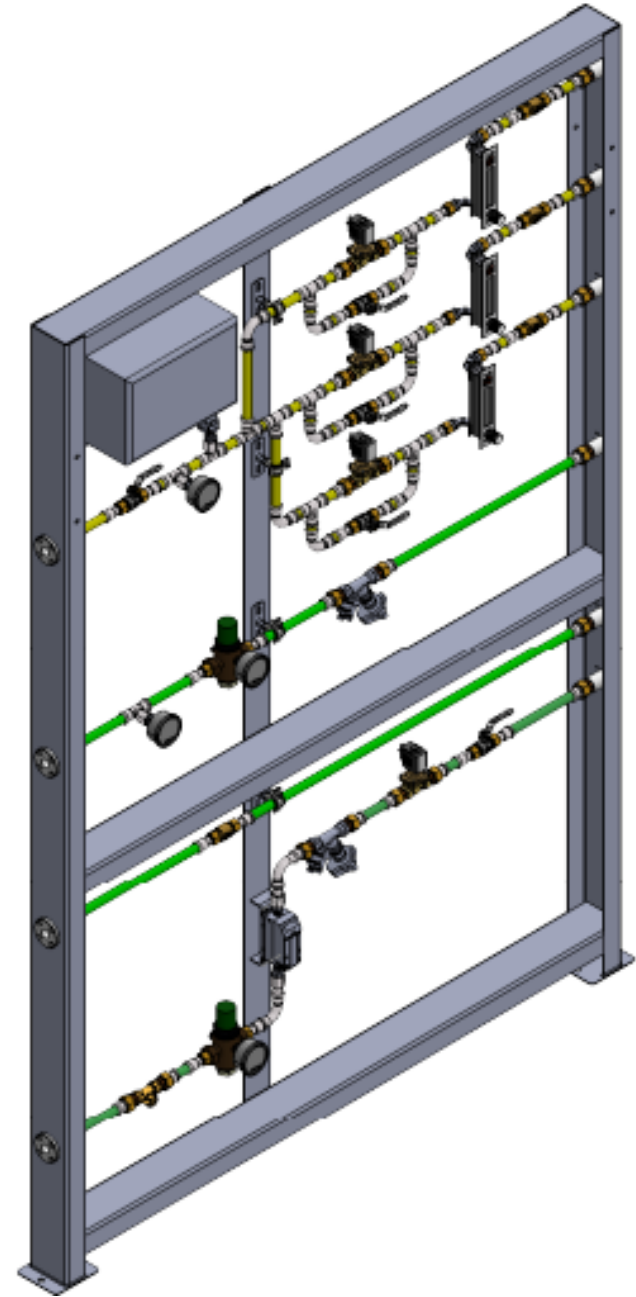
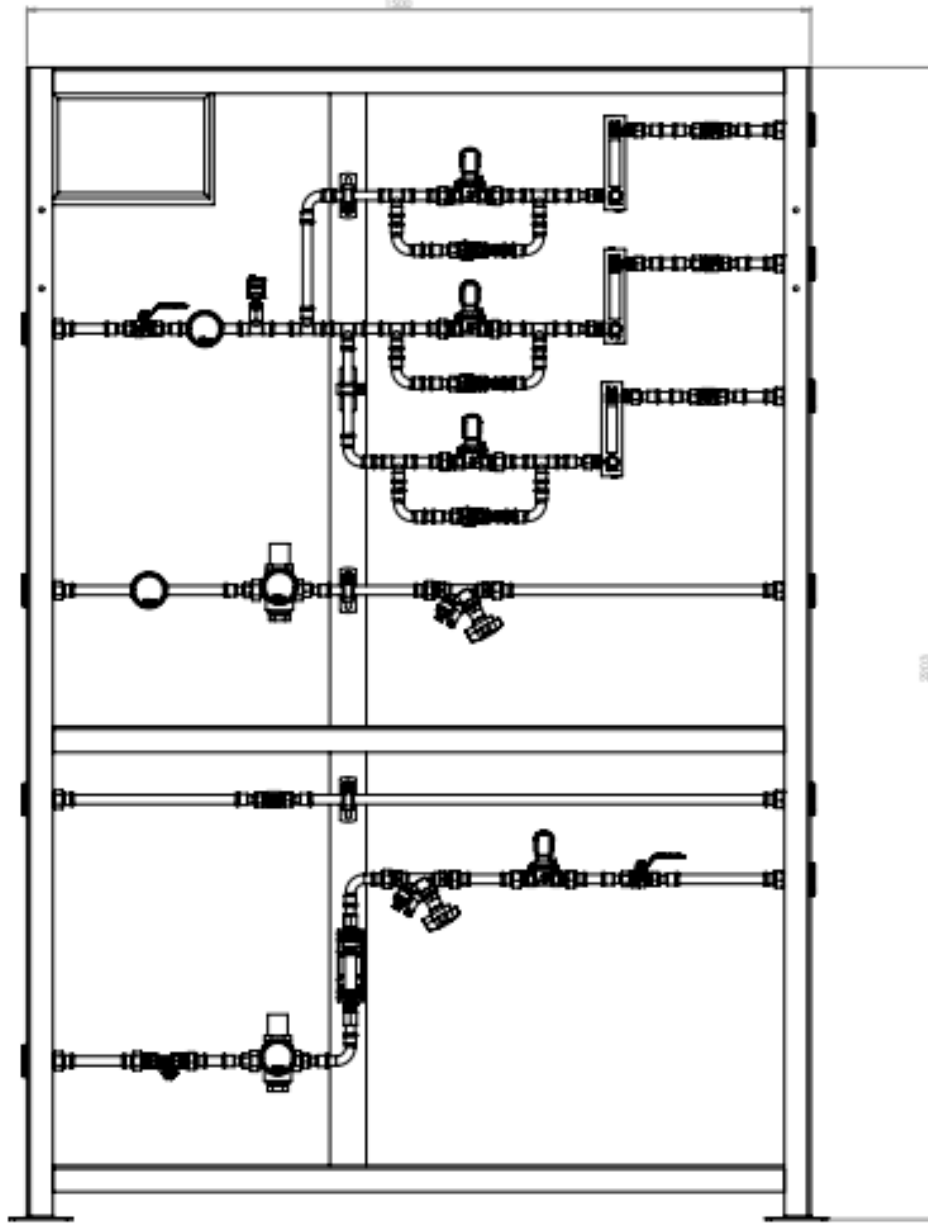
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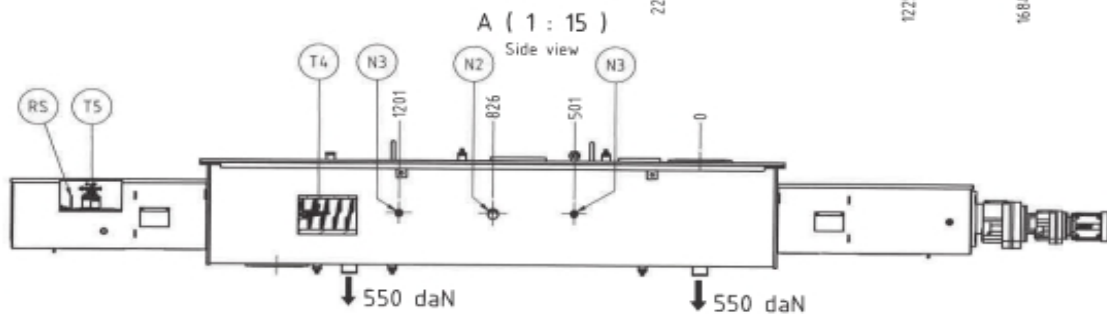
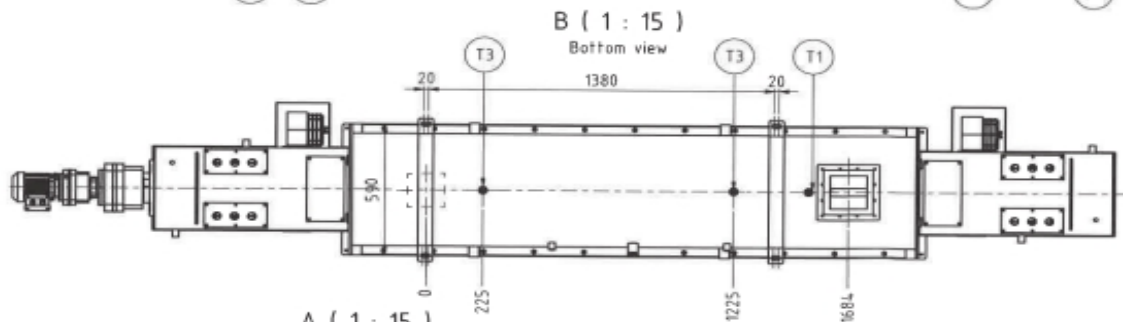
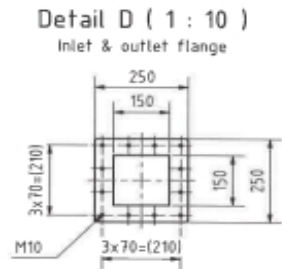
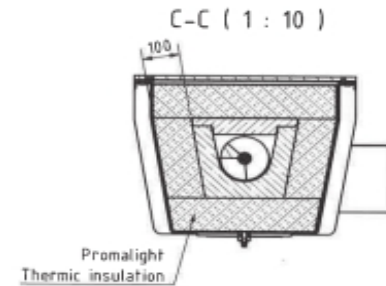
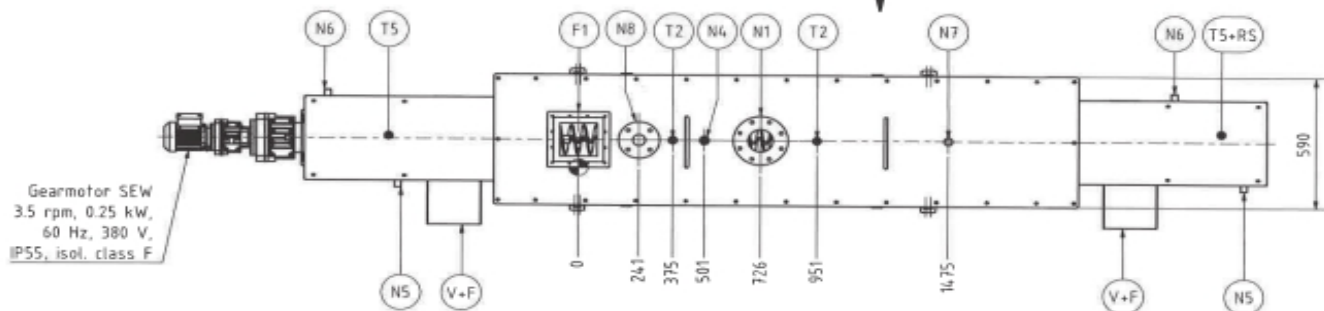
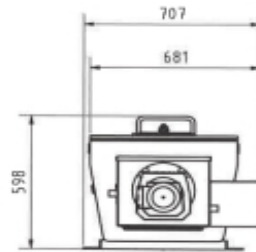
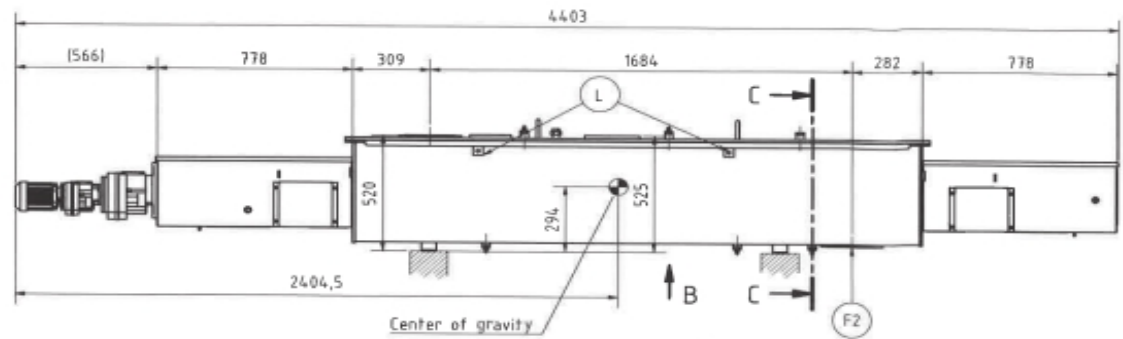
창조이앤이(주)  (주)미래에스아이

CEP PILOT 설비
PIPE & INSTRUMENT DIAGRAM (P&ID)

DATE	2018. 05. 18	SCALE	NONE	SIZE	A3	REV	10
DRWN BY	CHKD BY	APPVD BY	SHEET	DRAWING NUMBER			
KSJ	KDI		1 OF 1	MSI-PS-SRF-PID-10			

유체 조절 플루이드 패널

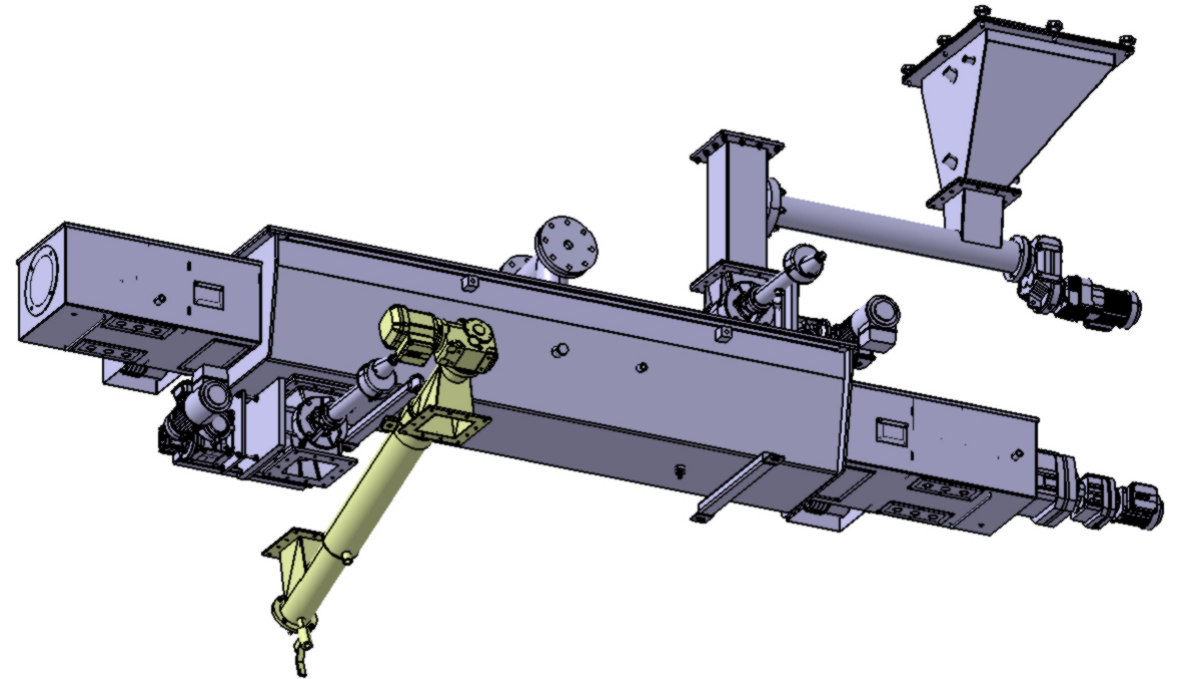
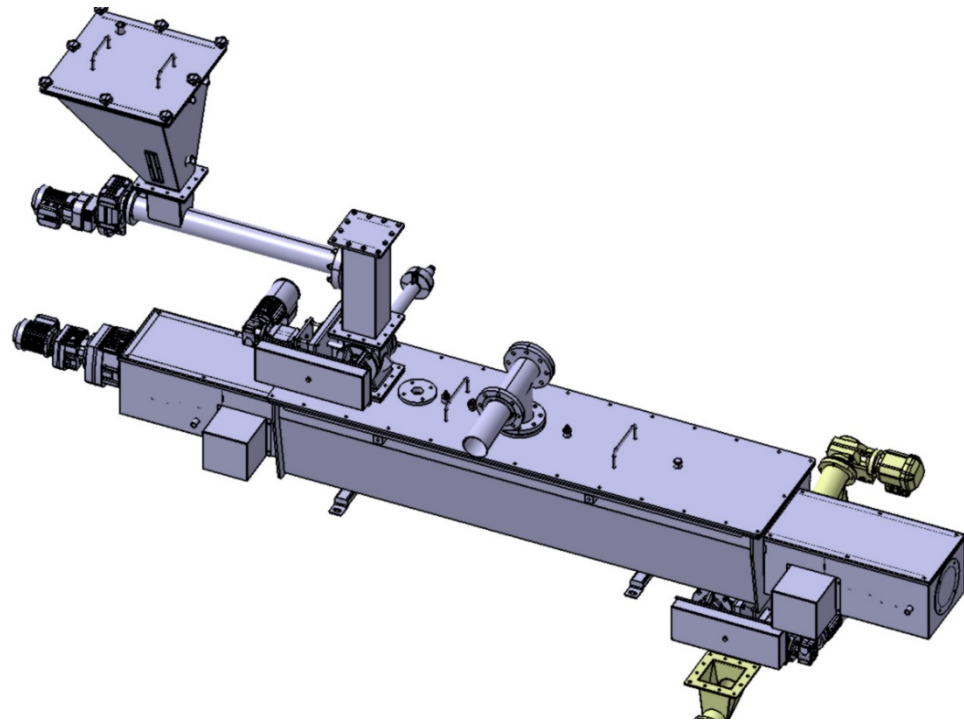
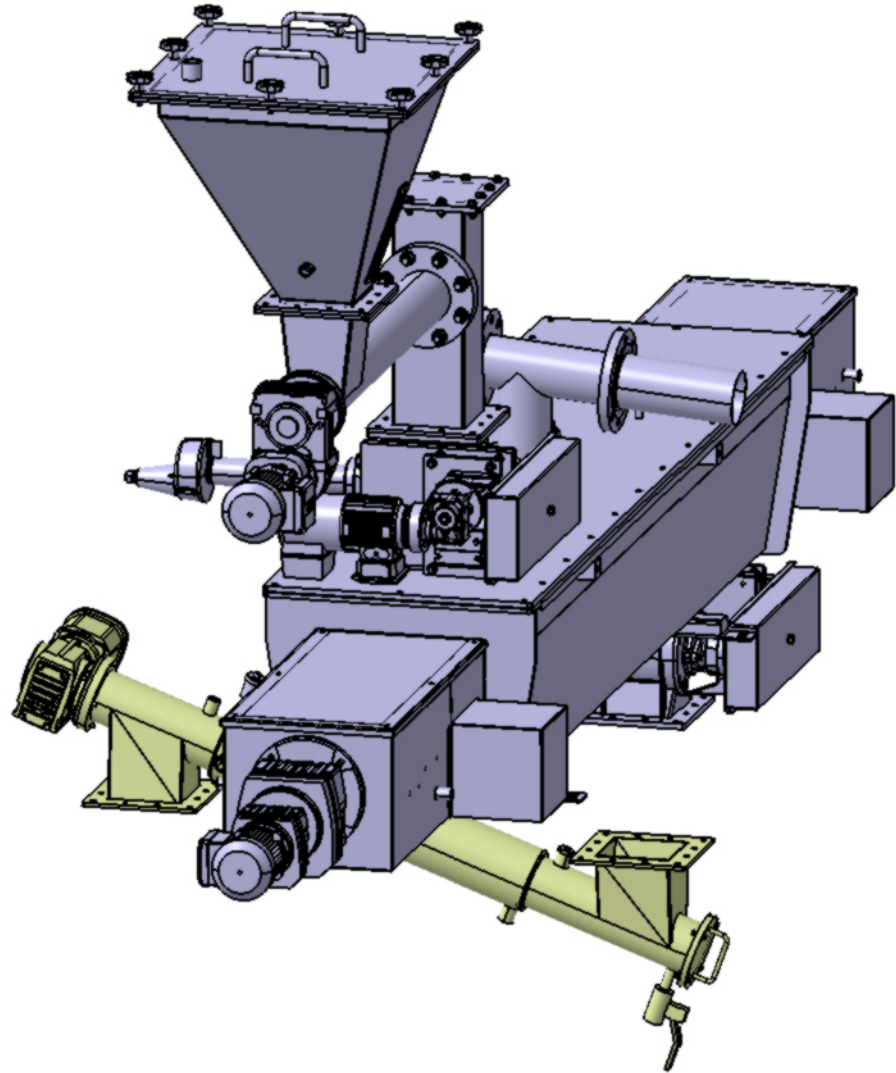




Weight: appx. 1200 kg
Acc. to data sheet 40.300.SPEC_68.049

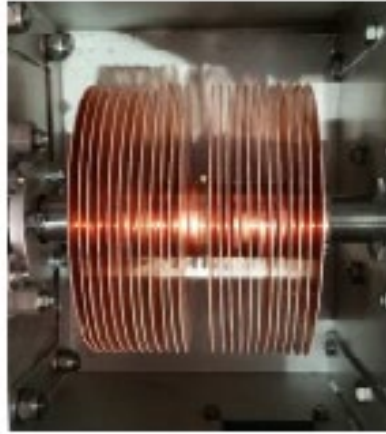
Document of approval		Date	Name	Scale 1 : 15
Project no.	68.049	05.03.2018	ls	
Date of issue	06.03.2018			
To prevent delivery delay, please return approved drawing by	07.03.2018			
<input type="checkbox"/> Revise and resubmit	Date	05/03/2018		
<input type="checkbox"/> Approved as noted	Signature			
<input checked="" type="checkbox"/> Approved	Day	06.03.2018	ls	
	Day	Description	Sign	
LSM Systems Rohrmatstrasse 6 4462 Bocklitz Switzerland www.lsmag.ch				SPJ-HT130L2 Biogreen Chango 68.049.01 - Rev.01
ISO 16016				Sheet A2 1/2 B

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Technical boxes

Each end of Spirajoule® has a cooling area with copper plates and technical boxes where the heating power is connected.



Extension and torque of the spiral is controlled by an inductive sensor located in the outlet side technical box that manage continuously the screw rotation through a cogwheel installed on the Spirajoule screw shaft. In case of strain detection, the process is stopped to prevent the screw damage.

Transformer

Biogreen system is equipped with continuous generator (transformer based on high frequency technology. An inverter is used to convert a DC voltage into high frequency AC voltage. The power supply of the transformer is specially designed and developed to meet all the legal requirements and regulations while maintaining compact size of equipment. Detailed characteristics of the transformer provided by the producer is enclosed to this manual.

Temperatures inside the technical boxes are controlled continuously by temperature sensors that stop the heating in case of overheating above 120°C. Cooling air generated by two fans installed outside the technical boxes is injected into the cooling boxes.



Reference picture of the Technical Box of a unit 130



