

beanE A

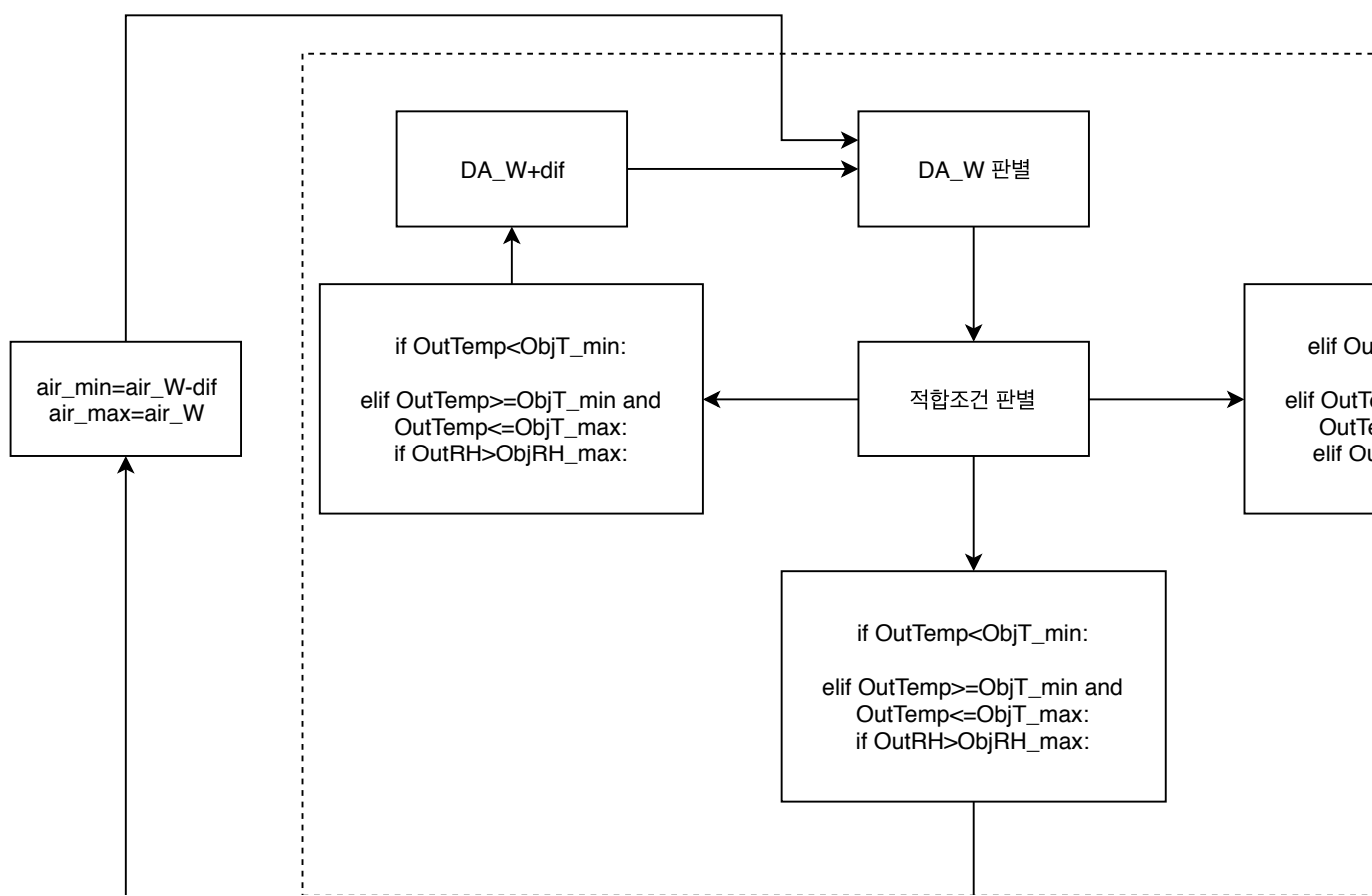
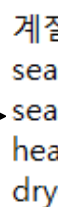
heater_Min

ObjRH_min/ObjRH_max

콩 건조 후 비엔탈피

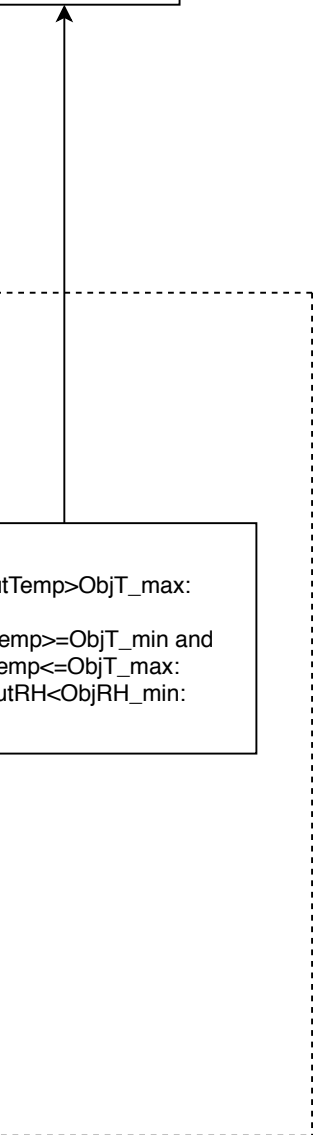
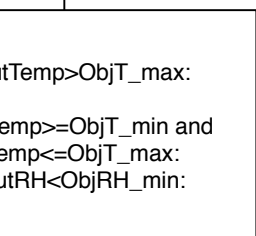
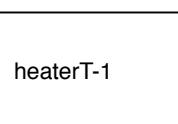
입구 최저 가열온도

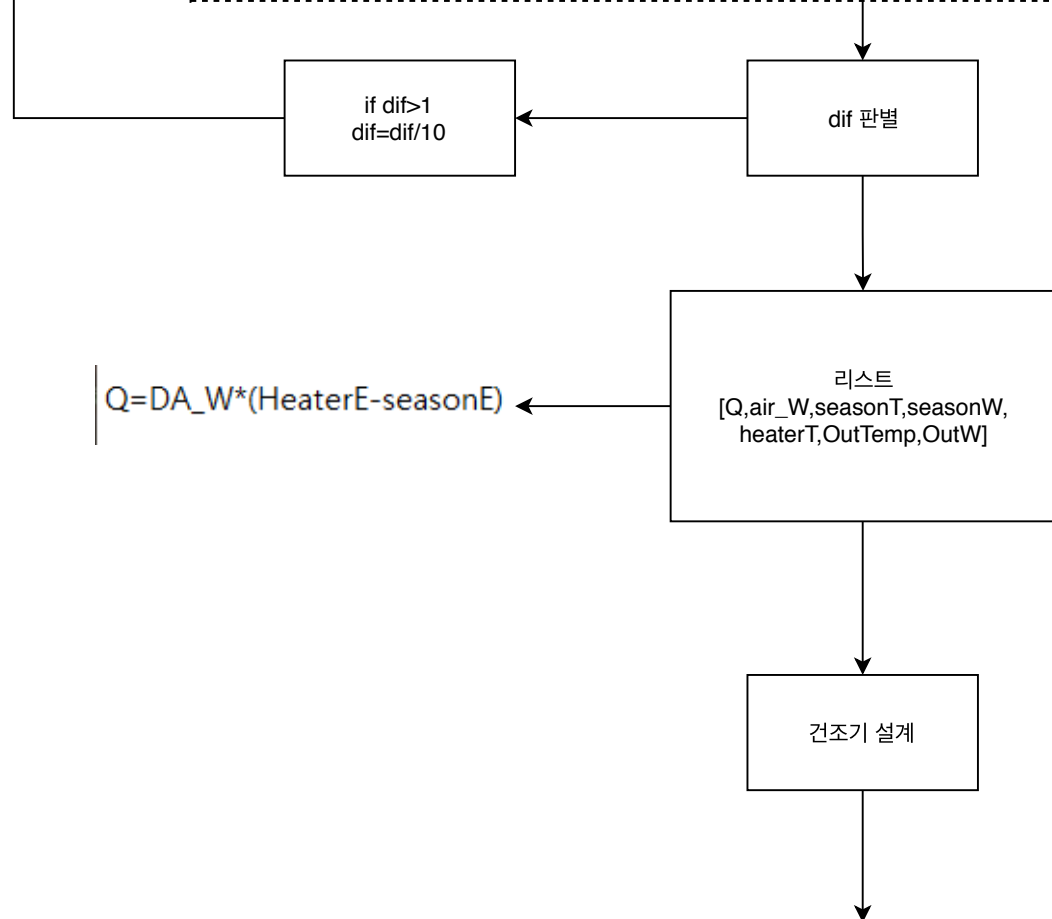
최저/최고 출구온도



설정
sonT
sonRH
aterEff
erEff

계절 기온
계절 상대습도
가열기 열효율
건조기 열효율





drytime
bulkD
 $\text{bean_flow} = (\text{bean_W} / \text{bulkD}) * \text{drytime} / 24$

콩 건조시간
콩 수분함량 별 벌크밀도
콩 유량

exspace 인풋
 $\text{bean_Trueflow} = \text{bean_flow} * (1 + \text{exspace})$

콩 여유공간
콩 실제 유량

air_D

이상기체 밀도

beantoair 인풋
 $\text{air_flowW} = \text{air_W} / \text{air_D} / (60 * 60 * 24)$
 $\text{air_flowV} = \text{air_W} / (\text{air_D} * (\text{seasonT} / 273)) / (27 * 60)$
air_time

콩 대비 공기 비
초당 공기 유량 kg
분당 공기 유량 m³
공기 잔류 시간

$\text{dryerW} = \text{float}(\text{input}(\text{'폭 비율'}))$
 $\text{dryerD} = \text{float}(\text{input}(\text{'깊이 비율'}))$
 $\text{dryerH} = \text{float}(\text{input}(\text{'높이 비율'}))$

$\text{length} = \text{pow}((\text{bean_Trueflow}^2) / (\text{dryerW} * \text{dryerD} * \text{dryerH}), 1/3)$
('폭 깊이 높이 =' ,dryerW*length,dryerD*length,dryerH*length)

단위
건조

$\text{fanE} = \text{float}(\text{input}(\text{'송풍기 전압소모량'}))$
 $\text{fanP} = \text{float}(\text{input}(\text{'송풍기 풍량 CMM'}))$
 $\text{fanEff} = (\text{air_flowV} / \text{fanP})$
 $\text{fankW} = (\text{fanE} * \text{fanEff}) * (24 * 90)$

송풍
전력

$\text{Elecprice} = \text{float}(\text{input}(\text{'전기 요금 원/kw'}))$
 $\text{LNGprice} = \text{float}(\text{input}(\text{'LNG 요금 원/MJ'}))$

$\text{print}(\text{'송풍기 필요 수'}, \text{fanEff})$
 $\text{print}(\text{'90일간 전기요금 원'}, \text{fankW} * \text{Elecprice})$
 $\text{print}(\text{'90일간 LNG 요금 원'}, ((\text{Q} / \text{heaterEff}) / 1000) * \text{LNGprice} * 90)$

길이
기 크기

기 필요수
소모량

