



- Year/Month : 2022. 12
- Client/Co-company : Dongwoo HST
- Engineer : ILSHINAUTOCLAVE / PUMSTER
- Location : Asan, REPUBLIC OF KOREA

**TITLE**

Hot isostatic pressing equipment  
- Large or Plant scale system

**PROCESS**

System condition

Hot zone dimensions	ø 350 x 1,600mm
Max. temperature	2000 °C
Max. pressure	200 MPa

**MAJOR APPLIANCES**

HIP Vessel (KGS)

Max. temperature	200 / 250 °C
Max. pressure	200 / 220 MPa
Vessel inner dimensions	ø 600 x 1,900 mm
Vessel flame	2,250 x 3,734 x 4,955 mm
Capacity	0.53 m <sup>3</sup>
한국가스안전공사(KGS) 검사필	

Main Gas Compressor

Flow rate	Max. 70N <sub>m</sub> <sup>3</sup> /hr
Compress ratio	7.5:1(1st Step), 16.4:1(2nd Step)
Suction pressure	3~15 MPa
Max. pressure	200 MPa

Heater

3 Step Heater (top-middle-bottom zone)	
Power	83, 95, 150 KwA
Capacity	380V 3PH 60Hz

Ar Gas Recycle system

Recycle storage tank	16.5MPa, 40°C, 2.6m <sup>3</sup>
Gas booster	GB- DD-14 (9.8MPa), 60 (42MPa)
Ar gas recycle percent	95%

**FEATURE**

- 불활성 가스인 아르곤을 활용한 생산 설비
- ASME U2 압력용기 강도 이론 설계 (ASME U2 STAMP 획득)
- 한국가스안전공사 특정용기 검사필
- 고압가스 안전 규정에 의한 허가 및 전문 시공

**구조도**

