







#### 본사 / 공장

경기도 여주시 가남읍 경충대로 1022

T +82 (31) 882 9800 대지 17,500 m<sup>2</sup>

F +82 (31) 881 6611 건물 10,000 m²

#### 서울사무소

서초구 반포동 746-15 청원BLD.4층

T +82 (2) 3446 8160~1

F +82 (2) 3446 8133

#### 창원사무소(영업)

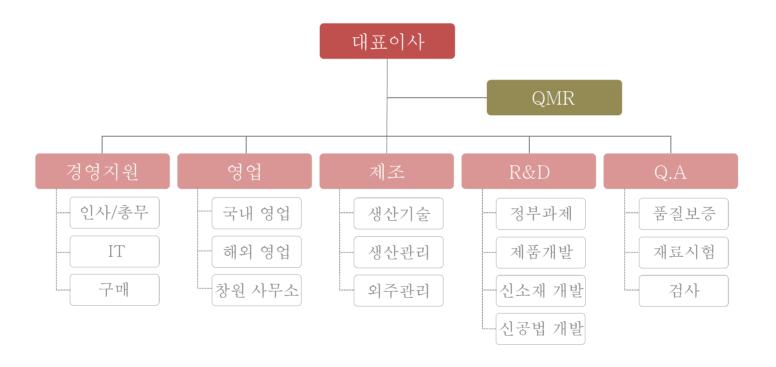
창원시 팔용동 174-4

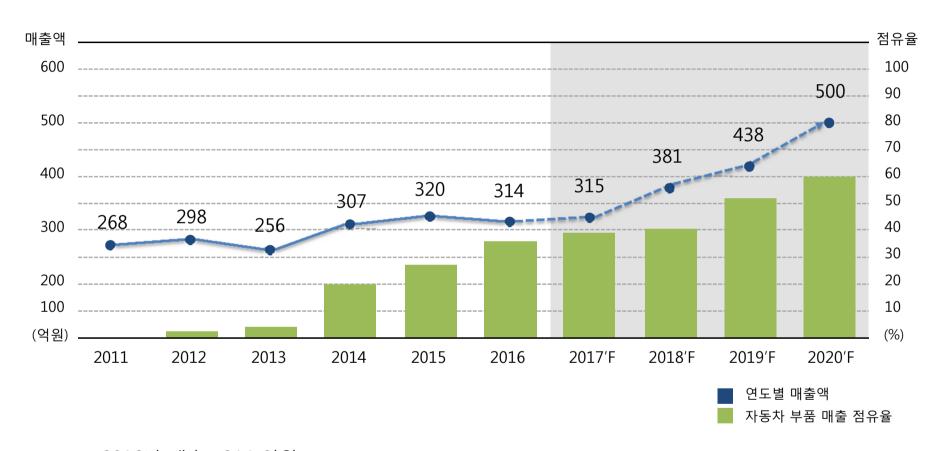
M +82 010-5446-7213

T +82 (070) 8289-2536

**F** +82 (070) 8289-2536

1974 - 1999	1974. 10 1978. 05 1988. 07 1993. 04 1993. 11	정밀주조공장 설립 방산업체 지정 품질1등급 공장 획득 기술연구소 설립 한국 원자력 연료 협력업체 인증
2000 - 현재	2000. 07 2000. 11 2001. 06 2007. 06 2011. 10 2012. 07 2012. 12 2013. 01 2013. 04 2013. 05 2013. 08 2013. 09 2014. 04 2015. 04	삼성테크윈-2공장 협력업체 인증 보잉 DI 9000 인증 한국항공산업 협력업체 인증 서울 구로에서 여주로 공장이전 7대 선급인증 획득 TS16949 & ISO 14001 인증획득 한국동서발전 정비적격업체 인증 SGS AS9100&ISO9001 인증획득 현대-기아 SQ(협력사 품질인증 A등급) 획득 한국남부발전 정비적격업체 인증 한국중부발전 정비적격업체 인증 현대수소차, 코렌스 EGR부품, Ti-Auto GDI Rail 중소기업진흥공단 일하기 좋은 으뜸기업 선정 중소기업청 뿌리기술 전문기업 선정



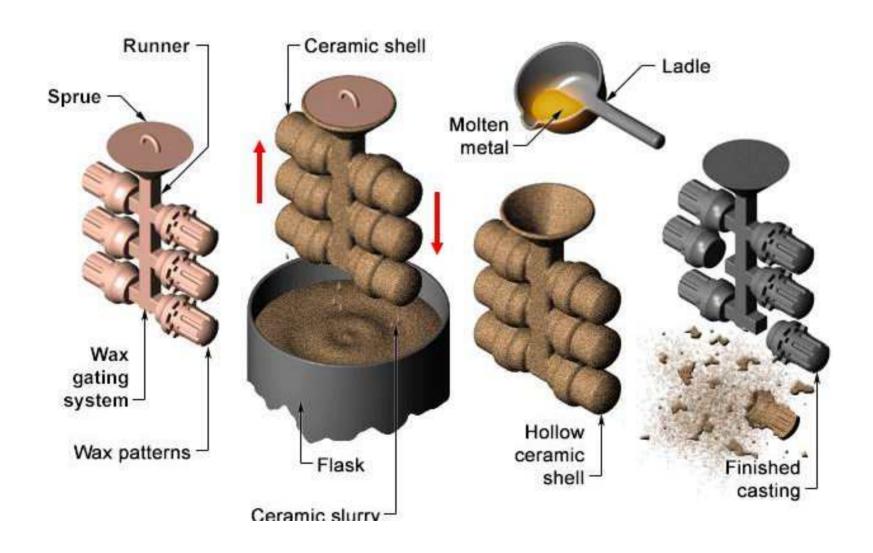


- 2016년 매출 : 314 억원

- 2017년 매출 목표 : 315 억원

- 인원 : 188명 (연구소 6%, 품질인원 : 8%)







Aluminum Alloys (356, A356, A357 A201, etc.)

PPT Hardening Stainless Steels (15-5PH, 17-4PH)

Austenite Stainless Steels (304, 305, 306, 316)

Martensite Stainless Steels

Duplex and Super Duplex

Nickel & Cobalt Base Alloys (air melt)

Nickel & Cobalt Base Super Alloys (for Vacuum Alloy)

Heat-resistance Alloys

Carbon & Low Alloy Steels

Cast Tool Steels



Capacity	정밀주조: 10,000 몰드/월 (약 240 톤) 금형 제작: 50 Sets 이상/월	
초도품/금형 소요일	30 일 ~ 60 일	
양산 소요일	As Casting : 30 일, As Machined : 40 일	

보증 및 책임 : 상호 협의 결함 정책 : 소재 무상 교환

## 제조 설비 현황









MCT, C.N.C 선반, 드릴 M/C

사출기 (자동, EXT, 수동, C형 )

로보트 코팅시스템

디왁싱 Autoclave

고용량 고주파 유도로

진공 주조 장치

넉아웃 머신 (탈사 장치)

워터젯

Speed FAM 사상장치

유압 교정 프레스

샌드 블라스트

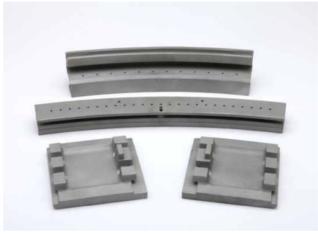




### 주조용해장비 사양 콘샥제작

주조시스템 -	2-챔버(2-zone) 시스템 (용해 챔버, 몰드 챔버)
전력용량	225 kW, 3000Hz'
주 볼트	460 volts / 3 phase / 60Hz
최대 온도	1,650℃
진공용량	1200㎡/hr (blower), 250㎡/hr (회전식 펌프) - 용해 챔버 4,200㎡/hr (블로어), 500㎡/hr (회전식 펌프) - 몰드 챔버
가능 용량	75Kg
가능 몰드 (mm)	1) 직경 : Φ600, 2) 높이 : 700
최고 진공도(용해 챔버)	4.5 ×10 <sup>-5</sup> ~ 10 <sup>-6</sup> Torr (확산 펌프)
생산 능력	7.5 tons/월 , 400 molds/월







IGT (Industrial Gas Turbine)

Turbo Charger (Vessel, Automobile)

- Inconel 738LC, Mar-M 247, Inconel 939, Hastelloy X
- Turbine Blade, Turbine Vane, Ring Segment, Shroud Block and etc.
- Inconel 713LC, Inconel 718
- Turbine Wheel, Turbine Blade etc.



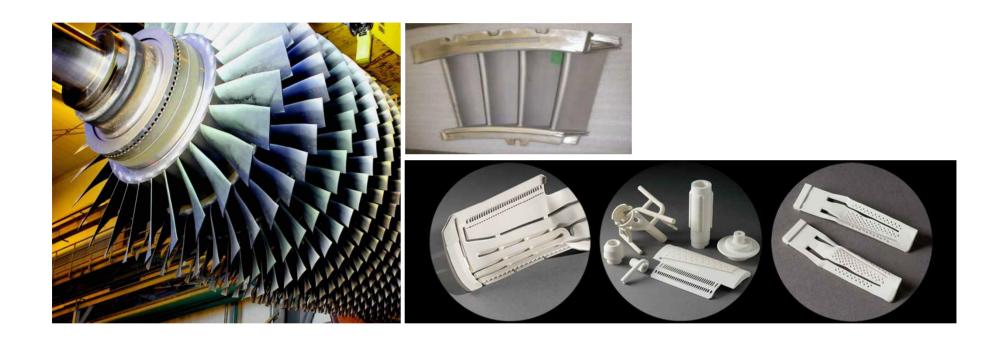




인공관절

- ASTM F-25

- Femoral Component, Tibial Baseplate, Hip Joint(Stem)

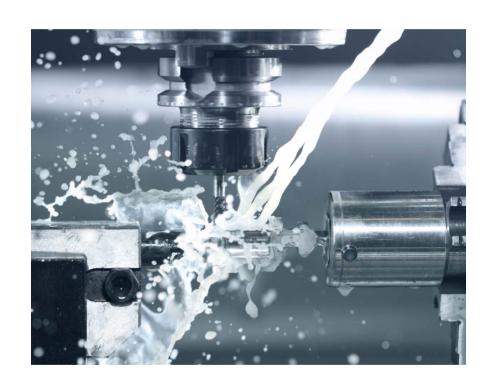


Hollow type EQX

(equiaxed crystal structure)

- Ceramic Core development technology is mandatory
- Ceramic Core Development Schedule

Engineer resourcing: Completed => Core Manufacturing facilities installation, Setup and Production from 2016

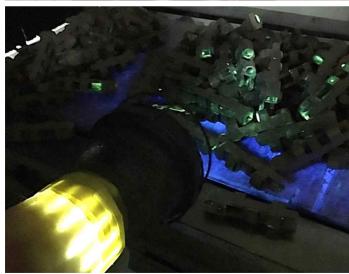


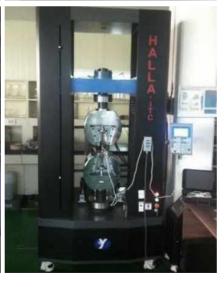
열처리	Normalized/Annealed, Solution annealed		
정밀가공	CNC, MCT 등		
도금	Chromating, Anodizing 등		
도색			
연마	Polishing		
함침	Impregnation		
유체압력시험			
하드웨어 설치	조립		

## 검사 및 시험 장비









분광분석기

삼차원 측정기(3대)

투영기

금속현미경

경도기- Brinell, Rockwell

인장시험기(UTM)

방사선 검사

형광침투탐상검사

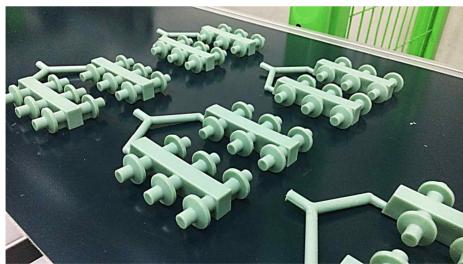
자분탐상검사

충격시험기

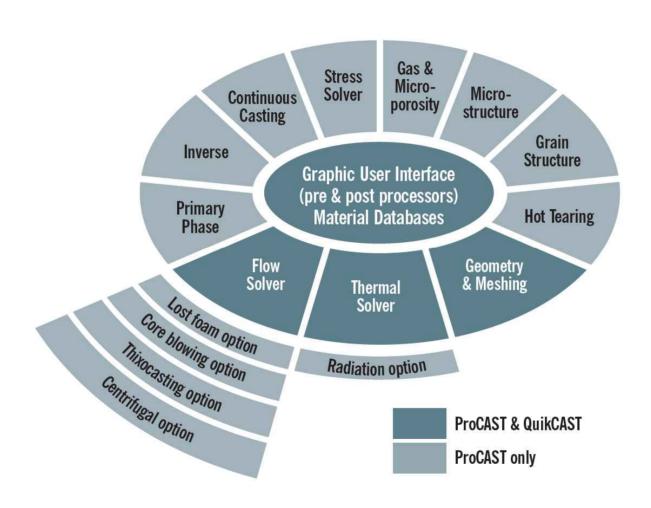
페라이트 시험기

고온인장, 피로시험기(Max 1,200℃)

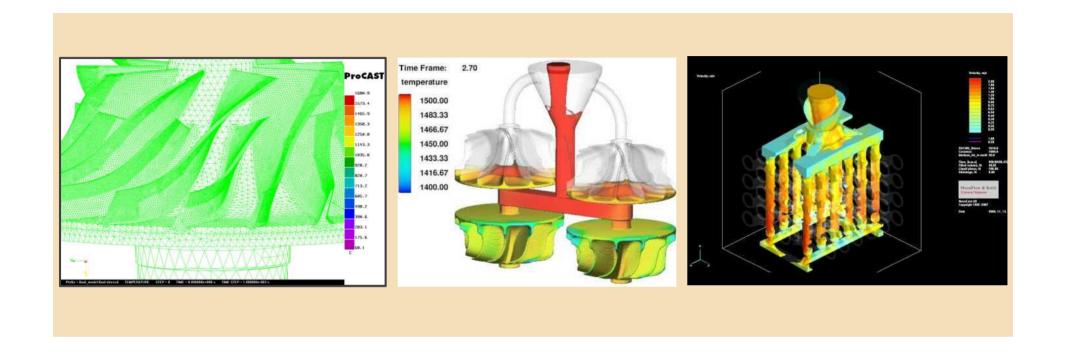








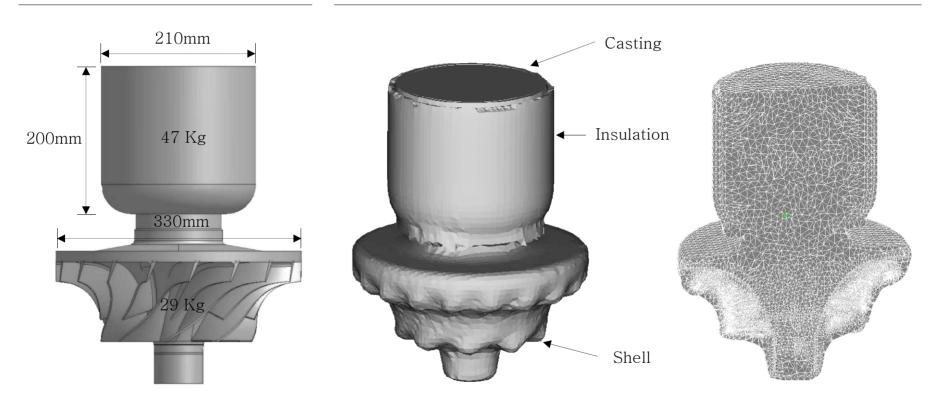
# 고체화 시뮬레이션 (PROCAST)



Program	Model
CAD	AUTO CAD 2012 (2D)
CAM	TOP SOLID CAM Ver.10.0
UG	NX 8 (3D)
Simulation	PROCAST

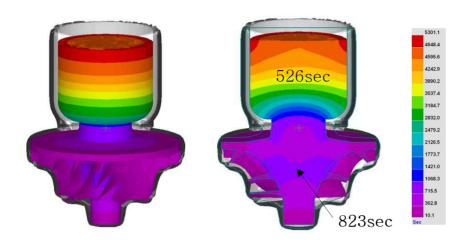
#### Wax Model

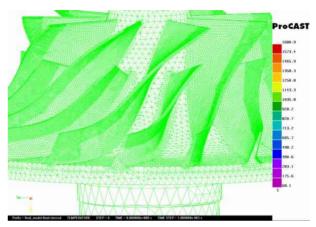
## Ceramic Coating



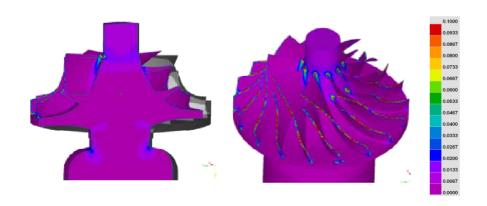
# 고체화 시뮬레이션

#### Vane Deformation





Effective Plastic Strain





# 자동차 부품 납품 실적





A356.0







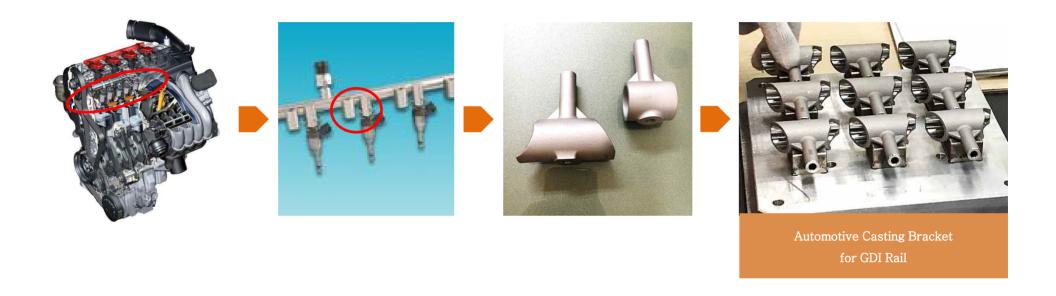
Automotive Motor Housing and Impeller Housing for Hydrogen Fuel Cell Vehicles

Material:

Annual

Quantity: 5,000pcs to 10,000pcs

고객명	관련제품	END-USER	납품사양	납품시작일	
현대자동차	SQ MARK 'A' 등	SQ MARK 'A' 등급획득		(2013.04)	
코렌스	B47D Housing 외	BMW	소재	2014.01 ~	
	BX7C	BMW	소재	2014.10 ~	
대성전기	수소차 Impeller Case 외	현대자동차	소재+기계가공	2013.03 ~	
TI-Automotive	GDI RAIL	AUDI	소재+기계가공	2012.09 ~	
우신 EMC	T/charger 개폐용 Housing	MAZDA	소재	내구성 TEST 중	
유성기업	L M BODY	투산, 소렌토	소재	2014.01 ~	

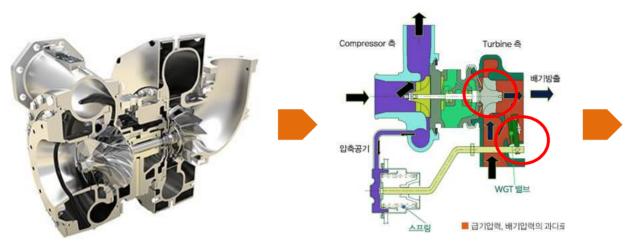


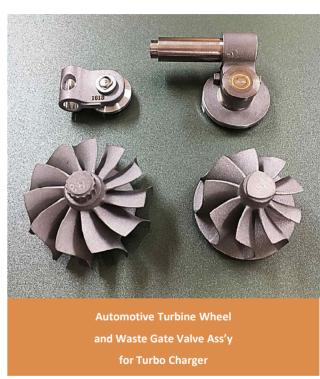
OEM: Volkswagen (AUDI, Porsche)

Material: CF8

Annual Quantity: 680,000pcs to 960,000pcs

#### Automotive Turbine Wheel and Waste Gate Valve Ass'y for Turbo Charger



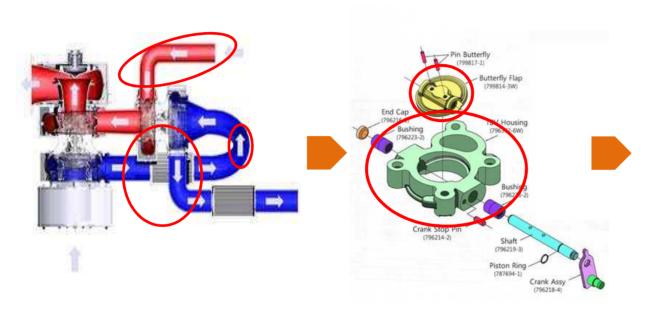


OEM: HYUNDAI-KIA Motors, McLaren, Honda

Material: Inconel 713C, HK30, DIN 1.4957 etc.

Annual Quantity: 200,000pcs to 400,000pcs

#### Automotive Butterfly Flip and Housing for 2-stage turbocharger by-pass valve



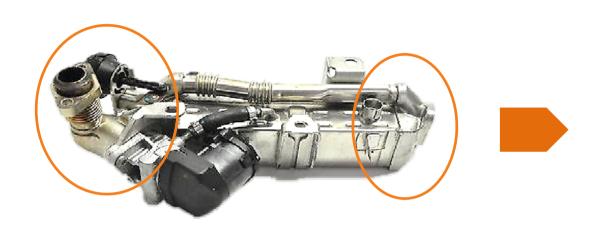


OEM: MAZUDA

Material: HK30

Annual Quantity: 100,000pcs to 200,000pcs

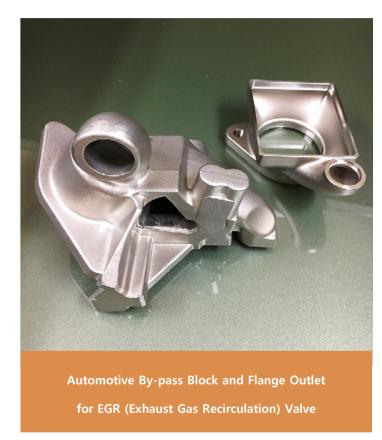
#### Automotive By-pass Block and Flange Outlet for EGR (Exhaust Gas Recirculation) Valve



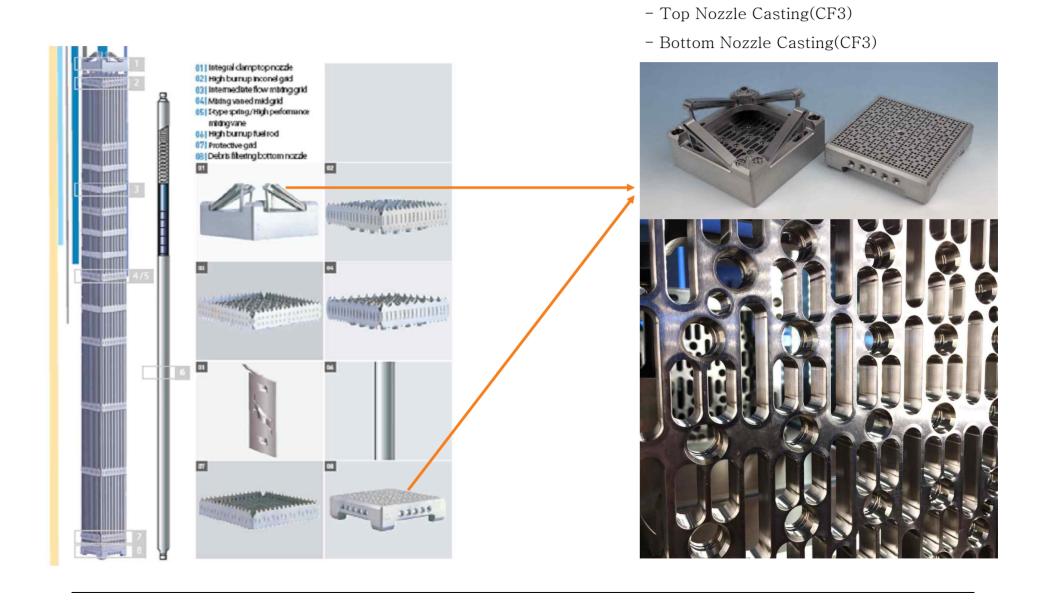
OEM: BMW

Material: CF8

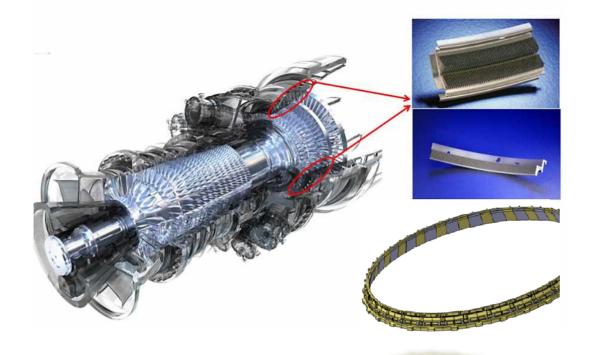
Annual Quantity: 150,000pcs to 250,000pcs





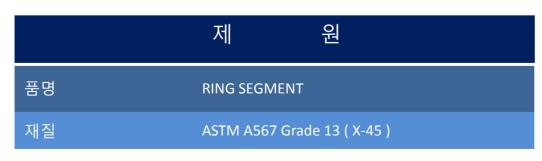


# 주요 제품 (복합 화력 부품)















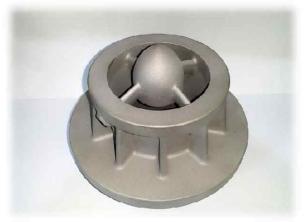
복합 화력 Swirler-CF8C









































Turbin wheel 터보차저용

Material: 소형 - Inconel 713 중/대형 - Inconel 713LC











**화염 안정화 장치 부품** Material : Inconel 718





<mark>발사체 연료 펌프 부품</mark> Material : Inconel 718









V84.3A \_ Ring Seagment Inconel 738



V84.3A \_ Hub Inconel 738



V84.3A \_ Outer Inconel 738









V84.3A \_ Fixing bolt Inconel 738















# 주요 제품(Valves Trim)

### 1" to 8" Cages



Material CB7Cu-1, CF3M, CF8M

Stellite 6(R30006)

WC9 Customer

Fisher Controls

1" to 12" Vee Balls



CG8M, CF3M, CF8M Material

Stellite 6(R30006) CW2M(Hastelloy)

Customer Fisher Controls

1" to 8" Attenuator



Material CG8M, CF8M CK3MCuN

Customer Fisher Controls

Ball Plug, Seal Protector Rings, Bearing, Retainer, Packing Flange & Follower and Yoke



Material CF3M, CF8M

Stellite 6(R30006)

CW2M(Hastellov) Customer Fisher Controls

# 1" to 2" Body



Material CF3M Customer Fisher Controls 0.5" to 4" Body



Material CF3, CF8, CF3M, CF8M

WCB M35-1(Monel) CD3MCu

Customer 3Z Corporation

1" to 2" Bonnet



CF8M Material Customer Fisher Controls 1" to 8" Seat Ring



Material Stellite 6(R30006) CF8M, CA15 Customer Fisher Controls

Module Base, Housing, Terminal Box, Cover, Bracket



Material CF8M Customer Fisher Controls

## Housing and Covers



Material CF8M Customer Fisher Controls

## 1" to 8" Cages



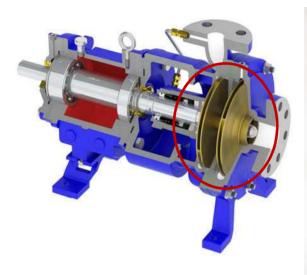
Material CF8M Customer Fisher Controls

#### Regulator Body and Flanged Bod5

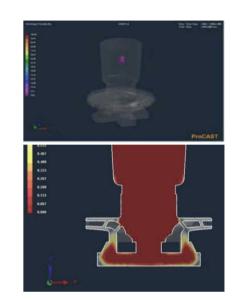


Material CF8M, WCC Customer Fisher Controls

# 주요 제품(펌프용 Impeller)

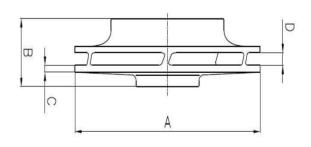






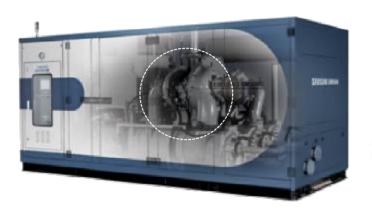
# Specification

Unit: mm		Dim. B	Dim. C	Dim. D	Weight
Dim.A	$\Phi150$ $\Phi151 \sim 200$ $\Phi201 \sim 300$ $\Phi301 \sim 400$	450 max 250max	7.0 ~ 10.0	Over 5.0 Over 7.0 Over 9.0 Over 12.0 Over 15.0	80kg max
	$\Phi 401 \sim 500$ $\Phi 501 \sim 800$			Over 20.0	

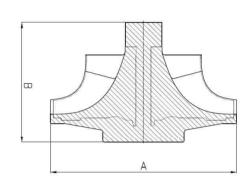




대형 선박용-NOZZLE RING







# Specification

Unit: mm	Dim. A	Dim. B	Weight
Maximum allowance	Ф600 max	350 max	80kg max

# 주요 제품(일반)



Transmitter Parts

- Flange, Adapter, Amp Dai

AI Parts

- GPTTS Housing

- Housing Electro Optical System





### AS9100&ISO9001



#### TS16949



#### ISO 14001



현대/기아자동차 SQ 인증

AD2000

한국동서발전 정비적격업체 인증미츠비시 업체 인증









벨헬리콥터 공급업체 인증

벨헬리콥터 어워드 수상

록히드마틴 협력업체 인증

록히드마틴 SPC 인증









독일 - GL







# 프랑스 - BV



## 노르웨이 - DNV



### 미국 - ABS





# 감사합니다

WEB www.chunji.co.kr

EMAIL sales@chunji.co.kr

TEL +82 31 882 9731~2

FAX +82 31 881 6611

ADD 경기도 여주시 가남읍 경충대로 1022