

The logo for JNS Magnetic Mixer features the letters 'JNS' in a stylized font. The 'J' is blue, the 'N' is green, and the 'S' is green. To the right, the words 'MAGNETIC MIXER' are written in a bold, green, sans-serif font. The background of the entire page is a light gray with a large, faint circular graphic and images of water splashes and mechanical parts.

JNS MAGNETIC MIXER

Magnetic Mixer Technology

Pharm
Food
Chemical
Applications

General Mixing
Applications

Low Shear
Mixing
Applications

Powder and
vigorous
mixing
Applications

Emulsification
and high shear
Applications

Magnetic Mixer to be used

마그네틱 교반기의 사용처

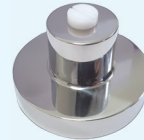
- 최저 믹싱의 효과를 원하는 Tank.
Tank needs minimum mixing effect.
- 압력 및 진공 사용의 Tank.
Tank needs pressure and vacuum.
- 내·외부와의 완벽한 차단을 목적으로 하는 Tank.
Tank needs complete isolation between inside and outside.
- 높이 제한 및 상부의 넓은 활용을 목적으로 하는 Tank.
Tank needs height limit and utilization wide upper space.
- Tank Mixing Volume이 큰 Tank의 에너지 효율에 적용.
To adjust effective energy of large mixing tank.
- CIP, SIP System을 구축하는 Tank.
Tank needs CIP, SIP system.
- Tank의 Size 및 점도를 공지하여 Model을 선정한다.
Select Model according to tank size and viscosity



Impeller, Female Bearing



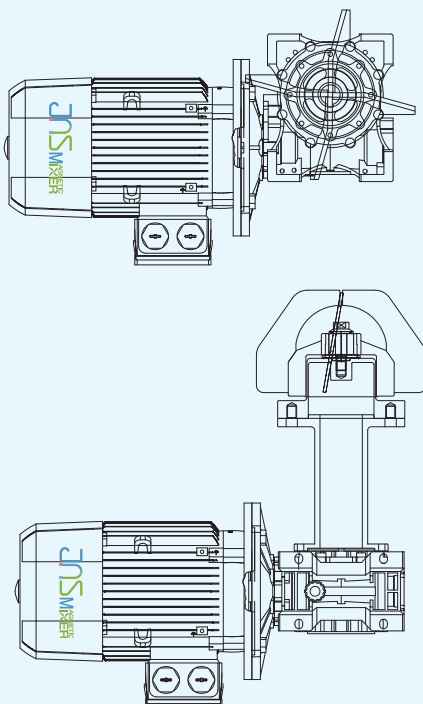
Male Bearing – TC,SIC Bearing Bolt, O-Ring, PTFE Washer



Welding Plate



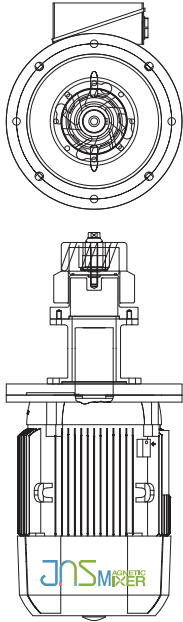
Drive Unit
Motor, Reducer, Housing
Shaft, Magnetic Rotor



Model JS

General mixing application (Pharmaceutical, Food, Chemical)
일반적인 혼합에 적용 (제약, 식품, 화학)

Model	Max Volume(Liter)	Drive Unit(kw,Ratio)
JS90	50L	0.18 / 5:1
JS140	300L	0.18 / 5:1
JS160	1000L	0.75 / 5:1
JS200	2500L	1.5 / 7.5:1
JS240	5000L	2.2 / 7.5:1
JS270	10000L	3.7 / 7.5:1
JS300	30000L	5.5 / 7.5:1
JS4H	50000L	7.5 / 7.5:1



Model **JSH**

High Speed Magnetic Mixer, Homogenization and Emulsification Application

고속 회전 마그네틱 호모믹서, 교반물 균질화 및 유화

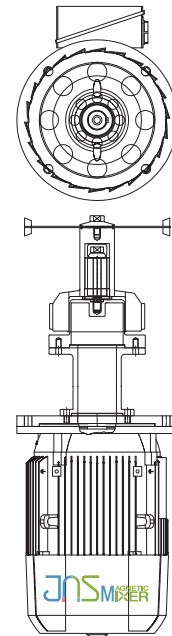
Model	Max Volume(Liter)	Drive Unit(kw)
JSH100	100L	1.5
JSH500	500L	3.7
JSH1000	1000L	7.5
JSH3000	3000L	11

Model **JSDS**

Powder and solution dispersal use

분말 용해, 분산

Model	Max Volume(Liter)	Drive Unit(kw)
JSDS100	100	0.75
JSDS500	500	1.5
JSDS1000	1000	3.7
JSDS3000	3000	5.5
JSDS7000	7000	11

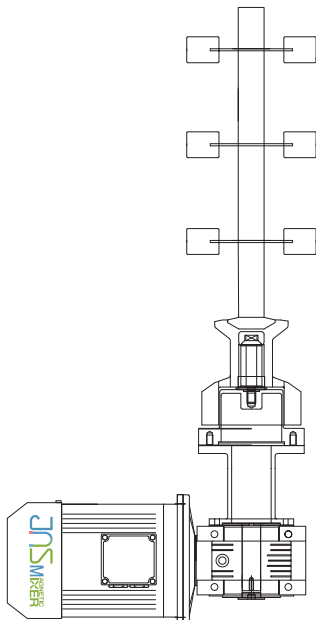


Model **JSR**

Low-speed hybrid cell culture, effective

저속 혼합, 세포 배양, 발효

Model	
JSR	교반물의 용량 및 점도
	임펠러 타입 (paddle, propeller)
	수량, 사용 RPM 협의 후 모델선정



Technical Specifications

General information

Material 및 기본사항 Material and specification

Impeller :	Stainless Steel STS316L
Welding Plate :	Stainless Steel STS316L
Male Bearing :	Tungsten Carbide(TC) (Optional Silicon Carbide(SIC))
O-Ring :	EPDM, PTFE Capsule, PTFE
Female Bearing :	Tungsten Carbide(TC) (Optional Silicon Carbide(SIC))
Surface Roughness :	Ra≤0.5μm (Optional Electro polished(EP))
Operating Temp :	5°C – 180°C
Environment Temp :	0°C – 40°C
Design Pressure	
Welding Plate :	-1 – 7bar
pH Range :	TC -4~12 SIC -1~14

Motor Data

Voltage AC :	220/380V AC – 60hz 440V AC – Optional
Degree of protection	
Certified :	IP 55 Optional d2G4

Option Item

Proximity sensor :	3Wire Type Housing Connection
Control Panel :	220 / 380V AC
Welding Tools :	Aluminum

Mixer Spare Parts :

- Impeller
- Male Bearing
- O-Ring
- Drive Unit

Additional explanation bearing

TC : 취성이 낮음.
TC : Durable against the brittleness

SIC : 취성이 높음.
SIC : No proof against the brittleness

SIC : 강산, 강 알칼리 사용에 추천
SIC : Recommend for strong acid & strong alkali

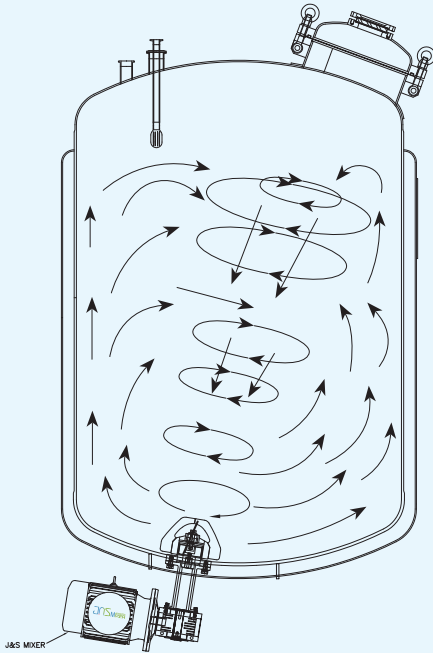
TC : pH 4-12 사용에 적용.
이동식 Tank & 직접세척 Tank에 적용.
활발한 교반력을 요구하는 Tank에 적용.
TC : Use pH 4-12 Value.
Apply for movable tank and COP (cleaning out of place)
Apply for tank needs vigorous mixing performance

Magnetic Mixer advantage and feature

마그네틱 교반기의 특징 및 장점

Magnetic Mixer의 장점 특징

Magnetic Mixer of advantage Feature



- 전기료절감 (소용량모터 구동)
Reduce electricity cost using small capacity motor.
- 교반력우수 (침전현상 없음)
Better Mixing effect, (no precipitation)
- 균일한 교반품질.
Homogenize mixing quality.
- GMP 및 HACCP 등 위생적인 생산라인에 적합.
Suit the sanitary process line for GMP and HACCP.
- 반영구적 수명.
semi-permanent life.
- 드라이브 유닛에 다른 부가적인 기구 불필요.
No need additional equipment of drive unit.
- 샤프트가 없어 쉽게 청소 가능.
Easy cleaning without shaft.
- 중앙부에 배출 배관 설치 가능.
Installation of drain valve in center position is available.
- 청소 및 멸균에 편리 하도록 디자인.
Design for easy cleaning and sterilization.
- 마그네틱 커플링을 사용하여 누유로 인한 오염 위험이 없다. (메카니컬 씰 불필요)
Using magnetic coupling, No leak, No mechanical seal, No contamination,
- 드라이브 유닛이 커플링으로 되어 탈 부착이 자유롭다.
Easy drive unit assembly using coupling.
- 유지보수를 위한 리프트 장치가 필요 없어 불 필요한 용기 위 공간을 줄 일수 있다.
No need lift equipment for maintenance.
- 사용 중 Motor의 문제가 발생하여도 액상의 이동 없이 처리 가능하다.
Replace motor not to move liquid even if motor is out of order.

상부형 교반기 특징

Top mount mixer features

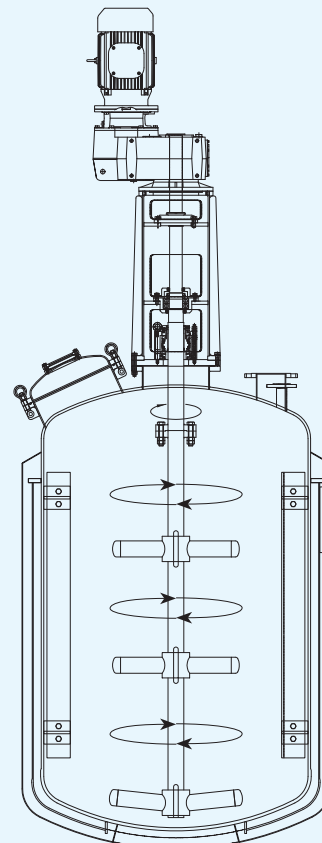
유지, 보수를 위한 Over head crane 필요.
Overhead cranes required for maintenance and repair.

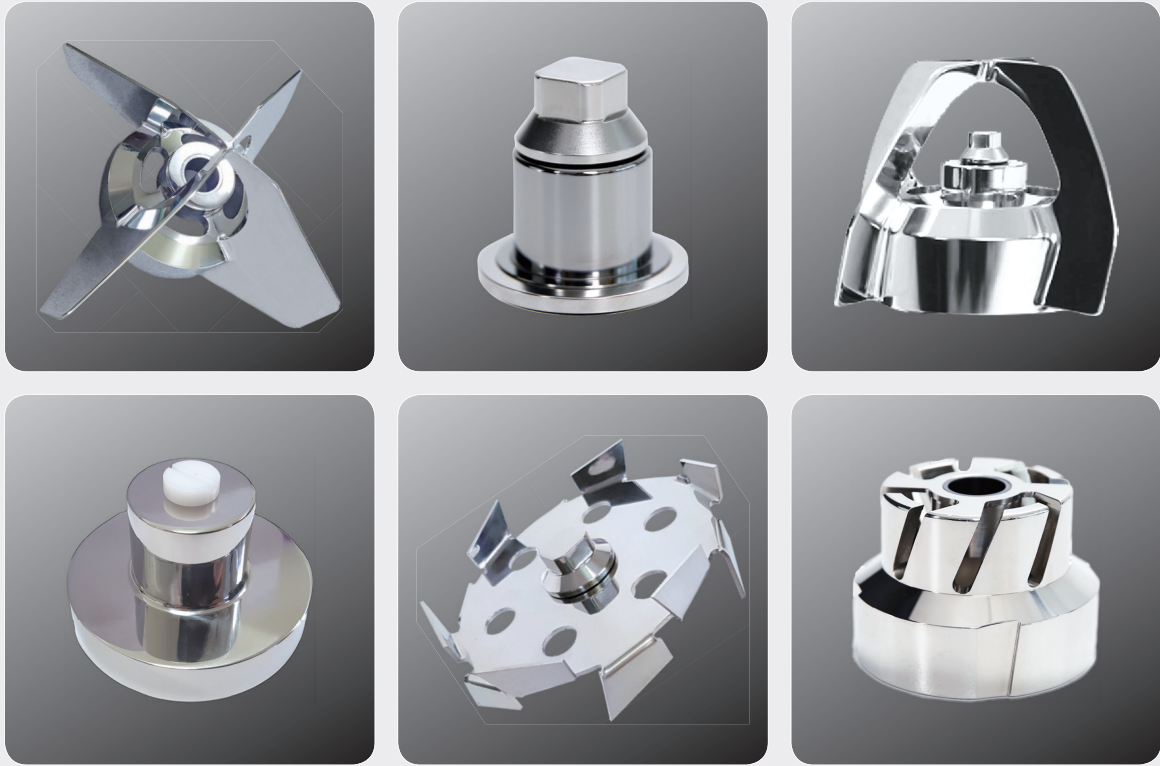
메카니컬 씰의 문제점 : 누유로 인한 오염.
Problems with Mechanical Seal: Contamination due to Oil Leakage.

샤프트 : 임펠러 고정 부싱이 있어 청소가 별도로 필요함.
Shaft - impeller fixed bushing, requiring separate cleaning.
(CIP/SIP 동안 긴 샤프트는 청소가 쉽지 않음)
(Long shafts are not easy to clean during CIP/SIP)

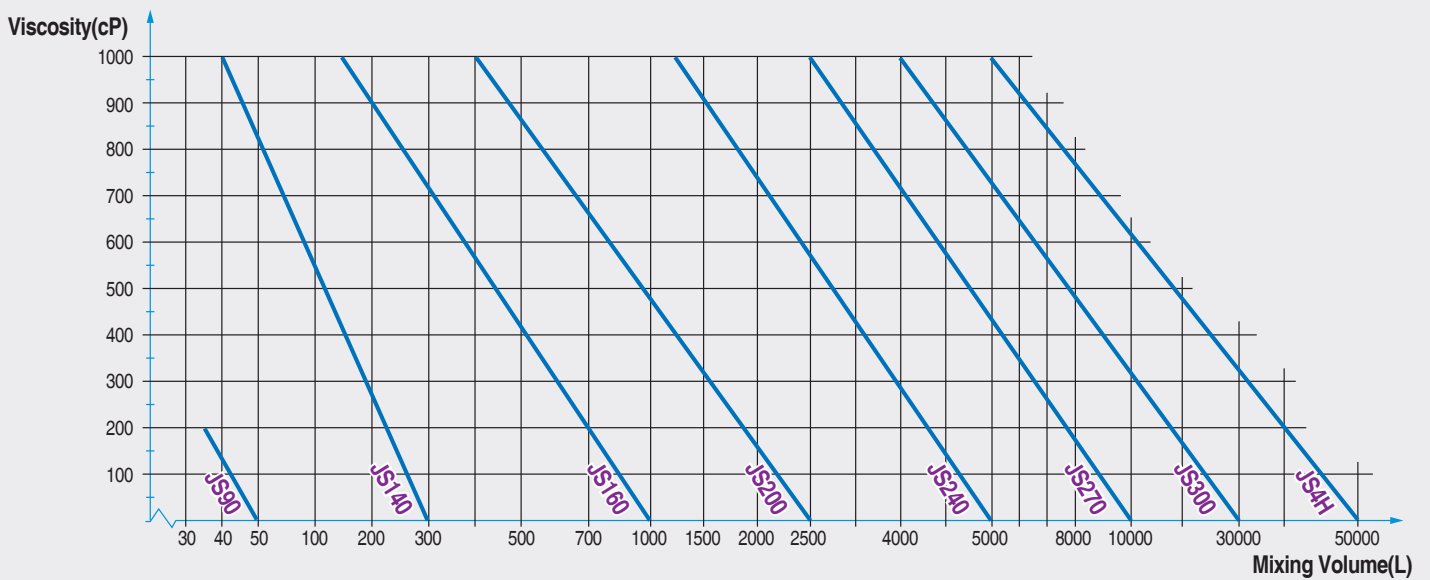
적용상의 한계 : - 교반력이 약함
- 하부 침전이 발생함

고점도 교반에 유리 : - 오염가능성이 많음 (찾은 유지 및 보수)
- 상부에 거품이 발생함
- 많은 공간을 차지함
(전체 높이의 1/3차지)





Model selection according to viscosity for JS serie



JNS MAGNETIC MIXER

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