# **CONICAL MIXER**

#### [PRINCIPLES]

The mixer actions consist of a combined motion of a simultaneous rotation and orbital motion of mixing screw in the conical vessel. The mixing time depends on the orbiting action of helical screw rotating on its own axis to carry material upward.

- · Upwards action
- · Horizontal circular action
- · Downward action

(Drum내에 개방된 Screw가 자전 및 공전을 동시에 진행 하면서 투입된 원료에 복잡한 혼합운동이 이루어진다.

혼합속도는 아래로부터 밀어 올려지는 분체의 양으로 결정되며 혼합운동을 분 류하면 다음과 같다.)

- · 분체의 상승운동
- · 분체의 나선운동
- · 분체의 하강운동

#### [THREE KINDS ACTION]

- 1. Upwards action (분체의 상승운동)
- 2. Horizontal circular action (분체의 나선운동)
- 3. Downward action (분체의 하강운동)



 Upwards action (분체의 상승운동)

The helical mixing screw which rotates on it own axis the powder upwards along the mixing vessel inside wall and the product is dispersed about at the upper end of the mixing screw.



 Horizontally circular action (분체의 나선운동)

The helical mixing screw rotates itself and simultaneously orbits around the cone inside, thus causing the product to a horizontally circular motion.





 Downwards action (분체의 하강운동)

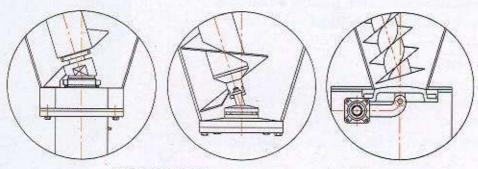
The rotating of the screw carries the powder upward, thus making the lower part of the cone empty relatively and bring the powder to flow downwards again by gravity

**DAEGA** 

#### [FEATURES]

- Short-term mixing time. (신속혼합: 혼합날개인 Screw에 의한 분체 이동량이 많아 혼합시간이 단축된다.)
- 2. High precision mixing. (정밀혼합 : Drum 내부에 Screw 운동반경에 따른 사각이 없으므로 정밀혼합 가능.)
- 3. Low power consumption. (동력소모가 적다.)
- 4. Minimize heat generation. (발열이 적다.)

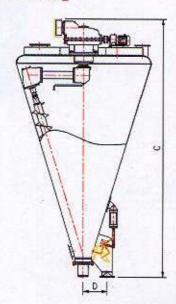
- 5. No friction. (마찰이 없다.)
- 6. Noiseless operating, Low Vibration, (소음 진동이 적다.)
- 7. Easy discharge, (배출이 용이하다.)
- 8. Low particle damage. (분체의 손상이 적다.)
- 9. Large capacity. (대용량 제작이 가능하다.)



### With radial locator

No screw support

#### [SPECIFICATION OF MIXER]





Model	Working Cap'(I) 250	Vessel Cap'(/) 600	Motor (HP)		Speed (rpm)		Dimensions					
					Rotation 60	Revolution 2	A 1150	B 1500	C 3100	D 345	Ε Φ200	F Φ300
DGNM-250												
DGNM-1000	1100	2600	1	5	60	2	1830	2630	3850	450	Ø215	Φ450
DGNM-1500	1500	3600	-1	7.5	60	2	2030	2970	4200	450	Ø215	Ø450
DGNM-2000	2100	4500	1	7.5	60	2	2210	3260	4450	450	Ø215	<b>Φ</b> 450
DGNM-3000	3000	6000	1	10	60	2	2420	3550	4800	450	φ250	Φ500
DGNM-4000	4000	9000	2	15	60	1.5	2760	4030	5350	540	Ф300	Φ600
DGNM-5000	5000	11000	2	15	60	1.5	3040	4490	5950	540	Ø300	φ600
DGNM-10000	10000	22000	3	20	60	1.5	3720	5600	7450	540	φ300	φ600



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