

Rotostat X and XP

High shear rotor / stator type mixers

Applications:

Viscosity range up to 50,000 mPa·s. Dispersing, dissolving, milling, emulsifying, homogenising.

Shear action

The mixer head consists of an internal rotor surrounded by a freely revolving stator. The stator has three large external paddle blades which restrain its rotation to about one tenth of the rotor speed. At a rotor speed of for inst. 3000 RPM the stator will do about 300 RPM. The rotor draws the mix into the stator where it is subjected to a high shear action prior to being expelled at a high velocity through slots in the stator rim. As the mix passes the slots, it is subjected to intense cutting and disintegrating action for a further reduction of the particle sizes.

Revolutionary revolving stator

When the rotor revolves at high speed inside the surrounding stator, the friction power of the mixture, rotating inside the stator, will attempt to make the stator revolve at the same speed as the rotor. It is, therefore, necessary to introduce a counteracting force that will prevent the stator from revolving with the rotor. With a conventional fixed stator, the counteracting force is exerted by a number of arms or a tube holding the stator in a fixed position. But this means that some of the frictional power is wasted. In the ROTOSTAT the frictional power is transferred out into the slower moving tank flow via the large stator paddle blades, working as a low speed agitator. In other words, the ROTOSTAT utilizes the frictional power to create increased action and less energy is wasted.

This is why ROTOSTAT received the American Chemical Processing Magazine's Vaaler Award. The awarding judges commented on the ROTOSTAT as follows: "The high shear mixer is fast and has low power requirements. The evolutionary design is a combination of mixing and milling achieved through simple but dramatic design changes."

What's in it for you ?

Your ROTOSTAT will be a smaller mixer with a low power consumption - and it will be easier to handle and easier to clean.

Moreover, the improved batch flow eliminates local high temperature in the vicinity of the mixing head and ensures a uniform shearing action throughout the batch.

Characteristics of the ROTOSTAT X and XP:

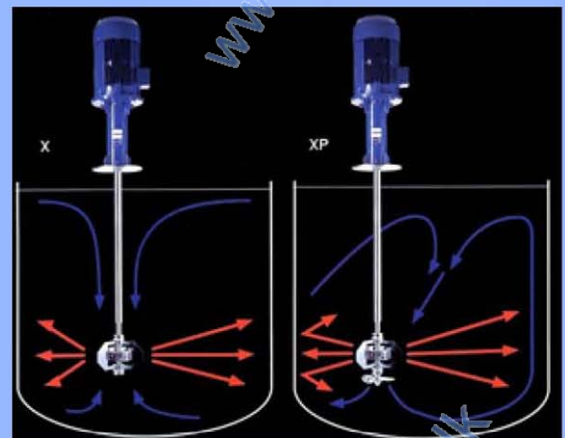
Flow pattern of type X and XP respectively

.

Blue arrows = flow into the mixing head.

Red arrows = expulsion from the mixing head.

The table shows ROTOSTAT X / XP standard models:



Model X	Model XP	Power Kw X / XP	Speed RPM	Mixing head diam. mm.	Propeller diam. mm. XP	Max. batch size at water like viscosity m ³ X / XP
X63	X63/P80	0.55 / 0.75	3000	130	80	0.50 / 0.30
X81	X81/P110	1.5 / 2.2	3000	170	110	0.40 / 1.40
X94	X94/P125	3.0 / 4.0	3000	200	125	0.80 / 2.50
X124	X124/P175	11.0 / 18.5	3000	260	175	2.60 / 12.0
X148	X148/P200	4.0 / 5.5	1500	320	200	2.50 / 8.00
X175	X175/P250	7.5 / 15.0	1500	365	250	4.50 / 20.0
X200	X200/P300	15.0 / 30.0	1500	420	300	8.50 / 50.0
X225	X225/P325	7.5 / 15.0	1000	472	325	8.50 / 40.0
X250	X250/P350	15.0 / 22.0	1000	525	350	13.0 / 50.0
X300	X300/P400	15.0 / 18.5	750	630	400	20.0 / 70.0
X350	X350/P450	30.0 / 37.0	750	735	450	40.0 / 110.0



Handing ApS

Nordkranvej 5-9, Vassingerød
DK - 3540 Lyngø
Tel.: +45 48160166
www.handing.dk

Rotostat type X 1,5 kW

Alle mål i mm.
Measures in mm

Dette dokument er vejledende
Der tages forbehold for fejl.
This document is only guiding.
We make reservation for possible errors

Lager nr.

R341

