Supra Speed Vacuum Centrifuge

Supra 30K Supra 25K Supra 22K Supra 21K

The Supra 30K/25K are supra speed refrigerates centrifuge with vacuum capacity and designed for separation applications in life science and bio-technology.
They have a broad range of rotors and accessories.
A maintenance-free induction motor, one -ship microprocessor control with digital display, amd an environmentally -friendly refrigerant are used.

- One-chip microprocessor control
- Extensive applications using versatile fixed angle rotors wing bucket, Vertical and zonal continuous flow rotors
- Display and control RCF
- Integral running
- Gentle start-up and braking : ten acceleration / deceleration profiles
- RCF/RPM calculation
- Rotor recognition
- Temperature limit input to ensure proper temperature control
- Feed back control system for automatic half-atmosphere vacuum
- Disp;ay abnormality : system, imbalance, over-speed, over-temperature, door open, vacuum

Performance	Supra 30K	Supra 25K	Supra 22K	Supra 21K
Max. Speed	30,000rpm	25,000rpm	22,000rpm	21,000rpm
Max. RCF	116,115xg	80,636xg	53,570xg	48,810xg
Max. Capacity	4x 1,000ml	4x 1,000ml	4x 1,000ml	4x 1,000ml
Temp. Range	-20deg.C to +40deg.C	-20deg.C to +40deg.C	-20deg.C to +40deg.C	-20deg.C to +40deg.C

The Effect of Air Flow

Rigid shaft Drive System

It is very hard to spin an angle rotor at speed higher than 23,000 rpm in the air. Therefore, a speed of more than 23,000 rpm can be achieved in a vacuum where air friction is reduced. It is impossible to use a rotor of high capacity such as 6x500ml without a vacuum at higher speed than 5,000rpm in a flexible shaft centrifuge, since it generates severe vibration of the shaft. Therefore, it is necessary to have a vacuum even at a speed of 9,000rpm un order to use a rotor of large capacity such as 6x500ml in a flexible shaft centrifuge. However, in the case of the Supra 30K/25K adapting rigid shaft, ti is possible to spin a rotor of 4x1,000ml without a vacuum at a speed of 9,000rpm

Sitting Rotors

Heavy rotors on a flexible shaft should ve taken out of the chamber after completion of centrifugation. Otherwise, the flexible shaft can change shape, which can lead to problems

Unnecessary standing by To reach the proper vacuum

For a centrifuge with a flexible shaft, it is necessary to wait until the vacuum reaches a certain level before starting the rotor to reduce friction caused by air flow at a high speed. However, for a centrifuge with a rigid shaft, you can start spinning the rotor with out a vacuum, During deceleration ain addition to acceleration, you can take the rotor out of the chamber right after it stops spinning.

Drive system of 3 fold Damper

Selection of a broad range of rotors

Light rotors cannot be used in a centrifuge with a flexible shaft designed for heavy rotors, and heavy rotors can not be used in a centrifuge with a flexible shaft designed for lighter rotors. the Supra 30K/25K adopting 3 fold damper driving system with a rigid shaft is de-signed to dffetively absorb the vibration generated by fixed angle rotors from small capacity rotors of 24x 15ml up to large capacity rotor sof 4 x 1.00

Supra 22K Supra 21K

Features

- One-chip microprocessor control
- 99 programmable applications and recall
- Display and control RCF
- Gentle start-up and braking : tem acceleration / deceleration profiles
- RCF/RPM calculation
- Rotor recognition
- Temperature limit input to ensure proper temperature control
- Display abnormality : system, imbalance, over-speed, over-temperature, door-open, vacuum(option)

Compare Kompspin1,000ml x 4 Angel rotor and 500ml x 6 Angel about size

Performance

The Supra 22K/21K are high speed refrigerated centrifuges without vacuum capacity. They can be used for most separation application in bio-science and bio-industry and have versatile ortors.

A maintenance free brushless AC induction motor, one chip microprocessor control with digital display, and an environmentally friendly refrigerant are used.

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