

shaker	
shaker speed	max. 80 rpm
shaker diameter	50 mm (orbital motion)
dimensions	width 90 cm, depth 90 cm, height 140 cm
weight	app. 400 kg without liquid
power requirement	230V or 110V
accuracy, absolute	0.1 RPM
setting, digital	1 RPM
active brake	adjustable
interface	CAN-Bus, RS232
oxygen sensor	optical measuring method
range	0-100%
accuracy	± 0.01%O ₂ at 0.21%O ₂ ± 0.1%O ₂ at 20.9%O ₂
drift	< 0.015%O ₂ per day
temperature range	Up to 50°C
pH sensor	
range	5.5 – 8.5
accuracy	± 0.05 pH at pH 7 with one point calibration ± 0.10 pH at pH 7 with pre calibration
drift	< 0.005 pH per day
temperature range	Up to 50°C
ISIS	software for monitoring, calibration, controlling
monitoring	O ₂ , pH, shaking speed, temperature
calibration	pre-calibrated sensors in bag
recalibration	one point recalibration is possible

SB200-X

Disposable Shaken Bioreactor System
(up to 200L working volume)

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This cylindrical SB200-X bioreactor is mounted on a circular moving platform. The mechanism of orbital shaking allows for efficient mixing of suspension cultures, while oxygenating cells through the head space. The cylindrical vessel contains a disposable, sterile bag with appropriate connection tubes for seeding, feeding, gas supply and harvesting of the culture. Compared to classical stirred tank bioreactors, SB200-X bioreactors are much simpler and less costly to operate.

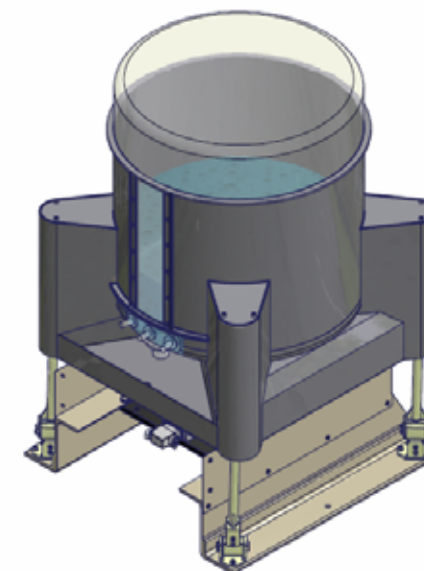
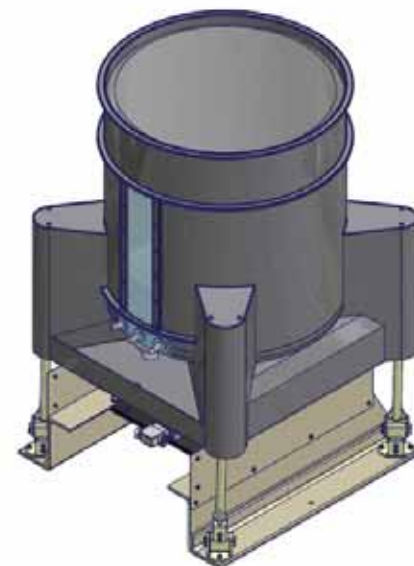
Cell culture data obtained from pilot experiments executed at ExcellGene have shown that growth and productivity from these reactors, now shown up to a scale of 200 Liters, are equivalent to those of fully instrumented non-disposable, glass or stainless steel stirred bioreactors.



heating
cooling
online-pH
online-pO₂
monitoring
audit-trail

SB200-X Disposable Shaken Bioreactor System

developed for cell cultivation in a
disposable bag



- + disposable
- + easy scale up
- + small footprint
- + fully monitored
- + range 30L-200L

reproducible
cultivation conditions
from 50mL-200L