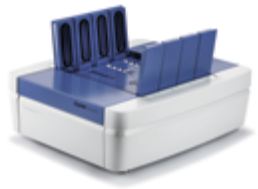
THE FLEET IS COMPLETE

Discover, screen and optimize

We are proud to present the Technobis Crystallization Systems workflow. Users are now able to perform well controlled crystallization studies from hit identification and lead identification up through process scale up. Combine the *CrystalBreeder, Crystal16* and *Crystalline* in a flexible configuration to optimize solid-state success!



CrystalBreeder

Discover new polymorphs, salts or single crystals with success. The CrystalBreeder enhanced your early stage solid state screening due to the availability of the multiple crystallization mode like cooling, evaporation, slurry or vapor diffusion crystallization studies using the world's smallest reactor. The new 32 reactor benchtop crystallizer with overhead stirring offers multiple crystallization modes all at less than 0.1 mL per reactor. The CrystalBreeder is the first crystallizer dedicated for both development and discovery/hit identification carrying out rapid complete crystallization screens with as little as 1 mg of sample. The CrystalBreeder gives you real time turbidity information for 32 parallel temperature controlled experiments.

Crystal16

Screen for selecting solvents, polymorphs, salts or co-crystals has never been so easy after the introduction of the Crystal16 in 2005. The Crystal16 is a parallel crystallization platform that allows for fast screening of crystallization parameters in 16 parallel reactors with a volume of 1 mL. The Crystal16 can be used for application of heating and cooling, for instance during polymorph or salt screening, but also for the determination of solubility as a function of temperature in e.g. process development and optimization. After more than 10 years of success in more than 300 companies, it is, by far, the world's most used equipment for solubility curves measurement and phase diagrams. New features in the Crystal16 include: eliminate the need for a chilled water supply, improved temperature range going from -15 °C up to 150 °C, overhead stirring, and a new flexible software based on our successful software for the Crystalline.

Crystalline

Optimize your crystallization process at an early stage with only small amount of material. The Crystalline follows in the same philosophy of the CrystalBreeder and Crystal16 system a user friendly tool with uncomplicated software to improve your to improve you crystallization and formulation research. The Crystalline with through the vial analytical capabilities including turbidity, particle visualization or Raman is easy to set up and operate. The ergonomic design and effortless operation removes all the barriers to using technology which was previously only accessible to experts. The intuitive control and analysis software gives every user access to valuable information from small amounts of material.




Specifications	CrystalBreeder	Crystal16	Crystalline
Feedback control	Yes	Yes	No
Reactors	32	16	8
Reactor type	Commercially available, glass	Commercially available, glass	Commercially available, glass or quartz
Optimal work volume (mL)	0.06 to 0.1	0.5 to 1.0	2.5 to 5
Temperatures zones	8	4	8
Temperature range (°C)	-15 to 150[1]	-15 to 150[1]	-25 to 145[2]
Temperature accuracy (°C)	0.1	0.1	0.1
Heating rate (°C/min)	0 - 20	0 - 20	0 - 20
Cooling rate (°C/min)	0 - 20	0 - 20	0 - 20
Stirring	Overhead or stirrer bar	Overhead or stirrer bar	Overhead or stirrer bar
Stirring speed (rpm)	0 - 1250	0 - 1250	0 - 1250
Evaporation option	Yes, with evaporation flow per block of 4 reactors	No	Yes, with evaporation flow per reactor
Vapor diffusion option	Yes	No	No
Turbidity (%)	Every reactor	Every reactor	Every reactor
Chiller necessary	No	No	Yes
Camera's	-	-	4 or 8
Camera resolution (µm)	-	-	2.8, 5.6 or 11.2
Particle size information	-	-	Yes
Raman	-	-	Yes, compatible with any Kaiser optical system
Data export	CrystalClear, Word Report, XML	CrystalClear, Word Report, XML	CrystalClear, Word Report, XML Bitmap AVI Movie
Foot print (D x W x H in cm)	(49 x 56 x 20)	(49 x 28 x 20)	(53 x 51 x 20)

1 Minimum temperature reached in 1 block reactor is -15°C, and -10°C when all 8/4 block reactors are in use.
2 Minimum temperature reached in 4 reactors is -25°C, and -20°C when all 8 reactors are in use.

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