

# 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 1.5 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 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
<b>Reactors</b>	32	16	8
<b>Reactor type</b>	Commercially available, glass	Commercially available, glass	Commercially available, glass or quartz
<b>Optimal work volume (ml)</b>	0.05 to 0.25	0.25 to 1.5	2 to 5
<b>Temperatures zones</b>	8	4	8
<b>Temperature range (°C)</b>	-15 to 150	-15 to 150	-25 to 150
<b>Temperature accuracy (°C)</b>	0.1	0.1	0.1
<b>Heating rate (°C/min)</b>	0-20	0-20	0-20
<b>Cooling rate (°C/min)</b>	0-20	0-20	0-20
<b>Stirring</b>	Overhead or stirrer bar	Overhead or stirrer bar	Overhead or stirrer bar
<b>Stirring speed (rpm)</b>	0-1250	0-1250	0-1250
<b>Evaporation option</b>	Yes, with evaporation flow per block of 4 reactors	No	Yes, with evaporation flow per reactor
<b>Turbidity (%)</b>	Every reactor	Every reactor	Every reactor
<b>Chiller necessary</b>	No	No	Yes
<b>Camera's</b>	-	-	4 or 8
<b>Camera resolution (µm)</b>	-	-	2.8, 5.6 or 11.2
<b>Particle size information</b>	-	-	Yes
<b>Raman</b>	-	-	Yes, compatible with any Kaiser optical system
<b>Data export</b>	CrystalClear, word report, XML	CrystalClear, word report, XML	CrystalClear, word report, XML Bitmap AVI Movie
<b>Foot print (DxWxH in cm)</b>	(49x56x20)	(49x28x20)	(53x51x20)

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