



# OPTI MATRIX | MAKER



## Streamline the design and creation of optimization screens

When you get a hit in a crystallization screen, it's time to optimize. But to generate the conditions and pipette the various chemicals is labor-intensive and error-prone. The Opti Matrix Maker takes the work out of designing and generating optimization screens. Generate the screen conditions with a few clicks of the mouse then let the desktop instrument automatically dispense the chemicals into SBS blocks or well plates. The Opti Matrix Maker can give you an accurate, neat optimization screen minutes after you find your original crystal hit.

## Design the screen online

Start your optimization process online at [www.emeraldbiosystems/escreen](http://www.emeraldbiosystems/escreen). Select your screen and the well where you got your hit. The software calculates your optimization screen data. You can make adjustments by choosing from hundreds of additional chemicals or varying the concentrations, buffers, and pH levels. Download a copy of the design to a USB drive then load the protocols into the Opti Matrix Maker instrument.

## A fast, simple instrument for dispensing chemicals

- > Runs on intuitive, touchscreen controls
- > Uses almost any stock solutions in your lab
- > Creates matrices with up to 96 well screens
- > Dispenses into SBS blocks and well plates
- > Priced to be affordable to any lab
- > Not just for crystallographers: Ideal for any scientist who needs to combine up to 10 chemicals in specific formulations



## Technical features

- > Contains 6 precision syringe pumps
- > Accepts up to 10 stock solutions plus water
- > Includes a SBS plate holder with X-Y motion control for random access delivery of stocks to any well
- > Offers a benchtop footprint of less than 2 by 2 feet
- > Works with E-Screen Builder software ([www.emeraldbiosystems/escreen](http://www.emeraldbiosystems/escreen)) for screen design
- > Runs on touchscreen controls with an integrated computer



**Emerald BioSystems** is a leading provider of sophisticated laboratory automation, **reagent kits, stock solutions, and plasticware** products for structural biologists. An innovation leader, scientists at Emerald BioSystems and its sister company Emerald BioStructures have created award-winning research tools that accelerate the gene-to-protein structure determination process. Our instruments automate cell-free protein expression, protein purification, liquid handling, and crystallization. Our stock solutions and reagents are available individually and in convenient screens. The **MPCS Plug Maker** delivers diffraction-ready crystals using nanoliters of protein.