

Ensures Even Distribution
of Dicing Surfactant

DXL Series Surfactant Dispensers

Suitable For a Wide
Variety of Applications

DXL Surfactant Dispensers

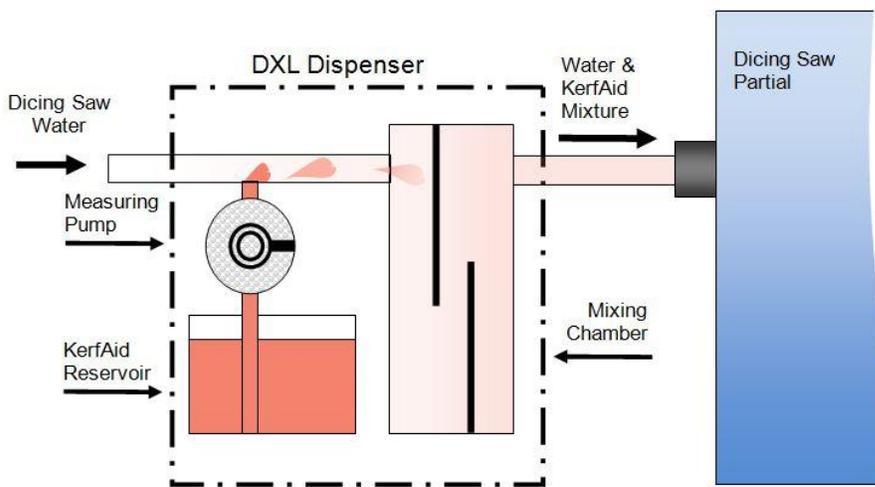
Dynatex International's DXL Surfactant Dispenser is designed to introduce KerfAid™ dicing surfactant into the cutting water for a wafer dicing saw. The DXL provides the perfect mixture of water and dicing surfactant. This ensures the even distribution across the wafer of the dicing surfactant and thereby makes the surfactant 100% effective. The DXL is easy to install requiring only water. It is designed to provide a wide range of dilution ratios for a wide range of saw dicing environments, and accommodates both low and high flow applications.

Applications

- Silicon Wafer Dicing
- Wafer Thinning
- Piezo Transducer Cutting
- Milling

Injecting KerfAid into the Dicing Saw Water

When injecting KerfAid into the dicing saw water, the DXL pumps a predetermined amount of KerfAid into the water stream. The water and KerfAid are then transferred to the mixing chamber where the two components are thoroughly mixed. The mixing of the surfactant and the water is vital to maintain process performance. To disable the injection of the surfactant simply power off the DXL. Water will flow through the system without the addition of the surfactant.



DXL Dispenser Advantages

- Ideal Mixing
- Dilution Ratio Control
- Simple Operation
- Resistivity Control
- Fluid Flow Control
- Operator Independent



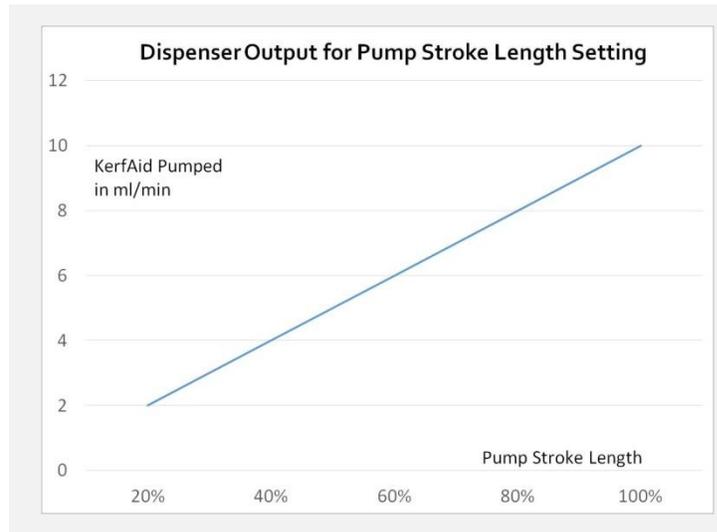
dynatex[™]
I N T E R N A T I O N A L

DXL Dispenser Setting

When setting the dispenser, determine the KerfAid flow rate from the following formula:

$$\text{KerfAid Flow Rate} = \frac{\text{Water Flow Rate}}{\text{Dilution Ratio}}$$

An example: a water flow rate of 2 liters per minute and a dilution ratio of 500 would require a KerfAid flow rate of 0.004 liters per minute (4ml/min).



« DXL-110 Dispenser

The Dynatex DXL-110 Dispenser provides the ultimate in convenience and control. The free standing structure has a compartment that accommodates the standard five gallon KerfAid container.

DXL-300 Dispenser »

The Dynatex DXL-300 Dispenser is the low cost alternative to the DXL-110. It is ideal for running experiments and for use in low cost wafer dicing operations. Its portability and light weight make it ideal for a dynamic laboratory environment.

The dispenser fits on top of the five gallon container.



DXL Dispenser Specifications

| | |
|----------------------------------|--|
| Pumping Capacity: | up to 0.038 Liters per minute |
| Min. Water Flow Rate: | 1 Liter per minute |
| Power Requirement: | 115 VAC or 220 VAC, 50/60 Hz, 5 Amp |
| Inlet/Outlet Connections: | 3/8" tubing bulkhead fitting |
| Dimensions: | |
| | (DXL) 15" (38 cm) Wide, 33" (83 cm) High, 15" (38 cm) Deep |
| | (DXL-III) 15" (38 cm) Wide, 33" (83 cm) High, 15" (38 cm) Deep |
| Controls: | Pump Stroke Rate & Pump Stroke Length |

KerfAid Dicing Surfactant

The DXL Surfactant Dispenser is designed to introduce KerfAid™ dicing surfactant into the cutting water for a wafer dicing saw. KerfAid is the premier dicing surfactant for the semiconductor wafer dicing process. It is the single biggest contributor to the reduction in cost of ownership of established wafer dicing processes.



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