6 APPENDIX

This section contains additional information of interest, but not essential to the operation or care of your I Series shaker.

6.1 Specifications

SHAKING			
Speed	25-500 RPM		
Motion	3/4 inch (19 mm) diameter circular orbit		
Indication	LED digital electric display, 1 RPM increments		
Setpoint & Control	Digital adjustment with PI microprocessor control and instantaneous		
	visual feedback		
Accuracy	± 1 RPM		
DRIVE			
Triple eccentric counterbalanced ball bearing drive			
TEMPERATURE			
Range	5°C above ambient to 60.0°C (I-2400)		
Range with Cooling	5°C above coolant using cooling coil accessory (option)		
Control Stability	± 0.1°C by use of PI microprocessor controller and pulse width		
	modulation of heater		
Setpoint	Digital adjustment increments within 0.1°C instantaneous visual		
	feedback		
Accuracy	± 0.1° @ 30-40°C range		
Uniformity	± 0.5° for remaining range		
Safety	Better than 0.5°C		
	Heater shuts off if temperature exceeds operating range		
Heater	Low watt density resistance heater with high temperature safety		
	thermostat		
TIMER			
Programmable shaking periods from 0.1 to 99.9 hours by a digital timer that shuts off at			
the end of period and energizes status light.			
Timer counts down and digital display indicates remaining time.			
Can be deactivated for continuous operation.			
Additionally, unit will display total accumulated running time for service information.			
OPERATING AMBIENT ENVIRONMENT			
0° - 40°C, 90% humidity	0° - 40°C, 90% humidity, non-condensing.		

SELF-DIAGNOSTIC STATUS

Warning signal (audible and visible) indicates when shaking speed deviates more than 5 RPM or the temperature deviates more than 1.0°C from set point and when timer operation has expired. Audible alarm can be deactivated/activated by the operator.

AUTOMATIC RESTART

Unit will automatically restart after undesired power interruption. Setpoints are maintained by non-volatile memory. Interruption is indicated by a flashing display.

MOTOR

1/15 HP, 3 phase brushless ball bearing DC motor.

ELECTRICAL SERVICE	
Voltage	120V, 60 Hz
VA Requirements	600 VA for I-2400
DIMENSIONS	
Width	21 inches (53.4 cm)
Depth	27½ inches (69.9 cm)
Height	19¾ inches (50 cm)
CONSTRUCTION	

CONSTRUCTION

WEIGHT

Heavy gauge steel, phosphate-coated and texture painted cabinet. See-through plastic cover.

Net	150 lbs (68 kg)
Gross	200 lbs (91 kg)
PLATFORM DIMENSIONS	
18 inches X 18 inches (46 cm x 46 cm), Phenolic composite.	
CHAMBER DIMENSIONS (interior)	
Width	19¾ inches (50.2 cm)
Depth	19 inches (48.3 cm)
Height	13½ inches (33.6 cm) above the platform

6.2 Available Platforms

6.2.1 Easy Load Platform Option

Quick-change platform option is available. This easy-load accessory enables the user to snap-in platforms without tools or hardware.

The kit (NBS #M1192-9901) includes a sub-platform with spring clips, and extra counterweight and hardware. The kit does not include a platform. Once installed, a speed of 25-400 rpm is recommended.

The package should be installed by a qualified Service Engineer.

I-2400 ● M1283-0050 User's Guide