

Peak Mode – Programmable Parameters

The Peak application is used to measure the peak force of a sample while controlling the speed and distance of the cross-head. The test stops when the installed force gauge detects a peak. The test stand records the detected peak and distance at which the peak occurred.

Compatible Force Gauge Mode: Standard, *Peak*

Programmable Parameter	Description
Profile ID	Profile name or number (9 characters)
Ref. Pos. Set. - Reference Position Set	Sets the starting position of the cross-head by moving the cross-head manual to the desired position with the dial-knob. Press on the dial-knob to put the cross-head in motion.
Ref. Pos. - Reference Position	Starting position of the test. Once a test profile has been selected the test automatically travels to the reference point. (in, mm)
Speed	Moving speed of the cross-head (in/min, mm/min)
Direction	Starting direction of the cross-head from the reference position. (Down / Up)
Load Stop	The test stops when a set load value is reached. (Off, Set lbf)
Distance	The distance required for the cross-head to travel. Cross-head will stop if the traveled distance is reached before a peak occurs. (Off, Set "in" "mm")
Auto Return	Cross-head automatically returns to the reference point after a peak has been detected or the test has been completed.

Cycle Mode – Programmable Parameters

The Cycle application includes two modes: Cycle and Time. The test stand will repeat the programmed cycle over a set number of cycles (Cycle mode), or over a preset time duration (Time mode). Up and Down travel speed of the cross-head may differ. The test stand displays Cycle No, Time Remaining, Cross-head Speed, Travel, Force, and Hold Time.

Compatible Force Gauge Mode: Standard, Multi-Peak

Programmable Parameter	Description
Profile ID	Profile name or number (9 characters)
Mode: <Cycles> <Time>	Cycle: the test will run for the specified numbers of cycles. Time: the test will run for a specified amount of time.
Cycles / Time	The number of Cycles or Time required.
Reference Position Set	Sets the starting position of the cross-head by moving the cross-head manual to the desired position with the dial-knob. Press on the dial-knob to put the cross-head in motion.
Reference Position	Starting position of the test. Once a test profile has been selected the test automatically travels to the reference point. (in, mm)
D. Speed – Down Speed	Moving speed of the cross-head in the “Down” Direction. (in/min, mm/min)
U. Speed – Up Speed	Moving speed of the cross-head in the “UP” Direction. (in/min, mm/min)
Direction	Starting direction of the cross-head from the reference position. (Down / Up)
Distance	The distance required for the cross-head to travel. (Off, Set “in” “mm”)
Hold Time Ref. – Hold Time at Reference	The amount of time the cross-head pauses at the reference point.
Hold Time End	The amount of time the cross-head pauses after traveling the distance amount.
Load Stop	The test stops when a set load value is reached. (Off, Set lbF)
Auto Return	Cross-head automatically returns to the reference point after a peak has been detected or the test has been completed.
Break Stop	When enabled the cross-head stops if a sample break is detected. The test stand performs its own break (peak) calculation from the measurements it receives from the force gauge.

Step – Programmable Parameters

Test is performed in steps. Each test can consist of maximum 12 steps. The sequence of steps can be set to cycle (repeat). Each step can differ in travel distance, speed, and hold time. The test stand displays the Step No., Speed, Travel, Force, and Hold Time (Countdown).

Compatible Force Gauge Mode: Standard, Multi-Peak

Programmable Parameter	Description
Profile ID	Profile name or number (9 characters)
Steps	Number of steps in the test. Parameter can differ for each step.
Ref. Pos. Set. - Reference Position Set	Sets the starting position of the cross-head by moving the cross-head manual to the desired position with the dial-knob. Press on the dial-knob to put the cross-head in motion.
Ref. Pos. - Reference Position	Starting position of the test. Once a test profile has been selected, the test automatically travels to the reference point. (in, mm)
Cycles	All steps of the test will run for the specified numbers of cycles.
Auto Return	Cross-head automatically returns to the reference point after a peak has been detected or the test has been completed.
Break Stop	When enabled the cross-head stops if a sample break is detected. The test stand performs its own break (peak) calculation from the measurements it receives from the force gauge.
Step Parameters	
Direction	Starting direction of the cross-head from the reference position. (Down / Up)
Speed	Moving speed of the cross-head. (in/min, mm/min)
Distance	The distance required for the cross-head to travel. (Off, Set "in" "mm")
Hold Time	The amount of time the cross-head pauses after completing a step.
Load Stop	Test stops when a set load value is reached. (Off, Set lbF)

Advanced Mode – Programmable Parameters

The advanced mode offers maximum programming flexibility. The mode compiles all programmable parameters of the test stands allowing the user to create complex testing profiles with conditions that may not be achieved in standard application modes.

Compatible Force Gauge Mode: Standard, Multi-Peak

Programmable Parameter		Description	
Profile ID		Profile name or number (9 characters)	
Steps		Number of steps in the test. Parameter can differ for each step.	
Ref. Pos. Set. - Reference Position Set		Sets the starting position of the cross-head by moving the cross-head manual to the desired position with the dial-knob. Press on the dial-knob to put the cross-head in motion.	
Ref. Pos. - Reference Position		Starting position of the test. Once a test profile has been selected the test automatically travels to the reference point. (in, mm)	
Cycles		All steps of the test will run for the specified numbers of cycles.	
Auto Return		Cross-head automatically returns to the reference point after a peak has been detected or the test has been completed.	
Break Stop		When enabled the test stand stops if a sample break is detected. The test stand performs its own break (peak) calculation from the measurements it receives from the force gauge.	
Step Parameters			
Action	Move Up	Starting direction of the cross-head from the reference position.	
	Move Down		
	Hold	Time: The amount of time the cross-head paused.	
	Constant Force	The cross-head maintains specified constant force. The cross head performs minimum movements required to maintain a constant force applied within a specified tolerance range for a specified amount of time.	Duration: The amount of time required to maintain the specified constant force. Force: The amount of force which will be maintained for a specified time. Tolerance: Force tolerance specified in percent +/- used to maintain the position of the cross-head in order to maintain the specified force.
Speed		Moving speed of the cross-head (in/min, mm/min)	
End	Travel	Distance: The distance required for the cross-head to travel.	
	Time	Duration: Step will run for a specified amount of time.	
	Sample Break	Step stops if a sample break is detected. The test stand performs its own break (peak) calculation from the measurements it receives from the force gauge.	
	Force	Step ends when a set force condition is met.	Condition: Greater than or less than condition for the force value at which the step will end. Force: Specified force condition value.
	Position	Step ends when cross-head reaches the set position.	