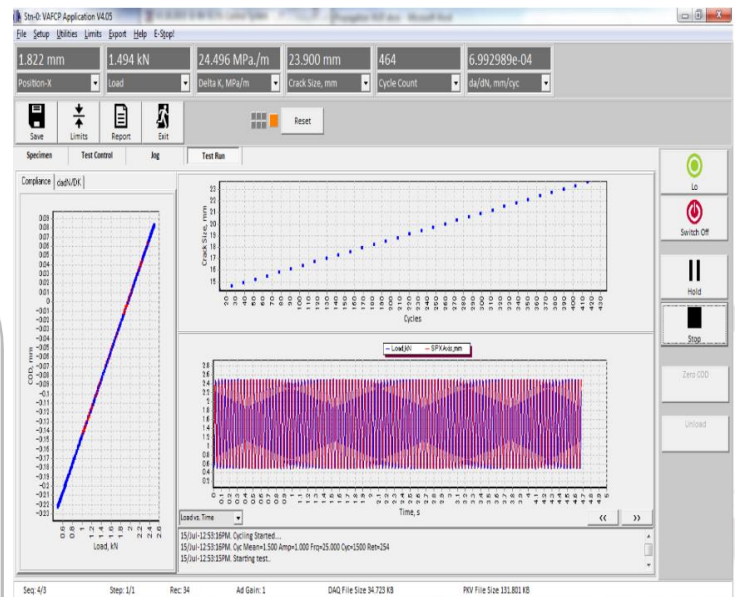


BISS Variable Amplitude Fatigue Crack Propagation test application software is designed to perform fatigue crack growth test under MTL32 environment with 2370 controller.

Fatigue crack propagation (FCP) test is done as per ASTM E647-15 standard on various specimens like C(T) LLD, C(T) MOD, SEB, DC(T), M(T), ESE(T), etc with compliance library.

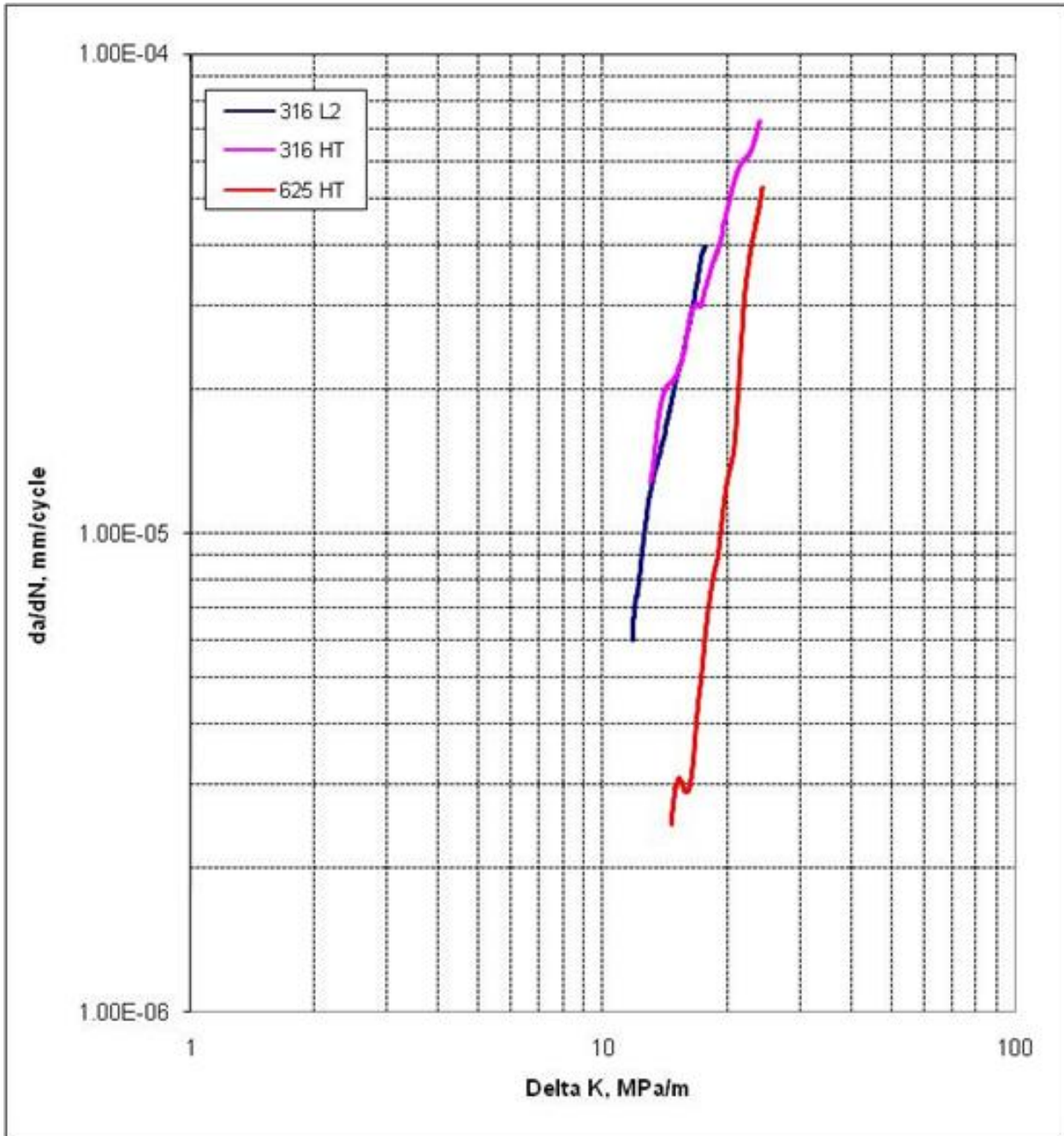


### Technical features

- Tests can be done in constant load control, constant Kmax control, decreasing  $\Delta K$  control, etc and combination of these with multiple steps
- Option to program multiple steps with different loading conditions and different frequency
- Crack length measurement from unloading compliance, ACPD / DCPD
- Online graphs for X-Y with  $Da/dN$ , load vs. COD, crack length vs cycles, K vs no. of cycles, chart and trend etc
- Automatic calculation of  $da/dN$ ,  $\Delta K$ , R-ratio
- Online display of crack length, Kmax, Kmin, delta K, Pmax, Pmin, delta P,  $da/dN$ , etc
- Option to stop the test at specified crack length, crack increment, Kmax, cycles etc
- Option to do variable amplitude test using Twist, Falstaff, etc spectrum files.
- Option to save the test profiles
- Auto data acquisition settings
- Autoscaling of graphs
- Option to enter material properties and specimen dimensions

- Option to measure crack length using remote LLD gage
- Post processing software for computation of  $da/dN$  Vs Delta K, crack length Vs No of cycles, crack closure and other parameters
- User can pause/resume the test at any time
- Data collection from various channels viz. Stroke, Load, Strain, and other transducers at user defined intervals
- User can modify controlling test parameters at any time ( $\Delta K$ , R-ratio,  $\Delta P$ , frequency)
- Results and raw data are stored in MS Excel spread sheet

### Da/dN Vs Delta K report



Note: Specification are subject to change without prior notice