DYNAChew

Chewing Simulator

General Information

Servo-electric testing machine for chewing simulation:

- Applying of mechanical loads for the purpose of chewing simulation
- Equipped with three servo-electrical drives (2 in the XY-table, 1 for Z-axis translation)
- Multi-axis control and synchronization
- Integrated measurement for three lateral displacements and forces
- Integrated sample temperature conditioning



Technical Data

Max. capacity (short-time peak force Fx/Fy/Fz): 1 kN
Continuous load (rms static/dynamic Fx/Fy/Fz): 600 N

• Test frequency: 1-5 Hz

• Max. displacement $S_{x/y}$: +/- 15 mm, S_z : +/-25 mm

Test Software

- o Operation and data analysis via DYNA-TCC test software
- Synchronized and controlled motion of all three axes
- Test module cyclic loading test for simulated chewing cycles
- o Control modes for displacement, force and combined mode
- Graphical user interface for parameterization of load profile
- o Display and storage of data for displacements, forces and temperature



