Main Features

Chap.	Item
2.1	Text Editor and Graphical Editor Pre-Processing and Post-Processing of Input and Output data
2.1	Six available units for lengths, and forces and two for temperatures
2.1	Continuous Beam, Plane and Space Truss and Frame, and Shell elements
2.1	Generation of Joints, Restraints, Springs, Members, and Shells
2.1	AISC or EURO Frame Member Data Base for Design. Any Used defined section for analysis only
2.2	Member's local plane 1-2 can be oriented in 3D
2.3	Up to 32700 joints for Static analysis and 10000 Joints for Dynamic Analysis
2.3	Automatic Joint renumbering to minimize Global Matrices Half Band Width
2.3	Fast 32-bit In-Core and Out-Of-Core Engine solution of up to 196200 linear equations
2.3	Restraints, Spring Supports, and Induced Displacements in any of the 6 DOF's
2.4	Up to 200000 Frame prismatic members and Shell members
2.4	Up to 10 types of Frame Member End Releases at any member end (4 Moments, 4 Shears, Axial, and Torsion)
2.4	Frame and Shell members with shearing deformation effects available
2.4	Tension Only Frame Members available
2.4	Materials MTOs available
2.5	Up to 2 Master Joints per Frame member
2.6	Frame and Shell Member with Loads along Local Planes and Global Planes (Point Loads and Trapezoidal Loads)
2.6	Joint Loads (forces and moments) in any of the 6 DOF's in Global Coordinates
2.7	Up to 100 Basic Load Conditions
2.8	Up to 1000 Load Combinations of the Basic Load Conditions
2.9	P-Δ effect in Static/Dynamic Analysis by Geometric Stiffness Matrix Correction, from Gravity Loads
2.10	Print a user selection of output information
2.11	Concrete design by ACI 318-19 (Frame Rect. Members, Circ. Columns, and Shells in Shear and Flexure)
2.12	Parameter Designs for Frame member Steel Structures
2.12	Steel design by AISC 360-10/16 (Tension, Compression, Shear and Flexure verification)
2.12	Frame Member's deflection verification
2.13	Automatic calculation of Self-Weight and Mass of the structural system
2.14	Damping of the structural system available for Dynamic analyses
2.15	Response Spectrum defined by Code (ASCE 7-16/NSR-10) or by User
2.15	Static (User defined loads and forces, and ELF/Response Spectrum by ASCE 7-16)
2.16	Dynamic (Eigen's, Modal Superposition, Step Integration, and Steady State) with Time History analysis
C	Analysis and design results cross verified with available commercial software and several published literatures