1.1 Features Overview

CONTROL TECHNIQUES
12005 Technology Drive, Eden Prairie, MN 55344
952-995-8000/ 800-893-2321 www.emersonct.com

CTSize is an easy-to-use servo sizing software package from Control Techniques. This guide lists some of the products major features. For more information, go to **www.emersonct.com.**

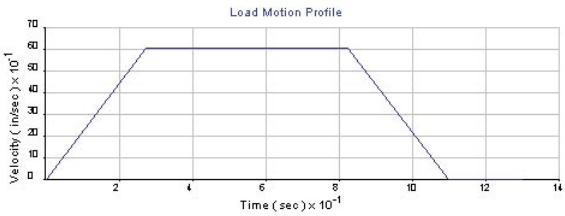
Tab Structured Layout— Easily step through your application from Load and Motion details to Product Selection by clicking on the links to one of the five tabs seen below. Start with the information you know and let the sizing software do the rest.

Load

Pre-Configured Applications — Leadscrew, Rack and Pinion, Conveyor, Cylinder, Feedroll and User Defined applications ease sizing by requiring only the necessary inputs parameters base on the selected load type.

Motion

Pre-Defined and Multi-Segment Profiles — Entering in a motion profiled is easily done by selecting one of the four basic profile types or by creating complex profiles with the multi-segment function.

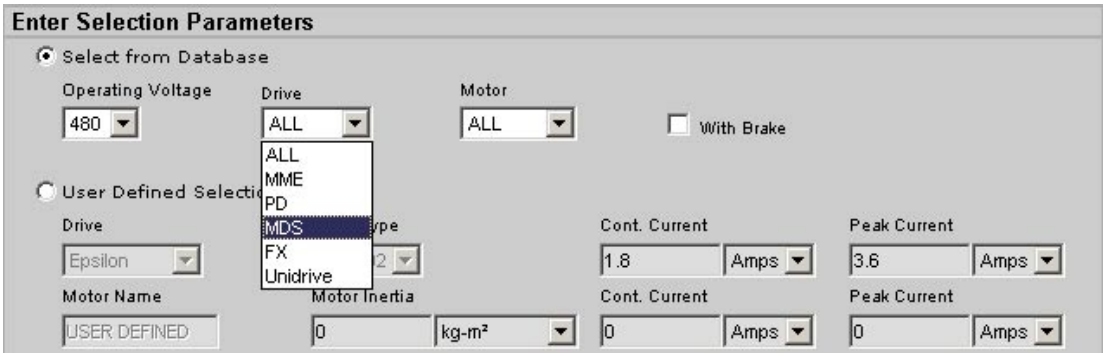


Reduction

Multiple Gearbox Reductions — Select up to three stages of speed reduction from five types – Belt/Pulley, Gear/Gear, Chain/Sprocket, User Gearbox and Catalog Gearbox.

Selection

Automatic or User Defined Selection — Let the internal product selection algorithm determine the best product for the application based on operation voltage, drive series, motor series, speed, torque and inertia requirements. The user can also determine what drive and motor series to select from or enter in a user defined motor/drive combination.

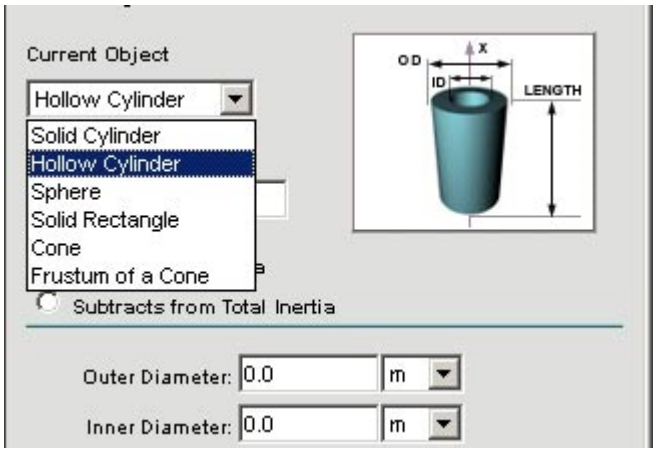


TSIZE Features Overview *(continued)*

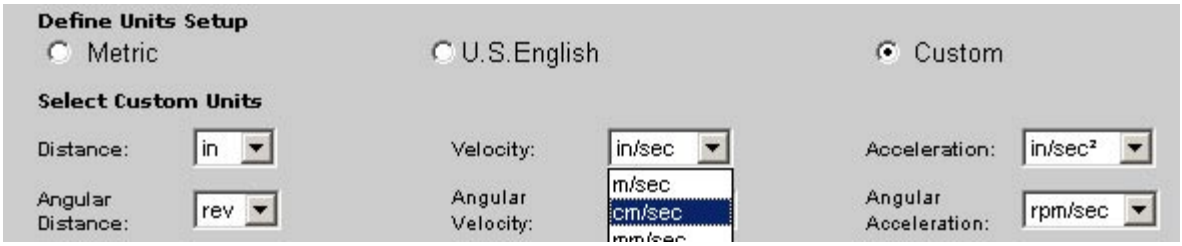
Results

Organized Results — The Results are organized in simple and clean fashion with the optimum selection parameters and speed/torque displayed at the top and alternative solutions listed at the bottom. The list of alternative solutions can be sorted by a variety of filters to quickly find the drive and motor models.

Inertia Calculator — Calculate inertia's of complex shapes by selecting from one of six pre-defined shapes and adding or subtracting their individual inertias.



lb-in-sec² **User Configurable Units** — The user can select Metric or English units or setup Custom units.



Extensive Help File — Explains each page of software in a detailed and easily understandable format.

Drive: UNI 3401 **Embedded Links to Websites** — Easily find contact information for additional support or drawings of drives and motors.

Detailed Printout — Easily document your results with the detailed printout that sums up all the application requirements and drive/motor combination information.

Selected Motor/Amplifier: NT-207 / Eb/i-202 (Operating Voltage: 230 V)

	Application Requirements	System Available	Safety Margins
Peak Torque(lb-in):	6.337	15.227	58.384 %
Continuous Torque(lb-in):	5.174	7.291	29.038 %
Continuous HP (HP):	0.118	0.48	75.518 %
Continuous Power (W):	87.666	360.0	75.648 %
Max Speed(rpm):	1432.4	5000.0	71.352 %

Total Reflected Inertia(lb-in-sec²):	0.00835
Motor Inertia(lb-in-sec²):	9.384E-5
Load/Motor Inertia Ratio:	89.036 :1