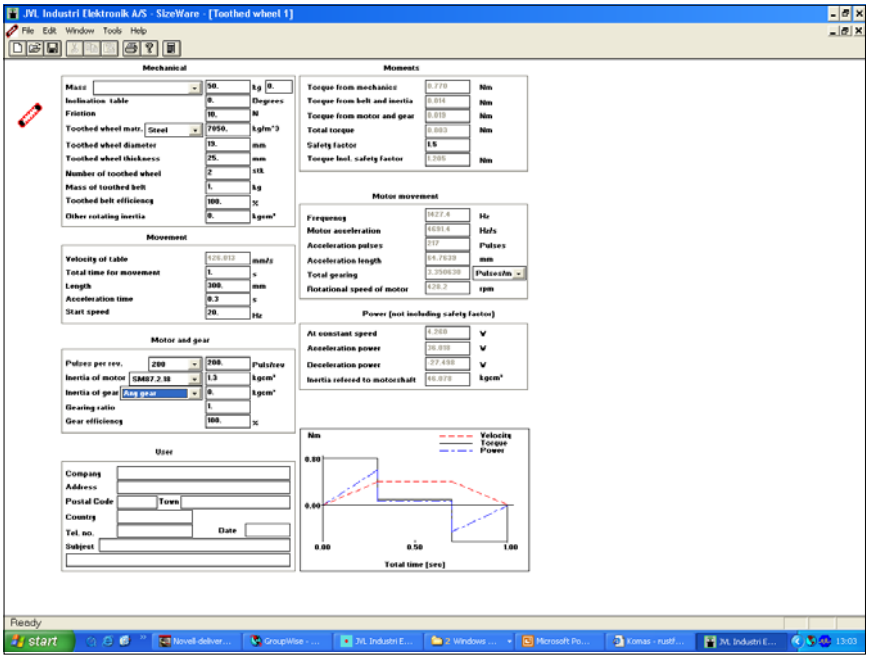
Product Data

JVL ...when motors must be controlled

SizeWare Motor Configuration Software



SizeWare is a Windows-based program that makes it very easy to determine the required motor size for a specific task in applications such as machine design, education and research.

SizeWare enables you to key-in all commonly required parameter values that influence the motor torque or power required in order to achieve the desired motion.

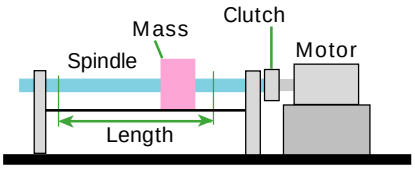
SizeWare can be used for calculation of the correct motor size for AC-Servo, DC-Servo, and Step motors.

SizeWare runs on any PC under Windows 3.xx or Windows 98/XP and is very easy to use. A single screen picture is used for displaying all parameters. Once the known values have been keyed in, simple select CALCULATE to display the results of the configuration. Results can printed out as hard copy or saved on disk for later use.

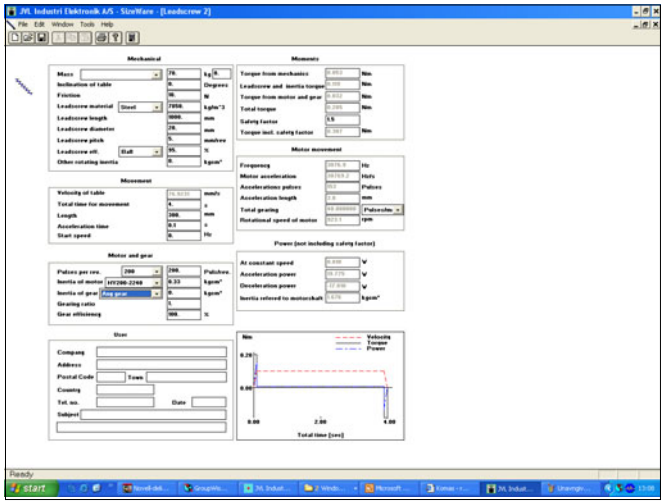
- Windows-based: runs under either Windows 3.xx or 98/XP
- Easy to use
- Single screen for all calcula tions
- Can be used for dimensioning Step, AC-, and DC Servo Motors
- Following parameters can be keyed-in:
  Velocity
  Acceleration
  Time
  Load
  Motor Inertia
  Gear Inertia
  Vertical/Horizontal movement
  Safety factor
- Can calculate with or without gearing on various drives:
  Spindle
  Drive belt
  Disk
- Hard-copy printouts of results
- Storage of results on disk
- Supplied on 3½" diskette
- Also ideal for educational purposes

SizeWare

Configuration Example

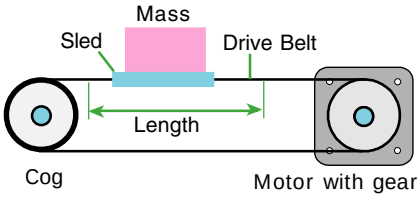


In the above simple example using a motor-driven spindle, a mass is to be moved a certain distance in a certain time.
Typical values are as follows:
Mass: 70kg
Length: 1000mm
Time of travel: 4s.
These values are keyed-in to SizeWare.
Acceleration (and Deceleration) time is set to 0.1 s and the start velocity to 500 Hz.
The spindle data are keyed in. Friction is estimated to be 10 N.
The CALCULATE button is then pressed and a suitable motor that can provide the required torque at the calculated step frequency is found. The motor data is then keyed in. In this example an MAE step motor HY 200-2240 is selected
CALCULATE is then selected again and a check is made to ensure that the calculation still provides results within the required range.



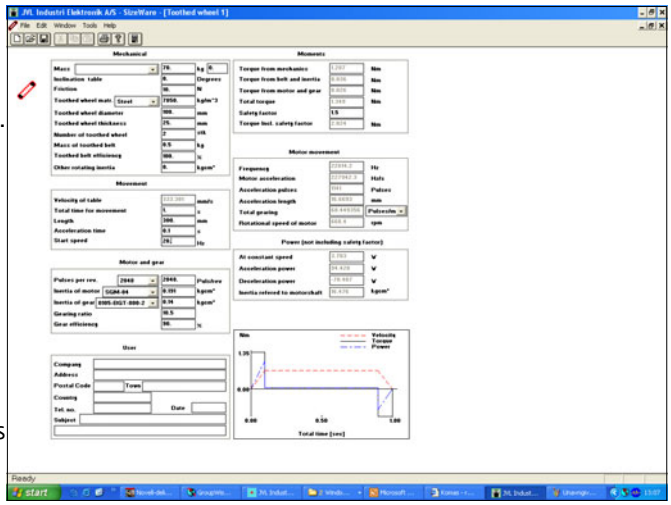
In this example the motor must be able to provide 0.4 Nm at 3064.1 Hz, which the selected motor can. A smaller motor may also be suitable for the task.
During the calculation sequence it may be necessary to adjust the selected time, acceleration and start frequency.
SizeWare immediately shows the effect of such changes on the required torque and frequency, thus greatly helping to optimise system design and configuration..

Configuration Example



In this simple example, the motor torque is transmitted via a gear to a belt-driven sled.
Typical values are as follows:
Gearing: 1:10.5
Mass of sled 70 kg
Time of travel 1.5 s.
Length: 300 mm
These values are keyed-in to SizeWare together with data for the cogs, etc. The gear can be selected directly from Technoingranaggi´s product range.

After pressing CALCULATE, a motor is selected that can provide the calculated torque at the given operating frequency. The software includes data for a wide range of standard motors of various manufacture. In this example a Yaskawa motor SGM-04 is selected.



System Requirements

PC with Windows 3.1 or later, or Windows 98/XP.
Harddisk with 1 Mbyte available disk space.

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