


Custom Reports

Use Origin to perform repetitive analysis and create custom reports without any programming.

Origin's new multi-sheet workbooks allow you to format the appearance of cell contents, merge cells and apply borders and other formatting changes. Further, you can paste-link result values from any analysis results and graphs contained in the book or project, thus creating a custom report sheet. With the ability of automatic recalculation of analysis results, your custom report sheets can become templates for repeated tasks—simply import new raw data and watch your custom report automatically update. When your report is ready, export it as a PDF file or as an image file by choosing a popular image format such as EPS and JPG.

Laboratory of Biomechanics and Physiology

EVALUATION REPORT
Ergocycle Force/Velocity Test
 Asymmetry detection + downstroke-upstroke separation



Name: Doe	First name: John	Date: 18/02/2008
Age: 25 yrs	Height: 180 cm	Weight (kg): 75
Speciality: kilometer	Best time (200m):	
Mean Velocity: -- km/h	Mean Pedaling Rate: -- rpm	

SEATED POSITION EXERCISE

Anthropometrics Data

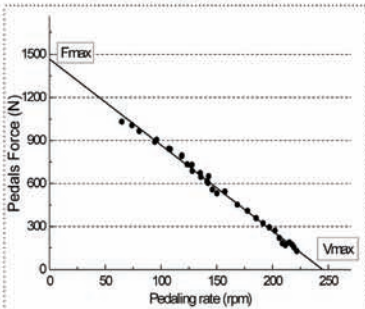
4 skin folds method, Dumin and Womersley (1974) - Harpenden Skinfold Caliper

Sum of skin folds (mm) : 30.2	Total leg volume (litre) : 7.9
Percentage of body fat (%) : 19.6	Maximal thigh circumference (cm) : 49
Sum of leg skin folds (mm) : 63.5	
Lean leg volume* (litre) : 5.5	
*(without knee)	

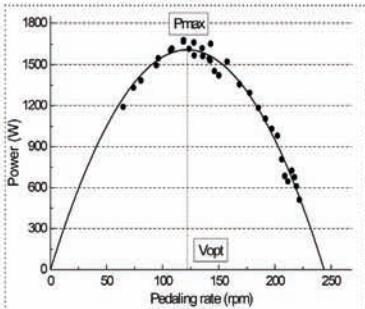
Global Force-Velocity Results

Lode Excalibur ergocycle (strain gauges in cranks). 3 sprints of 5 to 7 s : 2 sprints with high and medium resistance, 1 flying start sprint 70 rpm without resistance.

Force-Velocity Relationship



Power-Velocity Relationship



Individual results							
Vmax (rpm)	Fmax (N)	Fmax (N/kg)		Vopt (rpm)	Pmax (W)	Pmax (W/kg)	Pmax Peak (W)
245	1467	19.6		122	1608	21.4	1670
INSEP group mean							
255	1269	16.3		127	1457	18.7	1513

<p>Vmax: Maximal theoretical velocity (rpm)</p> <p>Fmax: Maximal theoretical force (N)</p> <p>Pmax W/kg: Relative maximal power (W/kg)</p>	<p>Vopt: Optimal velocity (corresponding to Pmax)</p> <p>Pmax: Maximal theoretical power (W)</p> <p>Pmax Peak: Mean of the three highest measured powers (W)</p>
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Embed images

Link to meta data associated with the imported data

Merge cells to create wide headings

Embed graphs within cells

Link to analysis results

Analysis Templates™

Analysis Templates™

Origin can automatically update most analysis operations whenever your source data or analysis parameters are changed.

This powerful feature can be used in conjunction with the custom report capability of Origin workbooks, to create Analysis Templates.

Analysis Templates can be a single workbook or an entire Origin project. Import data, perform analysis, and optionally create a custom report sheet combining graphs and results. Save the book or project as an Analysis Template, and then re-use to analyze similar data.

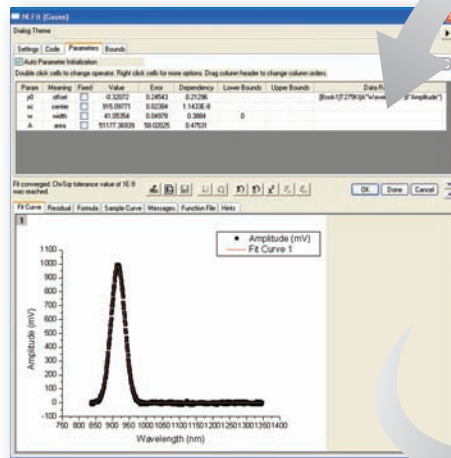
Setting up your Analysis Template

Making an Analysis Template is as easy as saving your workbook...

- Import your data.
- Graph and analyze your data with automatic recalculation enabled.
- Save your workbook as an Analysis Template, thereby preserving all of your work for repeat use.

Using your Analysis Templates is easy...

- Easily access your Analysis Templates by using the recent books or recent projects list.
- Import new data (e.g. drag and drop data from Windows Explorer) or use the Re-import feature to update an already loaded data file.
- Use the Batch Processing dialog to perform batch analysis of multiple data files, or multiple datasets contained in your Origin project.
- Origin recalculates your analysis results automatically and updates related graphs. You can then review and export or print the results.
- The Batch Processing dialog can also create a report sheet summarizing desired quantities specified in your template, for each data file or dataset that is processed.



Long Name	Wavelength (nm)	Amplitude (mV)
1	835	2.406
2	836	-5.717
3	837	6.53
4	838	-8.223
5	839	0.794
6	840	-9.049
7	841	6.663
8	842	4.172
9	843	9.327
10	844	6.668

Set up your analysis the way you want. After your initial analysis has completed, just save the workbook as an Analysis Template.

Parameter	Value	Standard Error
y0	-0.32072	0.24543
xc	915.09771	0.02384
w	41.05354	0.04978
Amplitude A	51177.36936	58.02025
sigma	20.52677	0.02489
FWHM	48.33685	0.05861
Height	994.6433	1.01537

Reduced Chi-sqr = 24.2737283993
 COD(R²) = 0.99960062467751
 Iterations Performed = 4
 Total Iterations in Session = 4
 Fit converged. Chi-Sqr tolerance value of 1E-9 was reached.
 sigma, FWHM, Height are derived parameter(s).

Import and Export: batchProcess

Dialog Theme: [Default]

Description: Batch processing with Analysis Template to generate summary report

Batch Processing Mode

Repeatedly Import into Active Analysis Template Window
 Load Analysis Template

Data Source: Import From Files

Use Import Setting in Workbook:

File List: D:\OriginLab\OriginPro8\5 Samples\Batch Processing

Dataset Identifier: File Name

Data Sheet: T365K

Result Sheet: My Results

Output Sheet: [Summary]Results

Options

Starting Row of Output Sheet: 1
 Clear Output Sheet on Start:
 Append Label Rows:
 When Output Sheet is Excel, check this box to append labels from Result Sheet

Script

Use your Analysis Template and the Batch Processing dialog to analyze multiple data files or data sets in your project. Create a summary report with data identifier and selected results for each data set.

Long Name	Dataset	File Name	Peak Center	Peak Width	Peak Width	Peak Width	Peak Area	Peak Height
1	T275K.csv	T275K.csv	915.09771	41.05354	20.52677	48.33685	51177.36936	994.6433
2	T285K.csv	T285K.csv	945.89011	43.35595	21.67798	51.04773	53294.13629	980.77809
3	T295K.csv	T295K.csv	977.5276	45.96913	22.98456	54.12451	55298.70742	959.81779
4	T305K.csv	T305K.csv	1009.93406	49.0259	24.51295	57.72358	57616.89048	937.70088
5	T315K.csv	T315K.csv	1043.1428	52.16647	26.08323	61.42132	59406.8903	908.6266
6	T325K.csv	T325K.csv	1077.12324	55.89471	27.94735	65.81099	61038.73221	871.31437
7	T335K.csv	T335K.csv	1111.88461	59.74574	29.87287	70.34523	62487.42014	834.49884
8	T345K.csv	T345K.csv	1147.4659	63.93499	31.9675	75.2777	63416.07431	791.40866
9	T355K.csv	T355K.csv	1183.85578	68.57247	34.28623	80.73791	63700.12042	741.19166
10	T365K.csv	T365K.csv	1221.05614	73.40072	36.70036	86.42274	63447.01932	689.68533