

**Clinical Software Innovations (CSI) thanks you for your interest in our Wound Area Software.**

**The following are direct screen shots from the Wound Areas software that are meant to illustrate some of its many useful features. Of course the best experience is to actually use the software. For this reason we offer a fully functional, completely free trial download that can be accessed via [www.clinsoft.org](http://www.clinsoft.org) or through [www.bimeco.org](http://www.bimeco.org)**

**The basic processing of wound images to obtain wound measurements, such as wound area, length, width and perimeter, are done in common using either the WoundAreas Professional version or using the WoundAreas Premium version The main difference between these two versions is that the Premium version has a Report feature that functions in association with Excel (any version).**

**If you should have any questions please contact us at [csi@clinsoft.org](mailto:csi@clinsoft.org)**



Plantar ulcer processed using only x-calibration

Area, length, width and perimeter of the wound are immediately shown.

All data and the traced image can be saved and later recalled for review and printing.

It can also be made part of a report in the Premium version.

Complete processing of this wound image (import, calibration and tracing and save) took less than 60 sec.

**Trace Color**

Blue  
Green  
Red  
White  
Yellow

**Trace Thickness**

Thin  
Medium  
Thick

**Length (Lx)**

**Width (Wy)**

ImageGrab  
ImageSave  
ImageClear  
LinesClear

Include L-W measurements

Wound area result is for TotalWound  
Wound Area = 6.3 sq cm

To SAVE area: Click Save Result  
To CLEAR: Click LinesClear  
To TRACE again click Start Tracing

**Perimeter (cm)**

10.8  
8.8  
10.9  
11.3

**Shape Factor**

0.657  
2.06  
0.624  
0.62

**Session Areas (sqcm)**

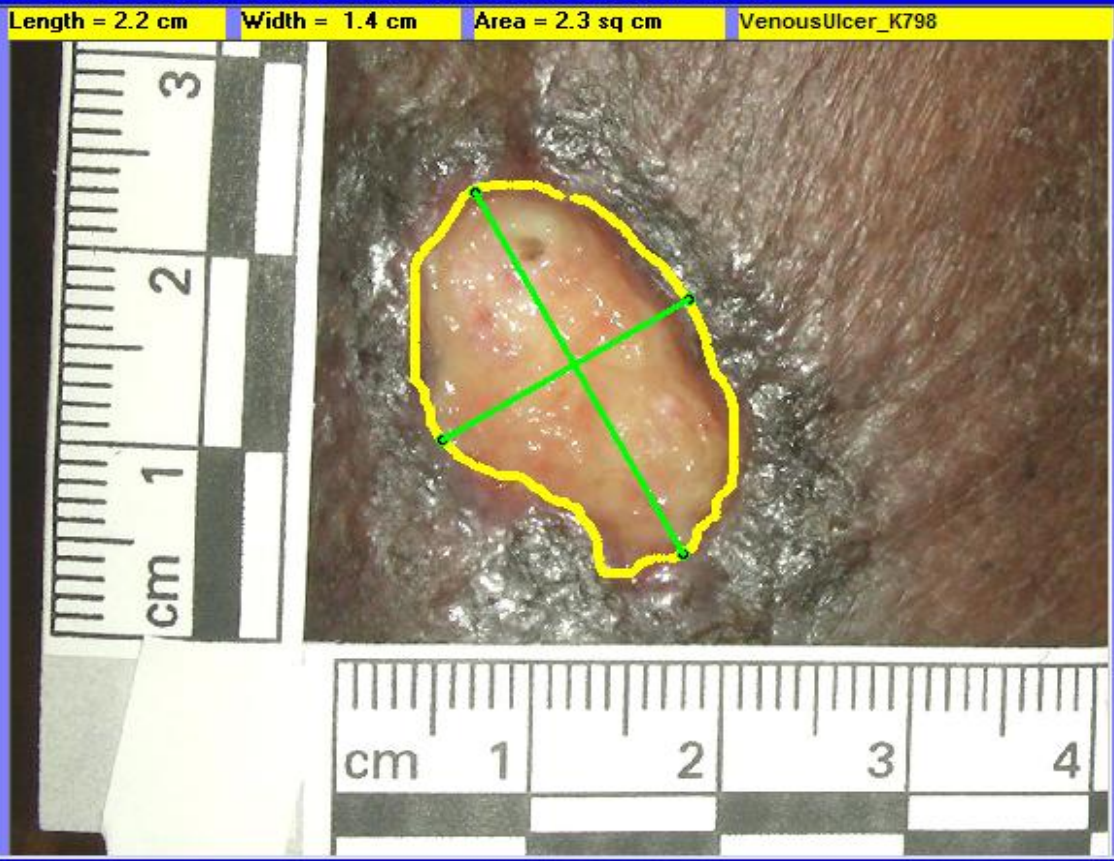
6.1  
12.7  
5.9  
6.3

**Total Area (sqcm)**  
6.3

**Wound Length (cm)**  
3.6

**Wound Width (cm)**  
2.1

The known area for this wound image is 6.1-6.3 cmsq. You can use it to practice your tracing procedure. Don't forget to trace in one direction - either clockwise or counter-clockwise and to slightly overlap the trace to include the start point to insure a closed area. Hold the left mouse button down for a continuous trace or use up-down clicks for a series of dots. You can calibrate using only the horizontal scale since that is all that is included with the photo



Venous ulcer processed using x and y-calibration

This feature is useful if the photographic angle is not close to 90° or lens-target distance is variable between treatment sessions.

In this image the vertical calibration scale is off-vertical.

The shape factor is an index of the circularity of the wound which may be useful to track shape changes with treatment.

Load Wound Image
Calibrate
Start Tracing
Save Result
End Program
Report
View Previous Data

**Trace Color**

- Blue
- Green
- Red
- White
- Yellow

**Trace Thickness**

- Thin
- Medium
- Thick

**Length (Lx)**

**Width (Wy)**

ImageGrab

ImageSave

ImageClear

LinesClear

Wound area result is for TotalWound  
Wound Area = 2.3 sq cm

To SAVE area: Click Save Result  
To CLEAR: Click LinesClear  
To TRACE again click Start Tracing

Perimeter cm  
6.6

Shape Factor  
0.663

Wound Area cmsq  
2.3

Total Area (sqcm)  
2.3

Wound Length (cm)  
2.2

Wound Width (cm)  
1.4

Clear Results

Include L-W measurements
  Include X and Y calibrations
  Show Messages
  Islands?
 Clear Lists

The known area for this wound image is 2.1-2.3 cmsq. You can use it to practice your tracing procedure. Don't forget to trace in one direction - either clockwise or counter-clockwise and to slightly overlap the trace to include the start point to insure a closed area. Hold the left mouse button down for a continuous trace or use up-down clicks for a series of dots. You can calibrate using just horizontal scale or by checking the include xy calibration box, use both horizontal and vertical scales

Complex shaped venous ulcer shown before tracing.

Processed image is shown on the Next page.



Area = 20.5 sq cm

VenousUlcerComplex\_SC2

View Previous Data

Load Wound Image

Calibrate

Start Tracing

Save Result

End Program

Report

Trace Color  
Blue  
Green  
Red  
White  
Yellow

Length (Lx)

Width (Wy)

ImageGrab

ImageSave

ImageClear

LinesClear

Include L-W measurements

Wound area result is for TotalWound  
Wound Area = 20.5 sq cm  
To SAVE area: Click Save Result  
To CLEAR: Click LinesClear  
To TRACE again click Start Tracing

Perimeter cm

Shape Factor

Wound Area cmsq

Subtract Islands

Include X and Y calibrations

Show Messages

Islands?

Clear Lists

Clear Results

Complex shaped venous ulcer shown after tracing.

This illustrates the software's ability to deal with complex shapes and its ability to exclude traced interior island regions that are healed or need to be excluded for other reasons.

Checking the Islands box will Automatically subtract all interior islands from total area.


[View Previous Data](#)
[Load Wound Image](#)
[Calibrate](#)
[Start Tracing](#)
[Save Result](#)
[End Program](#)
[Report](#)
**Trace Color**

Blue  
Green  
Red  
White  
Yellow

**Length (Lx)**
**Width (Wy)**
[ImageGrab](#)
[ImageSave](#)
[ImageClear](#)
[LinesClear](#)
 Include L-W measurements

 Include X and Y calibrations

 Show Messages

 Islands?

[Clear Lists](#)
[Subtract Islands](#)
**Perimeter cm**

35.6  
3.7

**Shape Factor**

0.211  
0.734

**Wound Area cmsq**

21.3  
0.8

**Summed Area (cmsq)**  
20.5

[Clear Results](#)

Length = 3.7 cm Width = 2.2 cm Area = 6.4 sq cm PlantarUlcer\_SC1



## Wound Description

### EXUDATE FEATURES

#### Exudate Type

- None
- Serous (thin-clear to yellow)
- SeroSang (pink to light red)
- Sanguineous (bright red)
- Seropurulent (tan to yellow)
- Purulent (thick-yellow to green)

#### Exudate Amount

- None (dry dressing)
- Minimal (damp dressing)
- Moderate (wet dressing)
- Copious (soaked dressing)

### WOUND BED TISSUES

#### Necrotic (Brown-Black)

- None
- Minimal
- Moderate
- Excessive

#### Granulation Tissue

- None
- Healthy - Minimal
- Healthy - Moderate
- Healthy - Extensive
- Healthy - Complete
- Unhealthy Looking

#### Slough (Tan-Yellow)

- None
- Minimal
- Moderate
- Excessive

#### Epithelialization

- None
- Slight
- Moderate
- Extensive
- Complete

#### Eschar (Black-Hard)

- None
- Minimal
- Moderate
- Excessive

#### Odor

- None
- Some
- Foul

#### Wound Pain

- None (0)
- Slight (1-3)
- Moderate (4-6)
- Severe (7-10)

#### Pressure Ulcer Stage

- 1
- 2
- 3
- 4
- Can't Stage
- Not Applicable

### Wound Type

- Ischemic Ulcer
- Skin Tear
- Neuropathic
- Traumatic
- Burn
- Diabetic

### Periwound

- Normal
- Erythema
- Macerated
- Indurated
- Edema

### Wound Margin

- Normal
- Erythema
- Macerated
- Indurated
- Edema

### Undermining

- None
- Between
- At about
- 12
- 1
- 2

### Depth (cm)

- 1
- 2
- 3
- 4
- 5
- 6

### Tunneling

- None
- Between
- At about
- 12
- 1
- 2

### Depth (cm)

- 1
- 2
- 3
- 4
- 5
- 6

Transfer Multiple Select

Close (keep selections)

Reset Selections

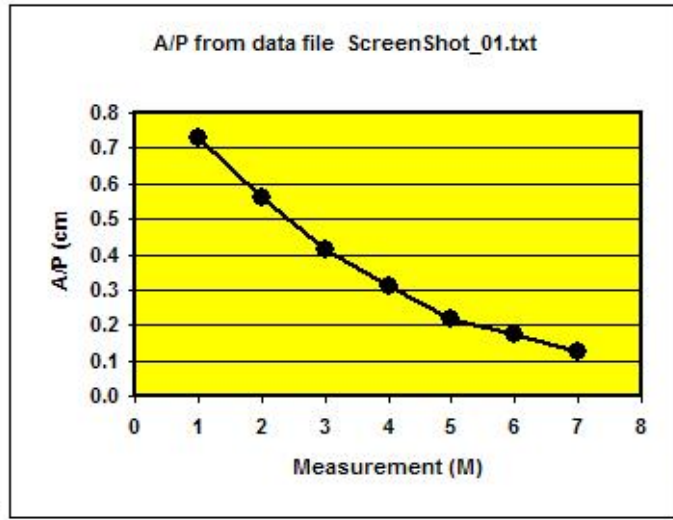
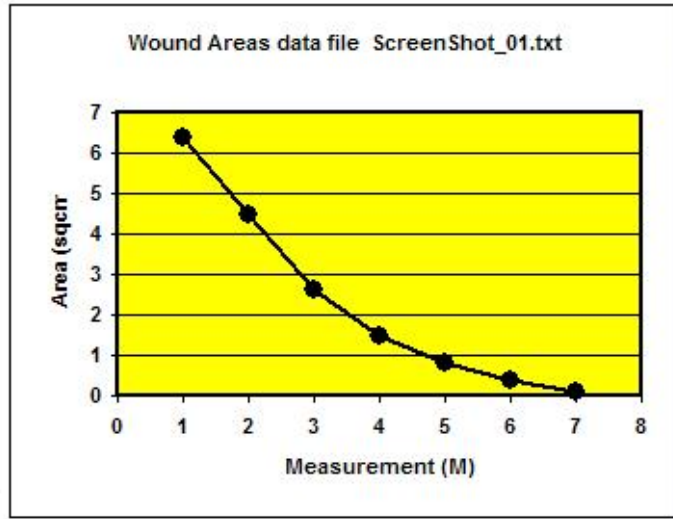
Wound Photo Date	7/10/2008
Initial Treat Date	7/10/2008
Exudate Type	None
Exudate Amount	None
Wound Type	Diabetic Ulcer
Necrotic Tissue	None
Slough	None
Eschar	None
Granulation	Healthy-Moderate
Epithelialization	None
Odor	None
Periwound	Erythema
Wound Margin	Erythema
Undermining	None
Tunneling	o'clock
Stage	Not Applicable
Pain	Slight (1-3)

Wound features can be easily assessed and documented using the Report feature in the Premium version. This shows the Wound Description page

ScreenShot_01	L cm	W cm	P cm	Area cm <sup>2</sup>	Depth cm	Volume cm <sup>3</sup>	A/P cm	M	Date
	3.7	2.2	10.0	6.4	0.2	1.3	0.73	1	2008-07-10
	3.3	2.1	8.0	4.5	0.2	0.9	0.56	2	2008-07-17
	2.9	2.0	6.3	2.6	0.1	0.3	0.41	3	2008-07-21
	2.4	1.7	4.8	1.5	0.1	0.2	0.31	4	2008-07-28
	1.9	1.2	3.7	0.8	0.1	0.1	0.22	5	2008-08-04
	0.8	0.7	2.3	0.4	0.1	0.0	0.17	6	2008-08-11
	0.2	0.1	0.8	0.1	0.1	0.0	0.13	7	2008-08-18

8/17/2008 21:56 Help DataPlots ClearPlots ClearData Menu

Data from file: ScreenShot\_01.txt   Also Plot A/P



**Wound measurements can be easily imported to the report so that sequential changes in wound area and other parameters can be documented and automatically plotted.**

**Information concerning the wound description, notes, the traced wound image and the area plots can be transferred to a formatted REPORT page for documentation and Summary with simple button clicks.**

**Menu** [X]

Close Menu

Load Data

Load Photo

Make Area Plot

Plot to Report

VIEW PAGES

Start

Data

Graph

Wound

Photo

Traced Image

Report

Make Custom Page

Save Report

Print Page

Close Report

Exudate Type	None	Wound Photo
Exudate Amount	None	
Wound Type	Diabetic Ulcer	Date
Necrotic Tissue	None	7/10/2008
Slough	None	Initial Treatment
Eschar	None	
Granulation	Healthy-Moderate	Date
Epithelialization	None	(M1)
Odor	None	7/10/2008
Periwound	Erythema	N of Tx to Date
Wound Margin	Erythema	
Undermining	None	
Tunneling	o'clock	
Stage	Not Applicable	
Pain	Slight (1-3)	



Menu ✕

Close Menu

Load Data

Load Photo

Make Area Plot

Plot to Report

VIEW PAGES

Start

Data

Graph

Wound

Photo

Traced Image

Report

Make Custom Page

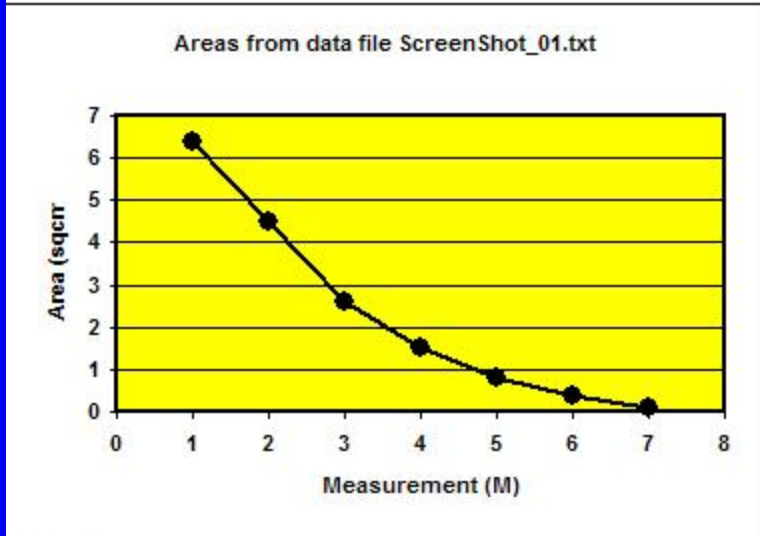
Save Report

Print Page

Close Report

Wound Notes: This is a diabetic plantar ulcer originally treated starting on 7/10/2008. Image shows wound prior to treatment. Response to treatment excellent as indicated by the area reduction in the accompanying graph. Wound essentially closed and fully epithelialized after 7 weeks (M=7 in the plot).

This note section can also be used to describe treatment regimine and any other pertinent details of treatment and wound progression.



**This is an example of a formatted REPORT page that is ready for printing and review**

Evaluator:

Physician:

Date:

Other Report or Patient Identifier