

pmark

keys:	[picture]	<i><number></i>	display picture to be marked
	[plist]	<i><number></i>	source particle parameter list
	if	<i><expression></i>	logical expression specifying which particles to include
	unless	<i><expression></i>	logical expression specifying which particles to exclude
	mkmode	<i><number></i>	mark mode
	mksize	<i><number></i>	mark size
options:	xref,yref,id,parents,holes,background,contact,xmin,xmax,ymin,ymax,hferet,vferet,aferet,bferet,hproj,vproj,perimeter,area,xcen,ycen,mmin,mmax,angle,circularity		mark with the specified particle parameter value
	cm		place annotation at particle centres of area

pmark operates on the particle parameter list (*ppl*) produced by the **analyse** command. **analyse** records 25 particles for each particle and stores these details in a *ppl*. **pmark** allows you to mark on a display the position of a set of particles or the values of one of their parameters. Refer to *Appendix D, Particle Parameters* for a list of the parameters recorded by **analyse** and the names that you should use to refer to them in **if/unless** expressions.

Examples

```
analyse...; pmark area
```

This command marks, as text, the area of all particles on picture *display*.

```
pmark if perimeter > 200
```

This command marks the position of all particles with a perimeter greater than 200.

```
pmark picture dis:3 hferet cm
```

This command marks in *dis:3* the horizontal feret diameters of all particles, at the centre of area rather than at the reference point.

Semper 6 Command Reference

pmark

Description

pmark marks the positions of the particles recorded by **analyse** in the style determined by the general keys **mkmode** and **mksize** (see *Appendix C: Semper Keys and Options* for details). **pmark** also allows you to mark the value of a particle parameter by specifying parameter names, for example, **xcen**, **ycen**. You can use the keys **if/unless** to select only particles that meet a specified condition.

To mark a display other than the current display, use the **picture** key. Use the **cm** option to mark a particle at its centre of area instead of at its reference point.

Notes

see also: **analyse**

Defaults and Ranges

keys/options	defaults	range
[picture]	mark current display, held in the variable <i>display</i>	valid display picture number
[plist]	<i>ppi</i> held in the variable <i>plist</i>	valid picture number
if	true	valid Semper expression
unless	false	valid Semper expression
mkmode	1 (upright cross)	integer in range 1 to 5
mksize	2	positive integer
xref,yref,id,parents,holes,background,contact,xmin,xmax,ymin,ymax,hferet,vferet,aferet,bferet,hproj,vproj,perimeter,area,xcen,ycen,mmin,mmax,angle,circularity	<i>none</i>	
cm	place annotation at particle reference points	