Flocculation and Acidification

Flocculation Factors and Curd Size *(from American Farmstead Cheese by Paul Kindstedt)*		
Factor	**Cheese Type**	**Curd Size**
2 to 2.5	Swiss, Alpine, and Granda	Rice Grains
3 to 3.5	Cheddar, (Hard British) and Provolone	Small Peas
	Scandinavian, Dutch, Tomme, Mozzarella	Large Peas to Hazel Nuts
4	Feta, Blue	
5 to 6	Soft ripened, Smear ripened, (soft to semi soft)	Walnuts
Here's one more trick to tell flocculation point. Take an empty bowl that floats, sanitize it, and float it on top of your milk after renneting. Then spin the bowl. At first, it will spin easily. At the flocculation point, it should barely spin or not spin at all because there will be a lattice matrix formed, and in its early stage.		

Acidification

-Collect some curds using a sterilized ladle or other implement. Squeeze the curds in the palm of your hand to check for springiness.
-Rub the curds between both palms to determine how well they separate into individual curds again. Let a small layer of curds settle on the underside of your fingers as you hold them tightly together.
-Hold them at an angle so they can drain off then turn you hand over to find out if they will stick to your fingers. You would normally want the curds to stick to your fingers when held upside down.
-Throw the curds away do not return them to the vat!

If the acidity is developing to quickly:

the temperature can be raised to slow down the acid development. for example

- 103 to 104°F or 39 to 40°C for mesophilic, or 125 to 135°F or 52 to 57°C for thermophilic.
- Curds can be salted sooner or wheels can be cooled down after pressing to slow acidity.

If the acidity is developing to slowly:

the temperature can be lowered a few degrees and the cooking time drawn out longer

-If the curds are firm enough: Curds can be piled and left to ripen longer before pressing or left in the press longer to increase acidity.

With mixed culture meso and thermo higher temperatures up to 110°F or 43°C can be used to inhibit coliform bacteria when making tomme style cheeses.