

**Below is a description of various types of fireworks shells from the American Pyrotechnics Association web site.**

## **Display Fireworks - Find Your Favorite**

**Brocade** - large number of spark trailing stars falling slowly in an umbrella pattern.

**Cake** - A cluster of small tubes, linked by fuse, that fire small aerial effects at a rapid pace. Tube diameters can range in size from ¼ inch to 4 inches, and can sometimes have over 1,000 shots. These are often used in large quantities as part of a show's finale. The variety of effects within individual cakes is often such that they defy descriptive titles. Others are simply quantities of 2.5"-4" shells fused together in single-shot tubes.

**Chrysanthemum** - A spherical break of colored stars, similar to a peony, but with stars that leave a visible trail of sparks.

**Crossette** - A shell containing several large stars that travel a short distance before breaking apart into smaller stars with a loud crackling sound, creating a crisscrossing grid-like effect.

**Dahlia**- Stars travel a longer-than-usual distance from the shell break before burning out, similar to peony shell but with fewer and larger stars, some shells are cylindrical rather than spherical to allow for larger stars.

**Falling Leaves** - Stars twinkle and flutter down.

**Farfalle** - Italian Butterfly.

**Fish** - Large inserts that propel themselves rapidly away from the shell burst, often looking like a fish swimming away.

**Mine** - A ground firework that expels stars and/or other garnitures into the sky; consists of a canister with the lift charge on the bottom with the effects placed on top, shot from mortar like a shell. Mines can project small reports, serpents, small shells, and stars. Mines are usually between 3 and 5 inches in diameter.

**Multi-Break shell** - Large shell containing several smaller shells of various sizes and types. The initial burst scatters the shells across the sky before they explode. When a shell contains smaller shells of the same size and type, the effect is usually referred to as "Thousands".

**Palm Tree**- Rising comet (trunk) that bursts into six large trailing stars (fronds) and can also have small reports (coconuts).

**Pattern Shells** - Aerial shells that look like maple leaves, rings, butterflies, Saturn, hearts, bows, smiley faces, snails, and more.

**Peony** - A spherical break of colored stars. Peony is the most commonly seen shell type.

**Pistil** - The centre sphere of stars in a spherical burst shell which contains an outer sphere of stars.

**Crackling Rain** - An effect created by large, slow-burning stars within a shell that leave a trail of glittering sparks behind and make a loud sizzling noise.

**Roman Candle** - A long tube containing several large stars which fire intermittently at a regular interval. These are commonly arranged in fan shapes or crisscrossing shapes at a closer proximity to the audience. Some larger roman candles contain small shells (bombettes) rather than stars.

**Salute** - Shell containing a large quantity of flash powder rather than stars, producing a quick flash followed by a large report. Salutes are commonly used in large quantities during finales to create intense noise and brightness. They are often cylindrical in shape to allow for a larger payload of flash powder but ball shapes are common as well.

**Set Piece** - These utilize a number of colored lances (small flares) which all together form a pattern or word. They typically burn for one minute.

**Spider** - Shell containing a fast burning tailed or charcoal star that is burst very hard so that the stars travel in a straight and flat trajectory before burning out. This appears in the sky as a series of radial lines much like the legs of a spider.

**Strobe** - Colored stars that flash on and off.

**Tourbillion** - A small, rotating device fired from candles, mines or shells which throws out sparks as it rotates eccentrically; it ascends and revolves at the same time.

**Waterfall** - Named for the shape of its break, this shell features heavy long-burning tailed stars that only travel a short distance from the shell burst before free-falling to the ground. Sometimes there is a glittering through the "waterfall"