



## Crystal on Chandeliers

Lobmeyr is always associated with crystal chandeliers, just as much as chandeliers are associated with crystal in the first place. But there is much more to crystal than meets the eye...

### Rock Crystal:

This natural material is the only real crystal in this field. We are speaking here of a natural mineral that can be found in mountainous regions. In contrast to gold or diamonds it is not mined, always found. So it is the scarcity that creates its value. The main use of this material was to create large and spectacular vessels by cutting and polishing. The by-product of this was shards which were used to decorate chandeliers. These were preciously cut to enhance the brilliance of the light.

### "Crystal" as we know it today:

Originally glass is a white opaque substance. The Venetian alchemists were trying to recreate the expression of genuine rock crystal. They de-coloured the glass by melting certain metals or minerals with it. These materials give the then clear glass specific properties and the name.

There are two broad types of crystal:

Lead crystal:	<ul style="list-style-type: none"><li>• English and French tradition</li><li>• good optical properties-high refractivity (sparkle)</li><li>• low melting point</li><li>• facilitates industrial techniques;</li></ul>
Lead-free (potassic) crystal:	<ul style="list-style-type: none"><li>• Bohemian tradition</li><li>• low refractivity</li><li>• high melting point</li><li>• requires accurate manufacture;</li></ul>

At Lobmeyr we mainly use potassic crystal for the following reasons:

- it has more tradition in our heritage
- the "sparkle" is less obtrusive and has a subtle magic
- less brittle

An interesting detail of lead crystal is that even though it is regarded as the more precious material, from a manufacturer's point of view its cost are much lower than potassic crystal.

### Strass or Swarovski:

This material originates in the bijouterie industry as early as the 19<sup>th</sup> century. Lacking chandelier crystal of acceptable quality after the Second World War Lobmeyr started using Swarovski crystal on chandeliers in the early fifties.



What started as an experiment proved a huge success and culminated for the first time in the enormous project for the Metropolitan Opera in New York which marked the greatest collaboration of Lobmeyr and Swarovski. After this success Swarovski's Strass became the best known crystal brand in the world.

Now Swarovski crystal is almost synonymous for chandelier crystal. It all started with Hans Harald Rath, back then the owner and manager of Lobmeyr.

### Crystal Linkages:

To connect crystals to a chandelier frame there are various possibilities:

#### Clips:

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• requires little training</li><li>• easy to repair</li></ul>	<ul style="list-style-type: none"><li>• may damage crystal</li><li>• weak connection</li><li>• may be damaged during cleaning</li></ul>

#### Brass or steel rings:

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• requires little training</li><li>• easy to repair</li></ul>	<ul style="list-style-type: none"><li>• wide gap between crystals</li><li>• width of gap can not be influenced</li></ul>

#### Wire linking:

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• strong mechanical connection</li><li>• gap between crystal totally variable</li><li>• no special material necessary</li><li>• easy to clean</li></ul>	<ul style="list-style-type: none"><li>• requires highly skilled craftsperson</li></ul>

The first two techniques are the most common as they imply the least of training. Lobmeyr favours the wire linking as here the advantages for the customer more than warrants the necessary additional diligence.