To enable an efficient cycle it is necessary for the wall of the lamp to run at a temperature above 250°C; this means that the bulb has to be made from quartz or hard glass.

Tungsten halogen lamps are more efficient and have longer lives compared with standard tungsten lamps. Also they are more compact than standard lamps. However they are more expensive as it is hard to make the quartz outer bulb and it is harder to introduce the gas fill into the lamp due to the high filling pressure.



Figure 37 Typical spectral light distribution of tungsten halogen lamp in comparison to daylight spectrum.



Figure 38
Professional typical Tungsten Halogen lamps (220V/240V) with R7s, GY9.5, 2-pin (heat-sink), G22 socket – professional version.
Glass cylinder should not be touched, this will shorten the lifetime dramatically!