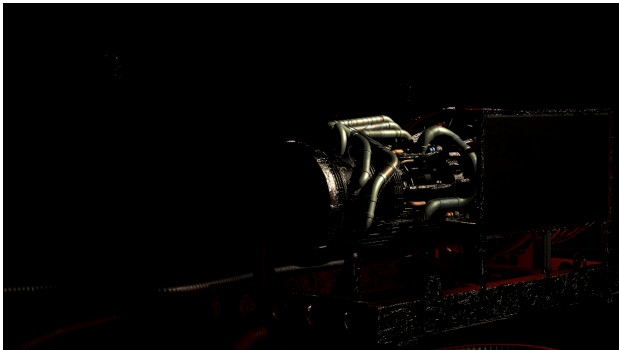# Specular

This page gives an overview of the Specular Render Element and explains how it is used.

Overview

The Specular Render Element isolates the reflected light in the scene. This render element is an image that stores specular reflection (highlight) information calculated from the material's reflection value in the scene. Specular reflection is defined as the reflection of light from a surface in a single particular reflection, as opposed to a diffuse reflection which is reflected at many angles.
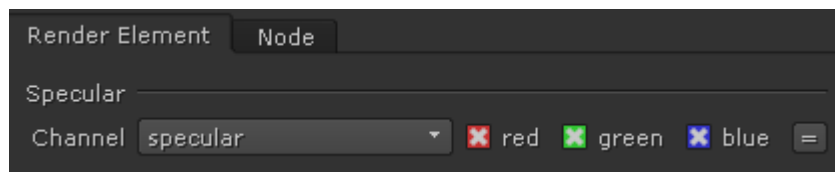
The brighter the area, the more highlight reflection the object exhibits in the render. Specular highlights will be colored if the Reflection Color parameter of a material is colored.

UI Path: ||Toolbar|| > **V-Ray Menu icon > Render > VRayRenderElement > Type: Specular**

Properties

The Specular render element has no controllable properties.


Evaluating the Specular Render Element

In most scenes, the Specular Render Element will render as mostly black with some gray, or as completely black. Only materials that are set up to reflect, and which do actually reflect a highlight in the rendered scene, will be rendered as having image value in the render element. Shades of gray (or shades of color) in the Specular Render Element rarely reach full value (white in most cases); a white or full value pixel would indicate that the material is completely made up of reflected light at that point, which is rare in realistic scenes. Surfaces with no reflection values set in their material(s) will contain no information in the render element, and will therefore render as black.

Specular light primarily appears on reflective surfaces with a low incidence angle to a bright surface or light source. Lowering the material's gloss value below 1.0 or increasing the IOR can increase this effect.

Common Uses

The Specular Render Element is useful for changing the final image's specular appearance during compositing. Below are a couple of examples of its use.
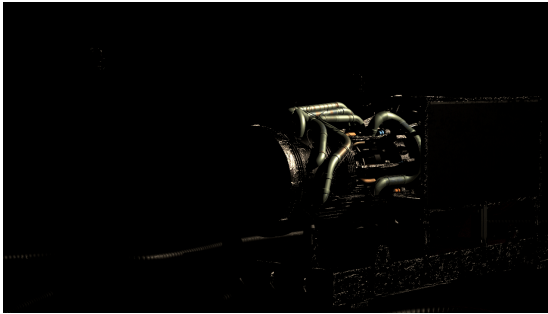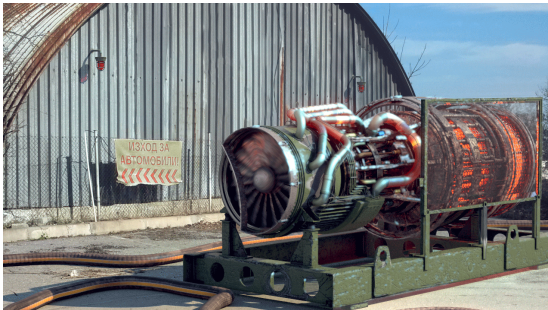

Specular Render Element

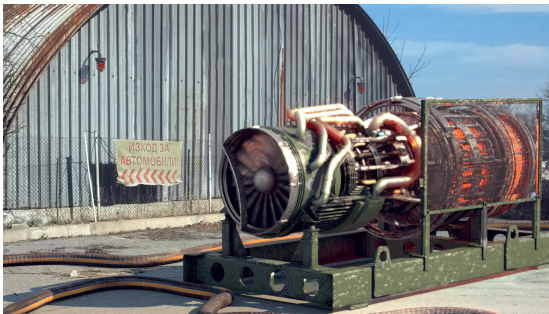Original Beauty composite

Brightened, blurred and tinted Specular Render Element

Brightened,blurred and tinted Specular Render Element

Brightened and blurred Specular

Brightened, blurred Specular set to screen mode in composite