

Diffuse

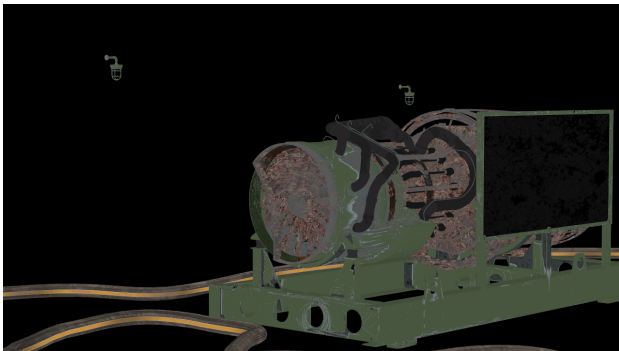
This page describes the Diffuse Render Element and how it is used to have more control of a final composited image.

Overview

The Diffuse Render Element shows the colors and textures used in materials, flatly applied to objects with no lighting information. The colors are the actual colors set in the material definition, and each texture appears as it does in the texture (file) itself. There are no highlights or shadows, and any background image is not included.

Other render elements that include colors from materials are said to include the *diffuse contribution* or the *diffuse component* of the rendered scene. The Diffuse Render Element contributes this diffuse component; any render element that includes this diffuse component is a combination of Diffuse and other render element(s).

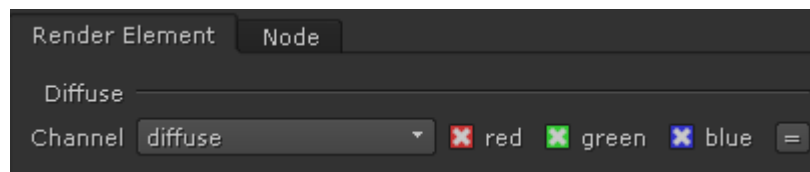
This render element is, by itself, useful for making overall adjustments and enhancements to base colors and textures during compositing without affecting things like reflections and highlights.



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

Properties

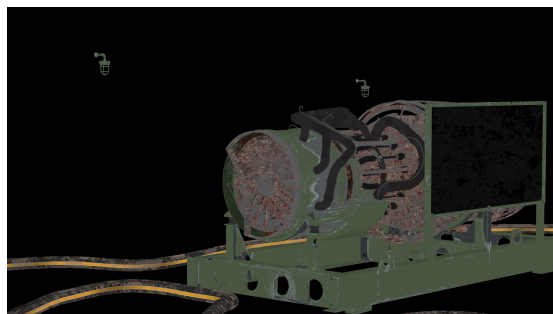
The Diffuse render element has no controllable properties.



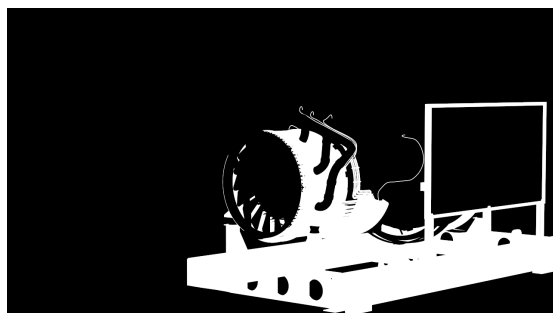
Common Uses

The Diffuse Render Element is useful for changing the appearance of many passes when it is combined with Raw render passes (like [GI Raw](#), [Light Raw](#), etc.). In the example below, the Diffuse is multiplied by the [GI Raw](#) Render Element to provide the [GI](#) pass. In this way, color correction can be performed upon the raw pass without the actual diffuse colors being changed, making it possible to tint a pass in a realistic way without re-rendering.

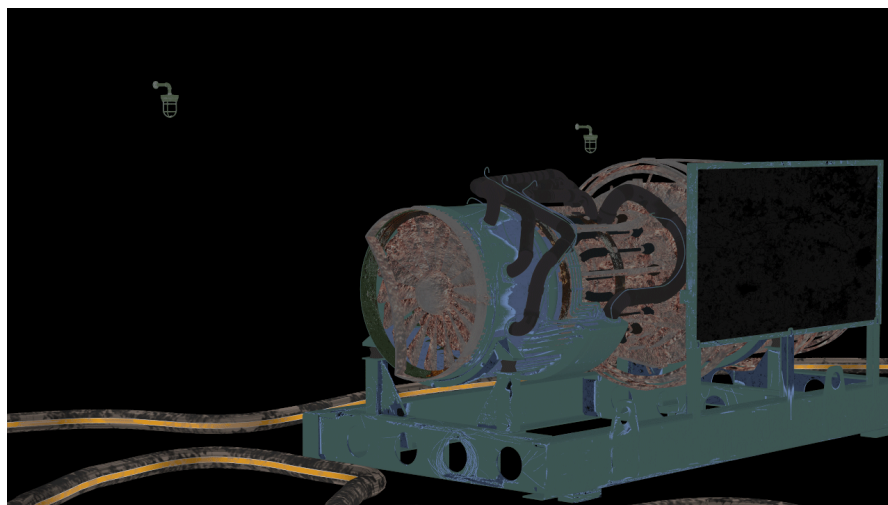
The Diffuse is a very useful render element due to the number of raw passes with which it can be combined, giving the ability to manipulate many areas of the render at the composite level. The Diffuse pass can also be color-corrected on its own, as shown in the example below. In this case, a [Multi Matte](#) Render Element was used in conjunction with the Diffuse Render Element to isolate the green painted metal parts and change their color from green to blueish without also tinting its lighting or shadowing in any way.



Diffuse Render Element



A matte for the green painted metal parts created using a V-Ray Multi Matte render element



Diffuse Render Element
with blue painted metal parts



Original Beauty Render Element



Resulting composite with Diffuse Render Element
with color correction on the blue painted metal parts