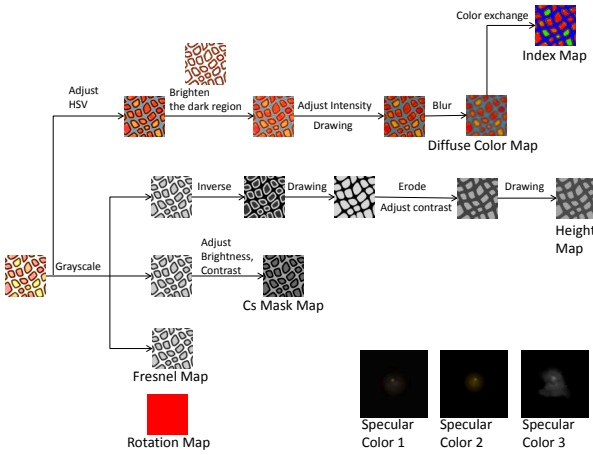## 6 Supplemental Results

The followings are our supplemental results, which are arranged in the order of being referred in our paper.

6.1 Comparison with BTF and texture mapping

Figure 16 shows the design process of the material in Figure 6. Since the lower part of the input image of the material has a brighter color, the height map generated from its gray-level image is not correct. To solve the problem, as Figure 16 shows, we inverse the color texture and use the 'Bucket Fill Tool' to fill the holes that should appear higher when rendering. We applied the 'Erode Filter' to extend the lower region.
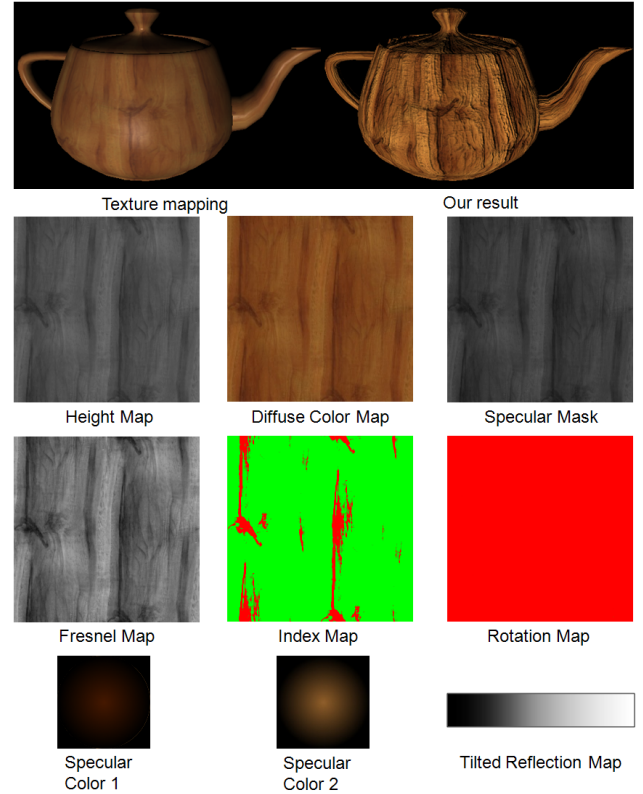

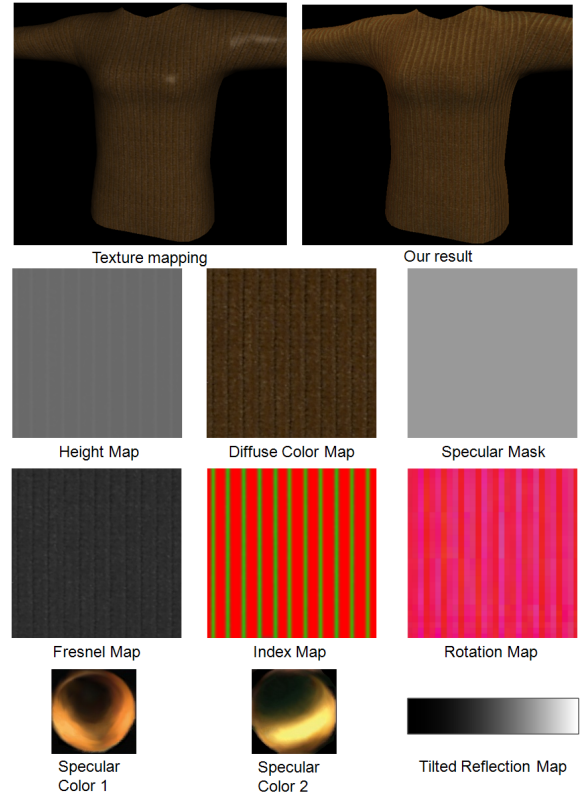**Fig. 16** The material creation flow of WL_cool.

6.2 Material Editing and Designing

Figure 17 and Figure 18 shows the material representation of the wood and corduroy sample, respectively. Figure 19 shows the material representation of the wool sample shown in Figure 9(b).

Figure 20 shows an imaginary material, in which we blur the height map to smooth the height field to let the material have a melted appearance.

Fig. 17 Material representation of the Wood sample in Figure 7(a).
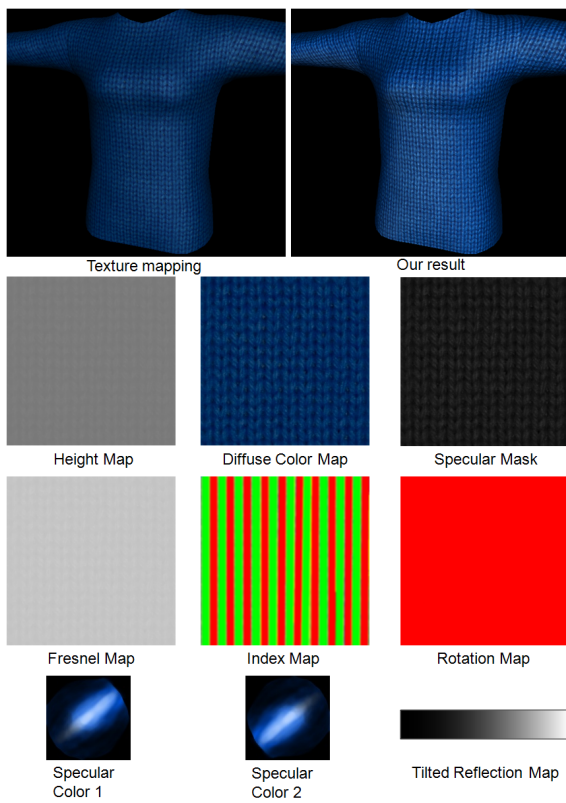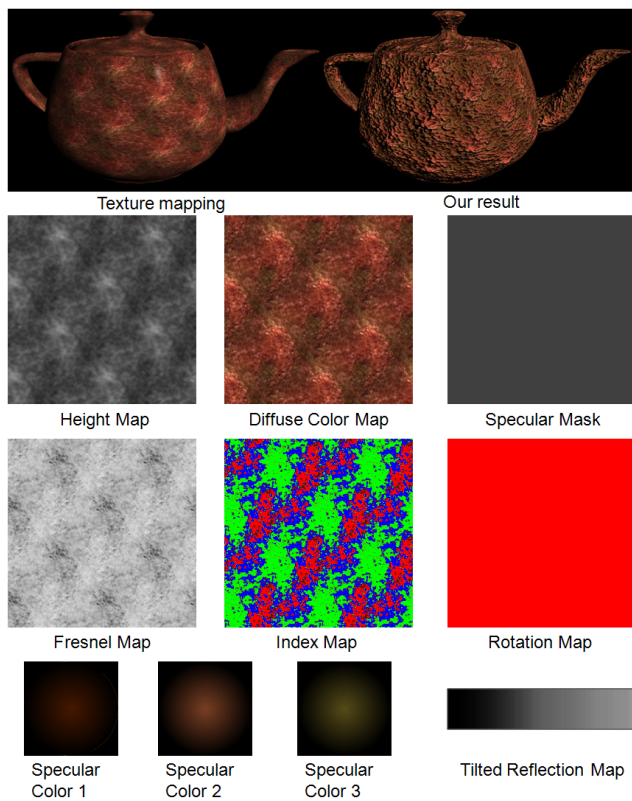

Fig. 18 Corduroy.

Texture mapping   Our result

Height Map   Diffuse Color Map   Specular Mask

Fresnel Map   Index Map   Rotation Map

Specular   Specular
Color 1   Color 2   Tilted Reflection Map

Fig. 19 Wool.

Texture mapping   Our result

Height Map   Diffuse Color Map   Specular Mask

Fresnel Map   Index Map   Rotation Map

Specular   Specular   Specular
Color 1   Color 2   Color 3   Tilted Reflection Map

Fig. 20 Lava liked material.