

## Comparison between horsehair (tail), horsehair (mane), natural bristle and synthetic bristle

	Horsehair (tail) <sup>1</sup>	Horsehair (mane) <sup>1</sup>	Natural bristle	Synthetic bristle
Origin	<ul> <li>horse's tail</li> <li>South America + China</li> </ul>	<ul> <li>horse's mane</li> <li>South America + China</li> </ul>	<ul> <li>pig (special breed)</li> <li>China</li> </ul>	<ul> <li>industrial production</li> </ul>
Technical	<ul> <li>rough surface =&gt; good polishing effect<sup>2</sup></li> <li>brush has very good polishing and cleaning effect, due to variable hair thickness<sup>3</sup></li> </ul>	<ul> <li>rough surface =&gt; good polishing effect<sup>2</sup></li> <li>big difference in diameter between hairline and end of hair =&gt; polishing effect is not so good<sup>4</sup></li> <li>length of hair varies =&gt; hair density decreases toward the surface of the brush =&gt; decreased polishing effect</li> </ul>	<ul> <li>rough surface =&gt; good polishing effect<sup>2</sup></li> <li>big difference in diameter between beginning and end of bristle =&gt; polishing effect is not so good<sup>4</sup></li> <li>length of bristles varies =&gt; density of bristles decreases toward the surface of the brush =&gt; decreased polishing effect</li> </ul>	<ul> <li>smooth surface =&gt; polishing effect not so good</li> <li>all bristles have the same diameter =&gt; no difference in effect through different degrees of hardness</li> </ul>
Optic	<ul> <li>looks superior</li> </ul>	looks superior		<ul> <li>the light bristles are yellowish</li> </ul>
Characteristics	<ul> <li>can absorb shoe cream</li> <li>brush can lose hair if the hair breaks off/ages</li> </ul>	<ul> <li>can absorb shoe cream</li> <li>brush can lose hair if the hair breaks off/ages</li> <li>mane hair is thin =&gt; can break easier=&gt; brush loses more hair</li> </ul>	<ul> <li>can absorb shoe cream</li> <li>brush can lose hair if the hair breaks off/ages</li> </ul>	<ul> <li>cannot absorb shoe cream</li> <li>shoe cream is sprayed away due to the large restoring force</li> <li>bristles are permanent</li> </ul>
Price	relatively expensive	<ul> <li>relatively expensive</li> </ul>	<ul> <li>good price-performance ratio<sup>5</sup></li> </ul>	> inexpensive

<sup>&</sup>lt;sup>1</sup> All our horse hair brushes are made with tail hair!

<sup>&</sup>lt;sup>2</sup> If you polish with a brush with rough hair, the leather becomes warmer and the cream more liquid. The cream can better enter into the pores, and the surface of the leather becomes smoother. The shoe shines.

<sup>&</sup>lt;sup>3</sup> Each hair has a different diameter. The hardness of hair varies with its thickness. This, in turn, leads to varying cleaning effects. Hard bristles remove dirt easier (also in seams and grooves), whereas soft bristles are better for polishing.

<sup>&</sup>lt;sup>4</sup> The diameters of the hair/bristle shaft and the hair/bristle end are very different. During production hairs/bristles are bent in the middle and the shaft and the end of the hair are set side by side in the brush. There is no mixture of hairs/bristles of different diameters, which would be necessary to achieve a good polishing effect.

<sup>&</sup>lt;sup>5</sup> The price-performance ratio of pig bristles is very good for short bristles only. Long bristles are more expensive than horsehair, but do not have the same characteristics.