

# Akasel Fact Sheet

## Moran-U Polishing Cloth

Updated January 2021

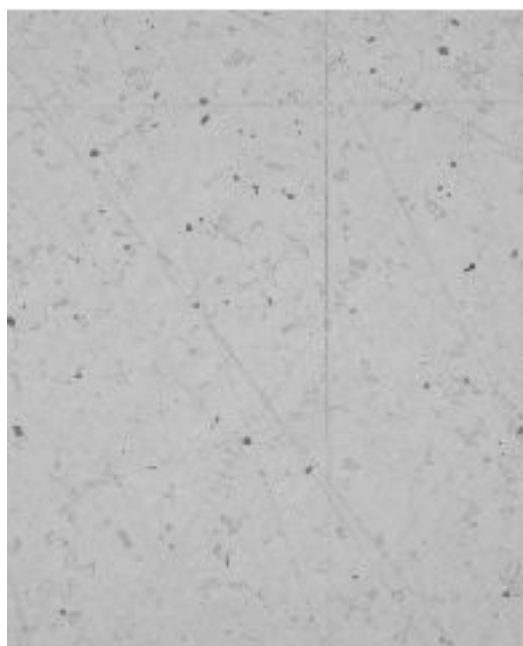


Aka-Moran-U and Mag-Moran-U are made of 100% woven wool and are especially suited for polishing with 6 and 3  $\mu\text{m}$  diamonds, and final polishing with 1  $\mu\text{m}$  diamonds.

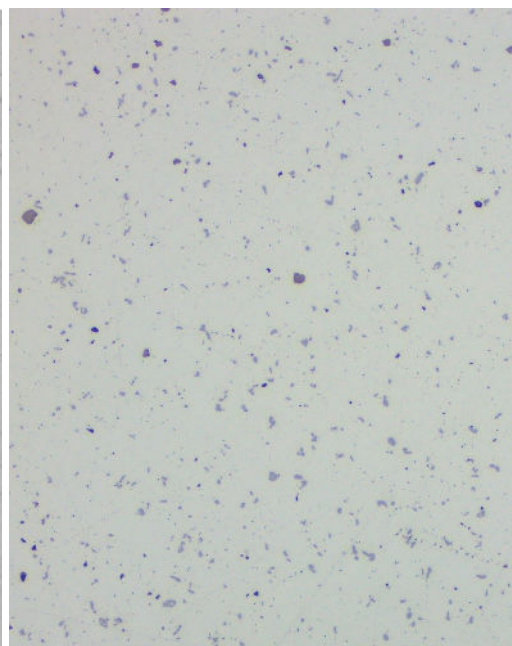


Moran-U has a very wide application range. It can be used for polishing of all types of steels and also for polishing of soft non-ferrous metals.

Moran-U has special advantages when polishing large samples, because the woven surface allows for better distribution of suspension and lubricant than the napped cloths or the very flat woven cloths. Better liquid distribution improves the cooling ability and can thus reduce the preparation time of larger samples and the creation of "orange peel" on the surface.



Aluminium Alloy AW6026 after polishing on Moran-U with DiaUltra 3  $\mu\text{m}$





Aluminium Alloy AW6026 after 15 sec of polishing on Chernal with 0.2  $\mu\text{m}$  Fumed Silica Suspension

The picture on the left shows the finish after a 3  $\mu\text{m}$  polish on the Moran-U cloth. Very few, shallow scratches are visible

On the right the result can be seen after a very short oxide polishing step using fumed silica. This shows how fast the remaining scratches from Moran-U can be removed

For polishing of soft materials Moran-U with 3 µm diamonds is recommended:

General preparation of soft materials					
1	 Rhaco Grit P320	 Water	 300 rpm	 25 N	 Until plane
2	 Largan 9	 DiaUltra 9 µm	 150 rpm	 30 N	 3:30 min
3	 Moran-U	 DiaUltra 3 µm	 150 rpm	 25 N	 2:30min
4 *	 Chemal	 Fumed Silica 0.2 µm Alkaline	 150 rpm	 20 N	 2:00 min

*The parameters in the preparation method are based on 300 mm dia. disc size and 40 mm dia. individual samples*  
*\* Step 4 is optional for a totally scratch-free result*

In preparation methods for steels where a final oxide polishing step cannot be carried out, 1 µm diamond polishing on Moran-U will be a very good alternative.

The Moran-U cloth can be used as recommended above, or it can replace similar cloths from other suppliers, keeping the preparation parameters as they were. All the preparation parameters can be transferred directly.

**Tip: To eliminate the run-in time, use Aka-Stick to prime the polishing cloth when using diamond abrasives. Use the same grain size as the suspension or spray used.**