Ohio Carbon Industries, Inc.

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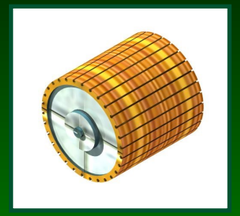
Other questions or concerns? Call us! *888-248-5029*

SATISFACTORY COMMUTATOR FILMS

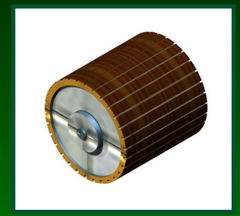


Light Film

Indicates good brush grade performance. Lighter color results from light current loads, low humidity conditions, film-reducing contamination or brush grades with low filming rate.

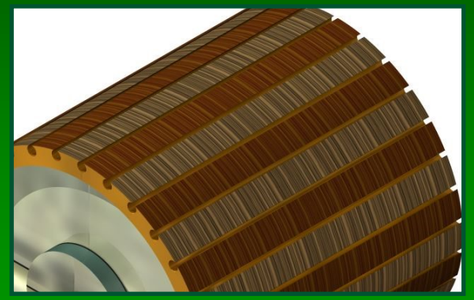
Medium Film

Ideal commutator conditions for maximum brush and commutator life. The film will be even and the color is coppery brown to dark brown.



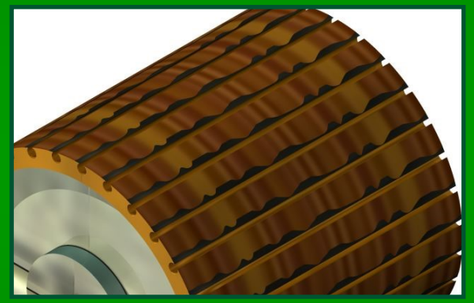
Heavy Film

Results from high current load, high humidity, high temperature or heavy filming rate grades. (Colors not in the brown tones indicate contamination, resulting in high friction and high resistance.)



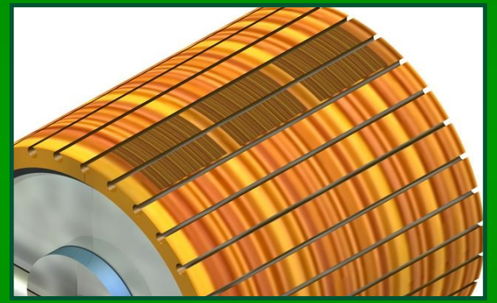
SLOT BAR MARKING

- Uneven current distribution in armature windings
- Unequal number of windings in adjacent slots
- Inconsistency in armature windings related to number of coils, slots and commutator bars



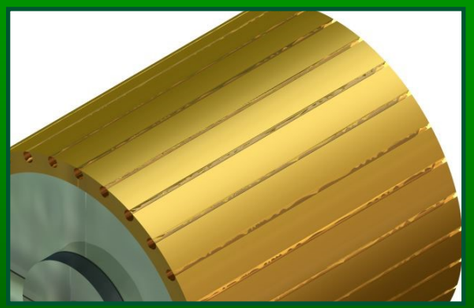
BAR EDGE BURNING

- Incorrect brush alignment/off neutral
- Incorrect interpole strength
- Inappropriate brush grade
- Low spring pressure
- Sparking caused by commutation problems



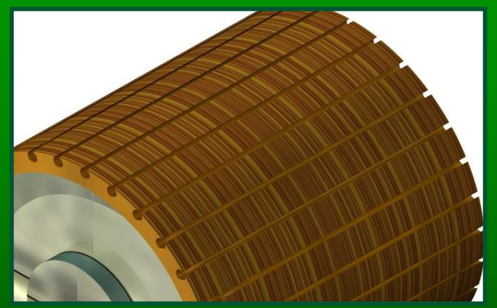
PHOTOGRAPHING

- Condensation under brush face from extended shutdown time
- A jolt on the brushes and interruption of contact or electrical spike at the same point in rotation



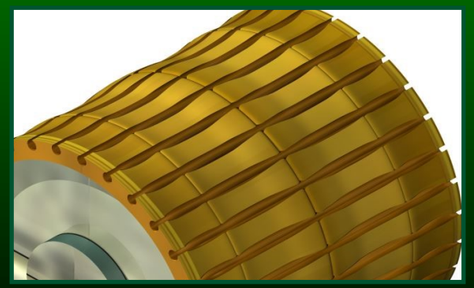
COPPER DRAG

- Overheating and softening of the commutator
- High friction brush grades
- Low spring pressure
- Excessive vibration



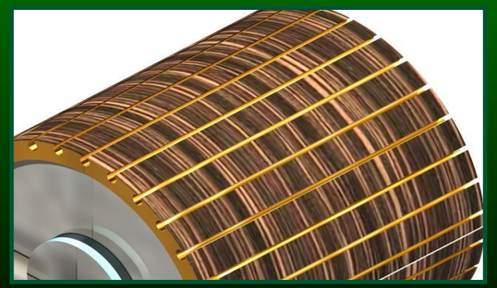
THREADING

- Commutator damage from long term streaking conditions
- Low current loads
- Low spring pressure
- Contaminated atmosphere
- High humidity



GROOVING

- Arcing due to low spring pressure
- Abrasive brush grades
- Low humidity and temperature
- Contaminated atmosphere
- Vibration



STREAKING

- Copper particle pickup from commutator
- Low current loads
- Low spring pressure
- Contaminated atmosphere
- High humidity