Metal back strip brush products can be found in industries performing tasks both simple and complex. The brushes can be simple in form such as straight strip or formed. All metal back strip brushes will have the following common attributes:

1. **Metallic strip/backing**
(Sizes ranging from #3 to #10 backing) See page 66. The metal strip is available in galvanized or stainless steel. The size backing typically works in harmony with the desired bristle diameter and density.

2. **Core wire**
Retaining wire within the formed metal strip is available in both galvanized or stainless steel.

3. **Bristle styles**
Some are more common than others but bristle choice can be tailored to your specific needs to assure the desired results.

4. **Specialized geometries** (The shape shifter of the brush world) All metal back strip brushes start from straight strip. Due to the malleable nature of strip a variety of shapes can be formed.

Custom brushes can be made to your specifications. Call for details!
Metal Back Strip Brushes

Metal Back Strip Brushes consist of densely compressed synthetic, natural bristles or wire filaments laid down over a continuous metal channel while being formed into a “U” shape. A core wire is inserted over the filament materials and forced down into the partially formed metal backing. The core wire causes the fill material to form vertically as the metal backing forms and closes over the core wire and filament.

Most Common Brush Seal
Applications Include:

**Shields** - Used effectively as a barrier, to contain flying debris such as wood chips on a router. Prevent liquids and mist sprays from escaping in a parts cleaning room or painting booth. Prevent penetration of smoke and fumes in small concentrated areas. Keep out insects and rodents. Control excess media from exiting areas that cannot be enclosed other than by brush seal.

**Light Exposure** - Reduce or eliminate the infiltration of light exposure in sensitive areas such as medical x-ray equipment, photographic darkrooms and film processing.

**Air Flow** - Highly effective in reducing air penetration and maintaining temperature control for both heating and cooling on all styles of commercial windows, doors and dock levelers.

**Dirt/Dust** - Prevent dirt and dust particle build up in machinery, buildings, clean rooms and filtration systems.

**Cleaning** - Used effectively to clean debris off conveyors, vegetables, machined parts, glass, circuit boards, paper products and film. The brush can be mounted stationary for continuous cleaning.

**Sound/Noise** - Seals gaps to reduce and dampen noise and sound transfer.

**Containment** - Used to position and contain parts on conveyor and transport systems to prevent parts from shifting or falling off conveyor.

Metal Back Strip Brush Shapes

<table>
<thead>
<tr>
<th>Helical</th>
<th>Internal Ring</th>
<th>External Ring</th>
<th>Formed Cup Brush</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Helical Brush" /></td>
<td><img src="image2" alt="Internal Ring Brush" /></td>
<td><img src="image3" alt="External Ring Brush" /></td>
<td><img src="image4" alt="Formed Cup Brush" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Formed Strip Brush</th>
<th>Straight</th>
<th>Coiled</th>
<th>Cylinders</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Formed Strip Brush" /></td>
<td><img src="image6" alt="Straight Brush" /></td>
<td><img src="image7" alt="Coiled Brush" /></td>
<td><img src="image8" alt="Cylinders Brush" /></td>
</tr>
</tbody>
</table>

See page 69

See page 77

See page 72
Mounting Methods

Metal back strip brushes can be mounted either by an alligator clip or an extruded aluminum holder. The prongs on the alligator clip wrap around the brush to allow a tight hold on a section of the strip brush. Metal back strip brushes slide into an extruded aluminum holder for mounting purposes. Aluminum holders are extruded in various end view shapes to match a specific application. See page 67 & 68.

Trim Profile

Custom Trims Available!

- **Flat**: Standard and most common trim shape.
- **Bevel**: Reduces brush resistance and conforms to surface being brushed.
- **Shaved End**: Made to utilize ends of strip as a mounting surface.
- **Offset**: Less density at surface with back-up support.
- **Stepped**: Uniform brush contact for irregular or uneven surfaces.

Metal Back Strips

Channel backing width and height may vary depending on fill amount!

- **#3**
- **#4**
- **#7**
- **#10**
Extruded Aluminum Holder #3

Extruded Aluminum Holder #4
Extruded Aluminum Holder #7

Extruded Aluminum/Steel Holder #10
Brush Application: _____________________________________________________________________________________________________

A. Overall Length: _______________________________________

B. Size of Channel:
   B1. Height of Channel: ________________________________
   B2. Width of Channel: _________________________________
   See Page 66-68 for Channel Size.

C. Overall Trim: ________________________________________

D. Trim Profile:
   [ ] Flat  [ ] Shaved End  [ ] Stepped
   [ ] Bevel  [ ] Offset
   See Page 66 for Pictures of Trim

E. Brush Shape:
   [ ] Helical  [ ] Formed Cup Brush  [ ] Coiled
   [ ] Internal Ring  [ ] Formed Strip Brush  [ ] Cylinders
   [ ] External Ring  [ ] Straight
   See Page 65 for Pictures of Shapes.

F. Brush Fill:
   [ ] Heavy  [ ] Medium  [ ] Light
   1. Type:
      [ ] Nylon
      [ ] Polypropylene
      [ ] Polyester
      [ ] Tampico
      [ ] Horse Hair
      [ ] Brass
      [ ] Phosphorus
      [ ] Bronze
      [ ] Aluminum Oxide
      [ ] Silicon Carbide
      [ ] Other ______________________
   2. Fill Diameter: __________________
   3. Crimped Level: __________________
   4. Color Preference: __________________

G. Channel Material:
   [ ] Aluminum
   [ ] Stainless Steel
   [ ] Galvanized
   [ ] Steel
   [ ] Other: ______________________

H. I’m not sure what I want, have someone contact me!
   [ ] Contact Me!

Fill out and Fax to Schaefer Brush
262-547-3927!

See Pages 67-68 for Extruded Holders.
Staple Set

Staple set brushes are very common in both industrial and consumer settings. With their wide range of uses and shapes, they fulfill a vast array of tasks. Some traits of this brush type are as follows;

1. **Brush Core**
   - Core materials cannot be too hard or too soft. Typically thicker for staple penetration.

2. **Bristle Styles**
   - Both man-made and natural materials may be used in staple set brushes. They are available in a wide range of textures, styles, colors and diameters.

3. **Staples**
   - Staple materials are tailored to meet your specific application needs.

4. **Replace or Refill**
   - Staple set brushes can be refilled a limited number of times at a reduced cost.

5. **Prototypes or Production Runs**
   - Automated equipment produce a variety of staple set brushes in high volume. Specialized, one of a kind, items are also available.

Hand Drawn

Hand drawn brushes are typically used in more aggressive applications where a very secure mounting of the bristle is essential.

Reasons for Hand Drawing Brushes:

1. **Brush Core**
   - Core material is metallic or a very brittle substrate for staple set construction.
   - Core material is flexible or too soft for staple set construction.
   - Core material is incompatible with bristle for fused construction.
   - Core cross-section is too thin for staple set.

2. **Specialized Geometries**
   - Bristles may be applied in geometric profiles not available in other construction types.
   - Examples: Straight, Staggered or Chevron.

3. **Harsh Environments**
   - Heat, caustics, and other environmental issues often require hand drawn construction.

4. **Wear Life**
   - Hand drawing is always the best choice when high wear issues are a factor. With hand drawn products you only purchase the brush core once, then return the core and we will refill your brush with new bristle at a fraction of the new cost.
   - Compared to staple set brushes hand drawn brushes can be refilled many times.

**Custom Brushes can be made to your specifications. Call for Details!**
**Schaefer Brush**

Custom Staple Set & Hand Drawn Form

Section 14-2

Name: ___________________________ Company: ___________________________

Address: ___________________________ City: __________________________ State: _______ Zip: _______

Phone: ___________________________ Fax: __________________________ Email: __________________________

Date: ___________________________

Brush Application: ___________________________________________________________

A. Brush Face Length: ___________________________

B. Brush Face Width: ___________________________

C. Block Length: ___________________________

D. Block Width: ___________________________

E. Block Height: ___________________________

F. Trim Length: ___________________________

G. Brush Block: 
- Wood
- Plastic
- Aluminum
- HDPE
- Delrin
- Other: ___________________________

H. Fill Material: 
1. Type: 
- Stainless Steel
- Carbon Steel
- Silicon Carbide
- Grit Size: ___________________________
- Aluminum Oxide
- Grit Size: ___________________________
- Phosphorous Bronze
- Other: ___________________________

2. Size: ___________________________

3. Level or Crimped: ___________________________

4. Color Preference: ___________________________

5. Pattern: 
- Straight
- Staggered
- Chevron

(see top drawing for the differences)

I. Tuft Hole Diameter: ___________________________

J. Fill Hole Spacing Width: ___________________________

K. Fill Hole Spacing Length: ___________________________

L. I’m not sure what I want, have someone contact me!
- Contact Me!

Fill out and Fax to Schaefer Brush
262-547-3927!