

TABER® ABRASIVE WHEELS

Taber® abrading wheels are available in a range of abrasiveness to suit a wide variety of testing applications.

Deciding which abrading wheel is best suited for your application is best determined with preliminary testing on the actual material. The ideal selection criteria is to reproduce, as nearly possible, the wear which the material will be subjected to in actual use.

The composition of Taber® abrading wheels has been carefully chosen and a rigorous quality program maintains the uniformity of the wheels. Wheels are sold in pairs, and shipped in tight-lidded containers to prevent damage. Each wheel is labeled "LEFT HAND (or RIGHT HAND) - THIS SIDE OUT" to assure that the mounting position will be duplicated after the wheels have been removed and later re-installed.



Features

- Available in **five levels** of abrasiveness to suit a wide range of material testing applications. Wool felt or plain rubber wheels test delicate materials or the abrasiveness of materials such as dental powders. Wheels containing abrasive particles in a resilient matrix of rubber or a hard matrix of vitrified clay are suitable for stiffer materials.

- **Calibrase®** - a resilient wheel composed of rubber and aluminium oxide abrasive particles
- **Calibrade®** - a non-resilient wheel composed of vitrified clay and silicon carbide abrasive particles
- **Wool felt** - no abrasive particles
- Plain rubber - no abrasive particles unless used with sandpaper strips
- **Tungsten carbide** - severe cutting and tearing action with helical teeth for use on resilient materials such as rubber, leather or floor covering

For detailed product information see back.

Model	Abrasive Description	Type	Composition	Servicing Required
CS-10F	Mild	Resilient	Rubber and Abrasive Particles	Reface with S-11 disc
CS-10	Medium	Resilient	Rubber and Abrasive Particles	Reface with S-11 disc
CS-17	Coarse	Resilient	Rubber and Abrasive Particles	Reface with S-11 disc
H-38	Very Fine	Non-Resilient	Vitrified and Abrasive Particles	Reface w/ Wheel Refacer & Multiple point tool
H-10	Fine	Non-Resilient	Vitrified and Abrasive Particles	Reface w/ Wheel Refacer
H-18	Medium	Non-Resilient	Vitrified and Abrasive Particles	Reface w/ Wheel Refacer
H-22	Coarse	Non-Resilient	Vitrified and Abrasive Particles	Reface w/ Wheel Refacer
CS-0	Very Mild	Resilient	Non-Abrasive Rubber	None
S-32	Very Mild	Resilient	Non-Abrasive Rubber	None
CS-5	None	Resilient	Wool Felt	None
S-35	Severe Cutting / Tearing Action	Non-Resilient	Tungsten Carbide	Clean with Solvent and Stiff Brush
S-39	None	Resilient	Leather	None

NOTES:

- Shelf life is dependent on proper storage conditions: relative humidity = 50% +/- 5%, temperature = 23°C +/- 2°C.
- The abrasive coefficient can be altered by oil or contaminants. When handling wheels, only touch the sides.

Cardboard, Packaging, Paper, Plastics, ...

Selecting wheels

If you are following a particular standard, please refer to it for the appropriate wheel. The information provided is intended to serve as a guideline only.

Calibrase® - Resilient wheel composed of rubber and aluminum oxide abrasive particles. Often used to test rigid specimens.

- **CS-10F** : a mild abrasive wheel designed to operate under loads not exceeding 500 grams. The soft rubber bonding material permits more even contact with the specimen than with the regular CS-10.

- **CS-10** : a medium abrasive wheel, designed to simulate the abrading action like that of normal handling, cleaning, and polishing.

- **CS-10W** : same as CS-10, but white in color. Especially useful for evaluating transparent materials where color transfer may be a problem.

- **CS-17** : these coarse abrasive wheels produce harsher results, like that associated with traffic or "underfoot" wear. This offers the most aggressive abrading action of the resilient wheels.

Calibrade® - Non-resilient wheel composed of vitrified (clay) and silicon carbide or aluminum oxide abrasive particles. Often used to test flexible specimens.

- **H-38** : designed to operate under loads not exceeding 500 grams. This fine-grained wheel is principally used for testing woven fabrics.

- **H-10** : the abrading action of this wheel makes it ideal for testing steel and ferrous alloys for resistance to abrasion. It is also used to test the effect of hardening and tempering treatments on steel and other ferrous materials.

- **H-18** : with medium abrasive properties, this wheel is recommended for abrading rubber (non-tacky), woven textile fabrics, coated fabrics, flexible plastic sheet, and other soft, resilient materials.

- **H-22** : with the coarse abrasion produced by this wheel, it has been used to test rubber, linoleum, leather, and certain deep pile fabrics (i.e. automobile floor covering).

Specialty Wheels - Used for special applications.

- **CS-0** : rubber - manufactured out of neoprene rubber, this wheel contains no abrasive grain. It is used when a very mild abrasive action is required, and for wet tests. Uses include determining the relative abrasion of dental powder and cream, cleaning powders, and similar compounds. Is also used to apply S-33 or S-42 sandpaper strips.

- **S-32** : NEMA wheel - same as CS-0.

- **CS-5** : felt - a densely, compacted wool felt wheel. Its principal use is in testing textile fabrics when the service wear requires one fibrous material to rub against another.

- **S-35** : Tungsten carbide - this wheel is manufactured with sharp, helical teeth cut in its periphery (25 per inch set at 45° spiral pitch). Combining both a cutting and tearing action, it provides very severe abrasion for use on resilient materials only (rubber, linoleum, and leather).

- **S-39** : leather - mounted on a brass hub, leather wheels are used in conjunction with the Taber grit feeder.

Applications

APPLICATION	CS-10F	CS-10	CS-17	H-38	H-10	H-18	H-22	S-35	CS-0
Adhesives & Sealants			X				X		
Anodized Aluminum			X		X	X			
Ceramic Finishes			X						
Coatings (Paint, Enamel)	X	X	X						
Concrete Floors							X		
Dental Powder									X
Electroplate		X							
Films	X								
Glass			X		X	X			
Hard Surface Coverings						X			
Home Furnishings							X		
Insulated Wire			X				X		
Laminates		X	X						
Leather (Shoe Soles)						X	X		
Leather Products		X	X			X	X		
Linoleum						X	X	X	
Masonite						X	X		
Optical Products	X	X	X						
Packaging		X	X						
Paper		X							
Paper & Cardboard		X			X	X	X		
Plastics		X	X			X			
Plastics		X	X						
Plating		X	X						
Porcelain Enamel			X						
Printing			X						
Rubber						X	X		
Sanitary Products						X			
Steel					X	X	X		
Textile (floor coverings)						X	X		
Textile (coated fabrics)		X	X			X			
Textiles (pile fabric)				X		X	X		
Textiles (natural & synthetic)		X		X		X	X		
Tile (rubber and asphalt)						X	X	X	
Upholstery				X					
Wax			X			X	X		
Wood						X	X		
Wood		X				X			

"Partners in Quality"