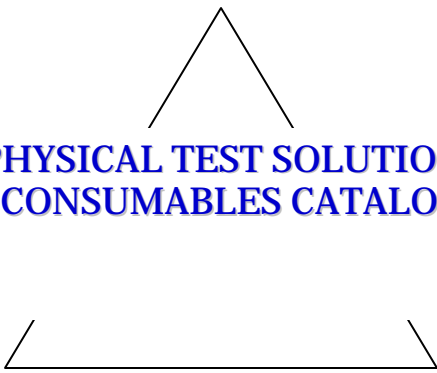




# Physical Test Solutions

Innovative Solutions in Material Test Equipment



**PHYSICAL TEST SOLUTIONS  
CONSUMABLES CATALOG**

# CONSUMABLES CONSUMABLES



Physical Test Solutions (PTS) provides a full line of metallographic consumables for the every day metallographer. The use of quality consumables is important in metallographic sample preparation process as it can reduce sample preparation time and can impact the final outcome of the process.

# Abrasive Cut-off Wheels

Sectioning is the first step of the metallographic sample preparation process. This step is commonly underestimated, but a quality cut will have a major impact on the rest of the sample preparation process and even on the optical metallographic analysis.

In industrial cutting applications, the objective is to use a long lasting cut-off wheel. By contrast, in metallography the objective is to achieve a clean cut that will not alter the microstructure of the material being tested. The idea is to avoid overheating during the sectioning process. That is achieved with adequate water cooling, with a fine-tuned cutting technique, and especially by using the correct cut-off wheel for the material being tested.

With the above in mind, PTS offers the right cut-off wheel for each material to be cut. PTS has 9", 10" and 12" (and larger) diameter aluminum oxide wheels. For precision cutting applications, PTS also has wafering blades



Abrasive Cut-off Wheels (.062 X 1.25") (Aluminum Oxide)	
PART No.	DESCRIPTION
101-000	9" diameter hard steel HRC 60+
101-005	9" diameter med hard steel HRC-45-60
101-010	9" diameter soft steel HRC 30-45
101-025	10" diameter hard steel HRC 60+
101-030	10" diameter med hard steel HRC-45-60
101-035	10" diameter soft steel HRC 30-45
101-050	12" diameter hard steel HRC 60+
101-055	12" diameter med hard steel HRC-45-60
101-060	12" diameter soft steel HRC 30-45

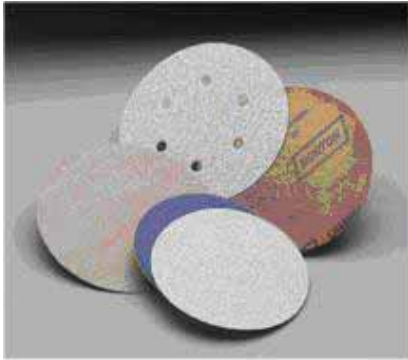
Silicon Carbide Cut-off Wheels for Non-Ferrous Materials	
PART No.	DESCRIPTION
101-015	9" diameter non-ferrous hard Titanium
101-018	9" diameter non-ferrous medium-hard Titanium
101-020	9" diameter non-ferrous soft Titanium
101-040	10" diameter non-ferrous hard Titanium
101-042	10" diameter non-ferrous medium-hard Titanium
101-045	10" diameter non-ferrous soft Titanium
101-065	12" diameter non-ferrous hard Titanium
101-068	12" diameter non-ferrous medium-hard Titanium
101-070	12" diameter non-ferrous soft Titanium



Diamond Wafering Blades	
23-4667ME	3" x .010" x 1/2"
23-4670ME	4" x .012" x 1/2"
23-4672ME	5" x .015" x 1/2"
23-4674ME	6" x .020" x 1/2"
23-4677ME	7" x .020" x 1/2"



# Abrasive Papers



For coarse and fine grinding applications, **PTS** has the appropriate silicon carbide disc for the task. Abrasive discs are offered in popular 8" and 12" diameters in grits of 60, 120, 180, 240, 320, 400, 600, 800, 1,200 and others. The paper discs are available with and without PSA backing. Abrasive belts are also available for course grinding applications.

<b>ABRASIVE PAPER</b>	
<b>DISCS</b>	<b>BOX WITH 100</b>
110-270	8" diameter, plain back grit 120
110-275	grit 180
110-280	grit 240
110-285	grit 320
110-290	grit 400
110-295	grit 600
110-305	8" diameter PSA back grit 120
110-310	grit 180
110-315	grit 240
110-320	grit 320
110-325	grit 400
110-330	grit 600
110-480	12" diameter, plain back grit 120
110-485	grit 180
110-490	grit 240
110-495	grit 320
110-500	grit 400
110-505	grit 600
110-410	12" diameter PSA back grit 120
110-415	grit 180
110-420	grit 240
110-425	grit 320
110-430	grit 400
110-435	grit 600
<b>BELTS</b>	<b>BOX WITH 10</b>
105-035	4" x 36" Grit 50
105-040	Grit 80
105-045	Grit 120
105-050	Grit 180
105-055	Grit 240



# Mounting Compounds



Specimen mounting facilitates the handling of the test specimens in the sample preparation process. It also facilitates other testing demands like microhardness testing. **PTS** has phenolic resins for hot mounting, and a special mounting media for edge retention applications. Also available from **PTS** are a variety of other products like mold release, mold cups and spec-clips for mounting various types of laboratory specimens. Cold mounting resins are also available for large or irregular shape samples.

## MOUNTING MEDIAS

### COMPRESSION

155-010	Bakelite black 5 lbs
155-020	Bakelite red 5 lbs.
155-030	Bakelite green 5 lbs.
155-050	Lucite thermoplastic transparent 5 lbs.
124-031	Mold release jar 16 oz.

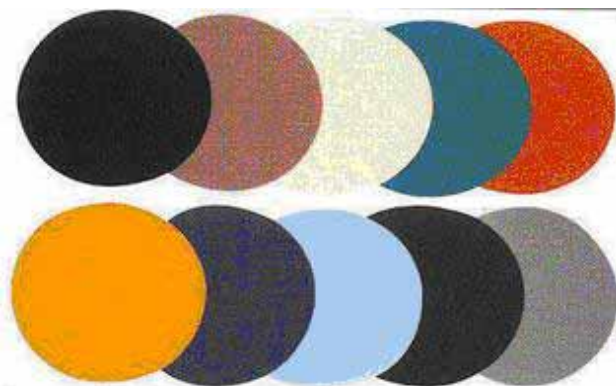
### COLD

124-015	Koldmount kit [translucid] (1 lb. Cures in 20-30 min.)
124-020	Koldmount kit (5 lbs., 5 units).
127-200	Spec-Klips (100)



# Polishing Cloths

For the final sample preparation process, a wide variety of polishing cloths suited for the diverse materials to be tested is available. Rough polishing applications typically demand polishing cloths with no nap for speedy and high material removal. The final polishing step demands a software polishing cloth that can produce a clean final polish while avoiding scratches. For this application, a polishing cloth with medium or short nap produces superior results. **PTS** has a polishing cloth for every material and every application.



<b>POLISHING CLOTHS</b>	<b>Package of 10</b>
150-285	Spec-cloth final polish 8" diameter PSA
150-295	12" diameter PSA
150-275	10" diameter Plain back
150-280	14" diameter Plain back
150-060	Nylon polishing cloth 8" diameter PSA
150-070	12" diameter PSA
150-045	10" diameter Plain back
150-055	14" diameter Plain back
150-150	Billiard cloth 10" x NH, Plain
150-180	Velvet cloth de 10" x NH,
150-190	Velvet cloth 14" x NH
150-007	Kempad cloth for rough polishing 8" diameter PSA
150-022	Kempad cloth for rouge polishing 12" diameter PSA

# Diamond Paste and Suspension<sup>™</sup>

**PTS** diamond products are available in three presentations, diamond paste, diamond slurry or suspension and diamond spray. To properly disperse the diamond polishing products, lapping oils are required to evenly disperse the diamond products.

Virgin Natural Monocrystalline Diamond

Synthetic Polycrystalline Diamond

