Grinding Wheel Teacher Notes

**T-1** means the grinding wheel is flat. This is also referred to as a Type 1 Grinding Wheel or a straight toolroom wheel;

**Vitrified** is the bonding of grinding wheel;

**A36** - **A** means it is an aluminum oxide grinding wheel and the **36** means the grinding wheel is composed of a medium grain size also known as grit.  See the grain size chart below.

**A/O** also means aluminum oxide;

RPM is the Revolutions Per Minute or Maximum Operating Speed  - not all specifications will show this. The tool, the grinding wheel and application must be in agreement to ensure safe operation.

**Grinding Wheel Specification Sheet**

**Grain Size/Grit:**

Coarse: 8, 10, 12, 14, 18, 20, 24

Medium: 30, 36, 46, 54, 60

Fine: 80, 100, 120, 150, 180

**Grade:**

Soft: B, D, E, F, G, H

Med:  I, J, K, L, M, N

Hard: O, P, Q, R, S, T

**Bond:**

V- Vitrified

B- Resin

B2: Resin Bonded

BF: Reinforced Resin

**Grain Types:**

A- Dark Aluminum Oxide – Most common grain. Used for Heavy Duty General Purpose

AS3- 20% Ceramic Aluminum Oxide, 30% Pink Grain, 50% White Grain. Excellent for form and corner holding.

AZ- Blue Aluminum Oxide- Grinds fast with excellent cool cutting action and requires minimal dressing.

RA- Red Aluminum Oxide (Ruby)- Harder grain and sharper than PA & AZ wheels good for steels with high level chromium

PA- Pink Aluminum Oxide- General Purpose Grain that is tough but friable. Tool Room sharpening applications.

WA- White Aluminum Oxide- Highly friable grain for fast cool cutting. Good for light grinding on all steels particularly on tool and die steels.

GC- Green Silicon Carbide- very friable use for carbide grinding applications.

LINK (<https://www.aaabrasives.com/blog/post/how-to-read-grinding-wheel-spec>)