

# SPECIALTY HIGH TEMP. ADHESIVES

## Magnet Bonding - Quick Set Superbonder - Thermal Bonder

### 500°F - DURALCO™ NM25

#### Magnet Bonding Adhesive

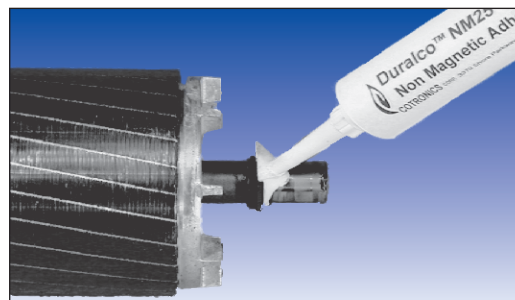
Duralco™ NM25 is an adhesive proven for bonding magnets while withstanding the high temperatures encountered in high performance applications.

It is free of magnetic particles or conductive fillers which would interfere with magnetic fields when in use.

Just mix and apply. NM25 cures at room temperature to provide excellent chemical solvent and moisture resistance.

Will form thin bond lines and is ideal for use in applications with minimum clearance.

NM25 has a medium viscosity and can form thin bond lines  
NM25 HV is a non-sag, putty.



Duralco™ NM25 Bonds a Motor Shaft Providing a High Strength Bond without Magnetic Interference

### 450°F - BOND-IT™ 007

#### “Quick Set Superbonder”

No measuring. No mess. Just mix equal parts of resin and hardener and apply.

Hardening starts in just 5 minutes. Bond strengths measuring 3,000 psi are reached in just a few hours.

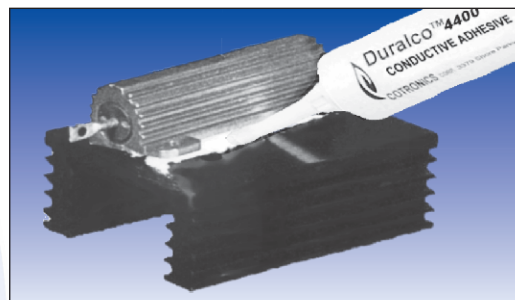
Bond-IT 007 has excellent adhesion to most metals, ceramics, glass, plastics, composites, etc.

#### Users Report:

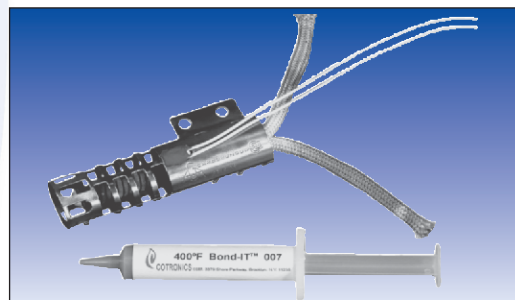
- Bond-IT 007 repairs a heater assembly in a chemical plant, eliminating any downtime. The assembly operated successfully at 300°F.

**Applications include** bonding ceramics to metals, brake pads to metals, assembling and repairing machines, etc.

Bond-IT™ 007 is the best adhesive for attaching thermocouples, strain gages, instruments and other difficult assemblies.



Duralco™ 4400 Dissipates Heat in a Semi Conductor Device



Bond-IT™ 007 Bonds a sensor to a High Temperature Heating Element

### 500°F - DURALCO™ 4400

#### Transmits Heat - Electrically Resistant

Use Duralco™ 4400 for high strength, thermally conductive and electrically resistant bonds. Cures at room temperature without any objectionable odors.

Duralco™ 4400 provides the thermal shock resistance and flexibility required to accommodate differences in thermal expansion which occurs during high heat flows.

#### Users Report:

- A “glass feed thru” was bonded to a brass housing and repeatedly cycled from liquid Nitrogen temperatures to 250°F, while maintaining its vacuum integrity.

Duralco™ 4400's unique combination of bond strength and thermal conductivity proved to be successful in this severe environment.

Cat. No.	Description	Temp.
Duralco NM25-1.....	Pint Kit .....	500°F
Duralco NM25HV-1.....	Pint Kit .....	500°F
Duralco NM25HT-1.....	Pint Kit .....	500°F
Duralco 4400-1.....	Pint Kit .....	500°F
Duralco 4400-2.....	Gallon Kit .....	500°F
Bond-IT 007-1 .....	Applicator Kit .....	400°F
For EPOX-EEZ Pre-Measured Epoxy Kits (See page 19.)		

Quantity Prices or Custom Formulations on Request

Duralco™	NM25	NM25HT	4400	007
Maximum Temperature	500°F	600°F	500°F	450°F
Components - Color	2-Tan	2-Tan	2-Tan	2-Tan
Mixed Viscosity (cps)	20,000	20,000	83,000	100,000
Mixed Density (gms/cc)	1.90	1.90	2.10	1.32
Hardness (Shore D)	80	94	80	70
Tensile Strength (psi)	10,000	11,100	7,000	3,000
Thermal Cond. (BTU-in/Hr. Ft. 2°F)	3.76	2.93	13	7
Thermal Expansion (x 10 <sup>-5</sup> /°C)	3.30	3.70	3.50	4.80
Dielectric Strength (volts/mil.)	500	555	625	450
Volume Resistivity (ohm-cm)	10 <sup>15</sup>	10 <sup>16</sup>	10 <sup>14</sup>	10 <sup>13</sup>
Heat Distortion (°C)	210	300	170	150
Elongation (%)	2	2	2	3
Thermal Stability (1000 hr. @ 200°F)	0.50	0.10	0.60	0.50
Shrinkage (% max.)	0.20	0.20	0.40	1.00
Moisture Absorption (% 30 days @ 50°C)	0.20	0.02	0.28	0.80
Cure (Hrs. @ Room Temp.)	4-16*	4 @ 250°F	4-16*	4-16*

\* Cures can be accelerated with mild heat.