03.12.05

TESTING THE NEW PANEL BONDER AND COMPETITION

TESTING THE NEW PANEL BONDER — #CEPB VS. COMPETITION



TEST PANELS PREPARED BY AN INDEPENDENT BODY SHOP.

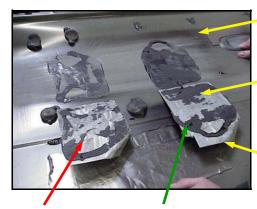
L.I.P. COLLISION NORTH WALES, PA. 19454 The latest design specifications for **PANEL BONDING** materials by Vehicle Manufacturers call for the bonding material to exhibit "**COHESIVE**" failure rather than "**ADHESIVE**" failure.

Simply put, its is more desirable for the bonding material to "split apart", consistently rather than "peel off" inconsistently.

TESTING FOR COHESIVE FAILURE VS. ADHESIVE FAILURE

co-he-sion (kō-hē/zhən) *n*. **1.** The act, process, or condition of cohering. **2.** *Physics*. The intermolecular attraction by which the elements of a body are held together.

ad-he-sive (ăd-hē/sĭv, -zĭv) *adj*. **1.** Tending to adhere; sticky. **2.** Gummed so as to adhere. **3.** Tending to persist; difficult if not impossible to shake off. --ad-he-sive *n*. A substance, such as paste or cement, that provides or promotes adhesion. -- ad-he/sive-ly *adv*. --ad-he/sive-ness *n*.



TEST DOOR SKIN

PANEL BONDING MATERIALS

HEAVY GUAGE GALVANIZED STEEL

COMPETITION CREST—CEPB



TEST PANELS WERE TORN APART WITH EQUAL FORCE.

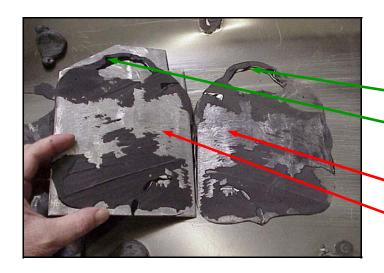
BOTH TEST PANELS EXHIBITED EQUAL AND EXCEPTIONAL STRENGTH.

LAP SHEAR TESTING BY AN INDEPENDENT TESTING FACILITY RATES BOTH MATERIALS AT @ 3500 p.s.i.

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COHESIVE FAILURE VS. ADHESIVE FAILURE - CLOSE EXAMINATION



EXAMINATION OF CREST
PANEL BONDER 3500 # CEPB

COHESIVE FAILURE EXHIBITED

BONDING MATERIAL "SPLIT APART" LEAVING ADHESIVE STUCK TO BOTH SURFACES.

ADHESIVE FAILURE EXHIBITED

BONDING MATERIAL "PEELED OFF" LEAVING ADHESIVE STUCK TO ONLY ONE SURFACE.



COHESIVE FAILURE EXHIBITED @ 60% ADHESIVE FAILURE EXHIBITED @ 40%

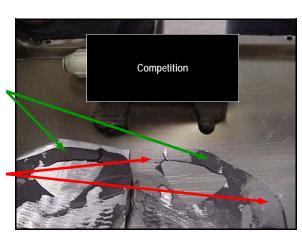


COHESIVE FAILURE EXHIBITED @ 40% ADHESIVE FAILURE EXHIBITED @ 60%



COHESIVE FAILURE

ADHESIVE FAILURE





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TESTING THE NEW PANEL BONDER AND COMPETITION

COHESIVE FAILURE VS. ADHESIVE FAILURE





CONCLUSION: CREST PANEL BONDER 3500 EXHIBITS VEHICLE MANUFACTURERS' DESIRED CHARACTERISTICS FOR PANEL BONDING MATERIALS

PANEL BONDING TESTING - CREST WORKSHOP TRAINING SEMINAR



PANEL BONDING LINE BEAD SAG TESTS



APPLICATION USING STANDARD HAND OPERATED CAULK GUN.



COMPETITION

CREST

CREST

COMPETITION





TESTING THE NEW PANEL BONDER AND COMPETITION

PANEL BONDING BRUSH OUT TESTS







COMPETITION IS
HEAVIER AND MUCH
MORE DIFFICULT TO
BRUSH OUT, DESPITE
SAGGING MORE
EASILY ON VERTICLE
SURFACES



PANEL BONDING BLOB SAG TESTS



LARGE BLOB DEPOSITS TO DUPLICATE HIDDEN CENTER PANEL BONDING

CREST CAN BE BUILT HIGHER AND "HANGS" BETTER

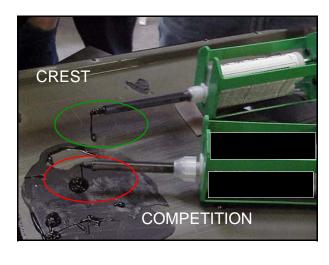


BLOBS BEGIN
TO LOSE
STRUCTURE
AFTER 2 MIN.
AND SAG
BECOMES
A
DRIP



FLOW STOPS AFTER 3 MINUTES.

PANEL BONDING DRIP TESTS



CONCLUSION:

- CREST PANEL BONDER 3500 EXHIBITS LESS SAG AND DRIP.
- CREST PANEL BONDER 3500 IS EASIER TO PUMP AND BRUSH OUT THAN THE COMPETITION.