

Epoxy Certification Wakefield-Vette 152-KA-NC

Wakefield-Vette DeltaBond 152-KA has been discontinued and replaced with DeltaBond 152-KA-NC. Equipment used to certify new material was Dage 4000, CCN 04338, due 7/21/20, with 100Kg Die Shear Cartridge, CCN 04616, due 7/21/20, calibrated to 20Kg.

Results are as follows:

- 3 samples each, Al tab, 3400275-2 0.132" sq mounted to 1" sq. Al coupon, 3400275-1
- Cure Schedule: 65°C for 45 minutes
- Bondline thickness approximately 0.001" – 0.002"
- Pre-thermal shock and post thermal shock shear test samples of each material are attached

Die Shear Strength Specification per manufacturer Wakefield-Vette:

≥ 2200 PSI per in overlap = 154.67 kgf/cm²

.132 in² tab = .112 cm²

Min pass value = 2.28 kgf

Based on the attached testing, please allow for use the new formula 152-KA-NC as a replacement for 152-KA.


Samples and copy of this report will be provided to QA Engineering for review and for certification.

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Pre-thermal shock

Test Group	DESTRUCT DIE SHEAR	Trak Part Number: 72-000-7008-002 NA
Operator	JT	Serial Number na
Test speed	5.60mil/s	Bonder Blue Staking Old
Shear height	5.00mil	Work Order Number
Test load	20.00Kg	
Machine	Series 4000 - 0	
Date saved	9/5/2019 07:43:09	
Sample number	60	
Total number of tests	3	

Destructive Tests Summary

Number of tests	3	Mean - 3*StdDev	8.481 Kg
Minimum load	8.946 Kg		
Maximum load	9.413 Kg		
Mean	9.183 Kg		
StdDev	0.234 Kg		

Pass / Fail Analysis

Pass / Fail limit	20.000 Kg
Tests above preset	0
Tests below preset	3
Tests over range	0

Grade Detail

Grade	Description	Number	Mean	StdDev
3	Bond 1 break (heel/neck)	3	9.183 Kg	0.234 Kg

Test Detail

Test	Force	Type	Grade	Description	Comment
1	8.946 Kg	Fail	3	Bond 1 break (heel/ne	
2	9.190 Kg	Fail	3	Bond 1 break (heel/ne	
3	9.413 Kg	Fail	3	Bond 1 break (heel/ne	

Post-thermal shock

Test Group	DESTRUCT DIE SHEAR	Trak Part Number
Operator	JT	Serial Number na
Test speed	5.60mil/s	Bonder Blue Staking Old
Shear height	20.00mil	Work Order Number
Test load	100.00Kg	
Machine	Series 4000 - 0	
Date saved	9/5/2019 08:06:59	
Sample number	64	
Total number of tests	3	

Destructive Tests Summary

Number of tests	3	Mean - 3*StdDev	0.000 Kg
Minimum load	10.508 Kg		
Maximum load	50.706 Kg		
Mean	36.432 Kg		
StdDev	22.489 Kg		

Pass / Fail Analysis

Lower Pass/Fail Limit	100.000 Kg
Upper Pass/Fail Limit	0
Within Limits	3
Tests above preset	0
Tests below preset	
Tests over range	

Grade Detail

Grade	Description	Number	Mean	StdDev
3	Bond 1 break (heel/neck)	3	36.432 Kg	22.489 Kg

Test Detail

Test	Force	Type	Grade	Description	Comment
1	50.706 Kg	Fail	3	Bond 1 break (heel/ne	
2	48.082 Kg	Fail	3	Bond 1 break (heel/ne	
3	10.508 Kg	Fail	3	Bond 1 break (heel/ne	

Note: Area of epoxy coverage was significantly larger on these samples than the others.

Pre-thermal shock

Test Group	DESTRUCT DIE SHEAR	Trak Part Number
Operator	JT	Serial Number na
Test speed	5.60mil/s	Bonder Blue Staking New
Shear height	5.00mil	Work Order Number
Test load	20.00Kg	
Machine	Series 4000 - 0	
Date saved	9/5/2019 07:47:08	
Sample number	61	
Total number of tests	3	

Destructive Tests Summary

Number of tests	3	Mean - 3*StdDev	8.911 Kg
Minimum load	9.062 Kg		
Maximum load	9.212 Kg		
Mean	9.136 Kg		
StdDev	0.075 Kg		

Pass / Fail Analysis

Pass / Fail limit	20.000 Kg
Tests above preset	0
Tests below preset	3
Tests over range	0

Grade Detail

Grade	Description	Number	Mean	StdDev
3	Bond 1 break (heel/neck)	3	9.136 Kg	0.075 Kg

Test Detail

Test	Force	Type	Grade	Description	Comment
1	9.133 Kg	Fail	3	Bond 1 break (heel/ne	
2	9.062 Kg	Fail	3	Bond 1 break (heel/ne	
3	9.212 Kg	Fail	3	Bond 1 break (heel/ne	

Post-thermal shock

Test Group	DESTRUCT DIE SHEAR	Trak Part Number
Operator	JT	Serial Number na
Test speed	5.60mil/s	Bonder Blue Staking New
Shear height	5.00mil	Work Order Number
Test load	20.00Kg	
Machine	Series 4000 - 0	
Date saved	9/5/2019 07:50:20	
Sample number	62	
Total number of tests	3	

Destructive Tests Summary

Number of tests	3	Mean - 3*StdDev	8.502 Kg
Minimum load	8.924 Kg		
Maximum load	9.346 Kg		
Mean	9.135 Kg		
StdDev	0.211 Kg		

Pass / Fail Analysis

Pass / Fail limit	20.000 Kg
Tests above preset	0
Tests below preset	3
Tests over range	0

Grade Detail

Grade	Description	Number	Mean	StdDev
3	Bond 1 break (heel/neck)	3	9.135 Kg	0.211 Kg

Test Detail

Test	Force	Type	Grade	Description	Comment
1	8.924 Kg	Fail	3	Bond 1 break (heel/ne	
2	9.136 Kg	Fail	3	Bond 1 break (heel/ne	
3	9.346 Kg	Fail	3	Bond 1 break (heel/ne	