

DAILY INSPECTION REPORT

REPORT # 12345, APPROVED PO# 12345-1 , JOB# 12345-1,
HOUSTON, TEXAS



Started: 03/18/2021, 7:13 PM CDT - Location: 29.7317,-95.2416 Submitted: 03/22/2021, 5:01 PM CDT - Location: 29.7316,-95.2414 Approved: 03/22/2021, 5:02 PM CDT

GENERAL

Report Date: 03/15/2021, CDT

Description of Items and/or Areas of Work: Pipe
spools, FL4 Piping Chevron

Job Phase Code: N/A

PRE-WORK SURFACE CONDITIONS

Substrate: Steel

Primed for Subsequent Coats: No

General Description: New construction rust grade -A

Previously Painted-Degree of Corrosion: Surface



Photo Description: As received.



Photo Description: As received



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CONTRACT REQUIREMENTS / APPLICABLE STANDARDS SPECIFIED

Job Specifications Only: N/A

Specified Surface Profile: 1.00 - 3.00 Mils

Average Surface Profile: 3.19 Mils

Profile Accomplished By: Gage (type)

Specified Coating Thickness Range Required:

SSPC: Yes: SSPC-SP 10 Near-White Metal Blast Cleaning

NACE: N/A

ASTM: N/A

ISO: N/A

AWWA: N/A

Other: N/A

Thickness: 2.00 - 3.00 Mils, Carboline Carbozinc 11

Thickness: 4.00 - 6.00 Mils, Carboline carboguard 890

Thickness: 2.00 - 3.00 Mils, Carboline carbothane 134 HG

OBSERVED DEFECTS

Oil and Grease: No

Weld Spatter: No

Contamination Tested: N/A

SO₄ (Sulfate): N/A

Moisture: No

Sharp Edges: No

CL: N/A

CSN: N/A

Nitrates: N/A



Photo Description: ISO 8502-6, -9 Total salt test kit



Photo Description: ISO 8502-6, -9 Total salt test Pure deionized water base reading. $8.4 \text{ microS/cm} = 8.4 \text{ mg/m}^2$

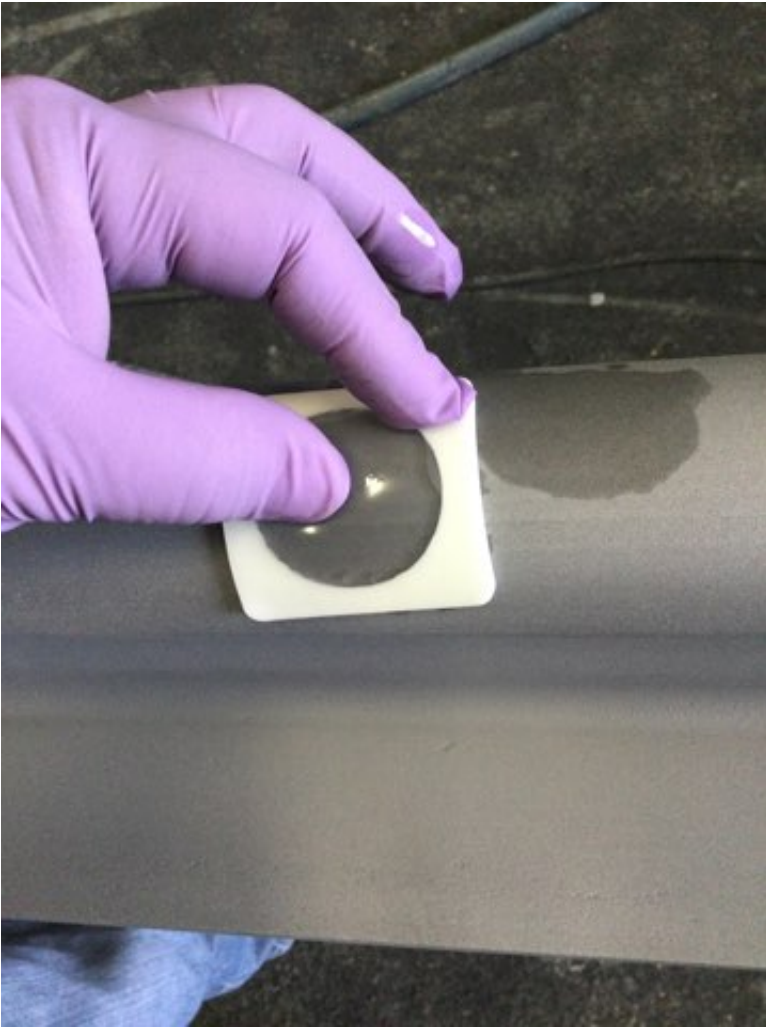


Photo Description: ISO 8502-6, -9 Total salt test Bresle patch application



Photo Description: ISO 8502-6, -9 Total salt test

Contaminated deionized water
10.9 microS/cm = 10.9 mg/m²

Test result 10.9-8.4=2.5 mg/m²

2.5 mg/m² < 10mg/m²

PASS



Photo Description: Compressed air cleanliness test.

Blotter test per

ASTM D4285, 2012

PASS

ENVIRONMENTAL CONDITIONS

READING 1

Description: Grit blasting

Date / Time: 03/15/2021, 2:30 PM CDT

Air Temp: 80.00°F

Wet Bulb Temp: N/A

Relative Humidity: 72.8%

Dew Point: 70.5°F

Surface Temp: 76.80°F

Delta: 6.3°F

Wind Direction: N/A

Wind Speed: N/A

READING 2

Description: Zinc primer

Date / Time: 03/15/2021, 5:30 PM CDT

Air Temp: 80.10°F

Wet Bulb Temp: N/A

Relative Humidity: 73.1%

Dew Point: 70.7°F

Surface Temp: 78.40°F

Delta: 7.7°F

Wind Direction: N/A

Wind Speed: N/A

READING 3

Description: Epoxy coating

Date / Time: 03/16/2021, 2:00 PM CDT

Air Temp: 79.90°F

Wet Bulb Temp: N/A

Relative Humidity: 75.2%

Dew Point: 71.3°F

Surface Temp: 79.50°F

Delta: 8.2°F

Wind Direction: N/A

Wind Speed: N/A

READING 4

Description: Top coating

Date / Time: 03/17/2021, 1:00 PM CDT

Air Temp: 79.10°F

Wet Bulb Temp: N/A

Relative Humidity: 60.1%

Dew Point: 64.1°F

Surface Temp: 72.80°F

Delta: 8.7°F

Wind Direction: N/A

Wind Speed: N/A



Photo Description: Immediately before grit blasting



Photo Description: Immediately before zinc primer coating



Photo Description: Immediately before Epoxy coating



Photo Description: Immediately before polyurethane top coating

HOLD POINT INSPECTIONS PERFORMED

Pre-Surface Prep/Condition and Cleanliness: Yes

Post-Surface Prep/Condition and Profile: Yes

Application Monitoring/WFT/Mist Coat: Yes

Post-Cure/DFT/Visual Coverage: Yes

Final Inspection: Yes

Surface Prep Monitoring: Yes

Pre-Application Prep/Surface Cleanliness: Yes

Post-Application/Application Deficiencies: Yes

Nonconformances/Corrective Action Follow-up: N/A

Lighting/Inspections min. 50 ft. Candles: N/A

SURFACE PREPARATION

Start Date/Time: 03/15/2021, 2:30 PM CDT
Stop Date/Time: 03/15/2021, 4:30 PM CDT
Area Prepared: N/A
DFT gage calibrated on: NIST Thickness Standard
Solvent Clean: N/A
Solvent Used: N/A

Abrasive Blast: Yes
Abrasive Used: 3/4 Grit Blast media
Blast Hose Size: N/A
Air Supply: 750
Blast Nozzle Pressure: N/A
Multiple Compressors Used: N/A

Nozzle Size: N/A
Compressed Air Cleanliness: N/A
Hand Tool: N/A
Hand Tool Types: N/A
Power Tool: N/A
Power Tool Types: N/A

Low Pressure Wash: N/A
Degree Cleanliness: SP10/NACE 2 Near-White Metal Blast Cleaning
HP Water Wash: N/A
Substrate Exposed: N/A
Lighting Conditions Surface Prep within 10-20 Ft. Candles: N/A
BMR: N/A
of Candles: N/A

SPG

Readings (Mils)	Total (Mils)	Average (Mils)
1.90, 2.80, 3.80	8.50	2.83
3.20, 3.40, 4.10	10.70	3.57
3.30, 3.20, 2.60	9.10	3.03
3.60, 3.20, 3.00	9.80	3.27
4.40, 2.10, 2.40	8.90	2.97
3.30, 4.00, 3.10	10.40	3.47
	57.40	3.19

PAINTED SURFACE CONDITION

Painted Surface Condition: Bare Surface To Be Coated

Dry To: Cure

Coats Being Applied: Prime, Intermediate, Top



Photo Description: Grit blasted Surface profile measurement



Photo Description: Grit blasted Surface visual comparison to SSPC -VIS 1 guide SP10 cleaning



Photo Description: Grit blasted Surface profile measurement



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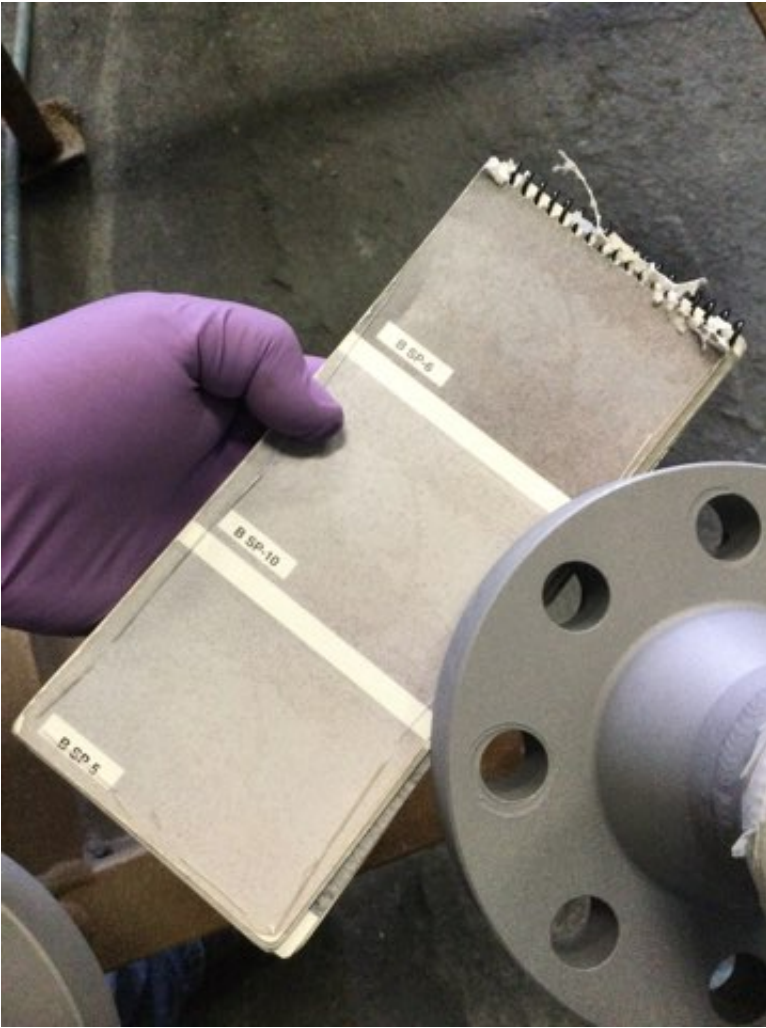


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Photo Description: Grit blasted Surface profile measurement



Photo Description: Grit blasted Surface visual comparison to SSPC -VIS 1 guide SP10 cleaning



Photo Description: Grit blasted Surface profile measurement



Photo Description: Grit blast closeup

Photo Description: N/A





Photo Description: Grit blasted Surface visual comparison to SSPC -VIS 1 guide SP10 cleaning



Photo Description: Grit blasted



Photo Description: Grit blasted Surface profile measurement

PRODUCT / MIXING

PRODUCT / MIXING 1

Coating Product Type: Zinc rich primer	Batch # Part D: N/A	Percentage Thinner Added: N/A	Application Equipment Used: N/A
Manufacturer: Carboline	Material Temperature: N/A	Mixing Method: N/A	Quantity Mixed / Applied: N/A
Catalog No. / Name: Carbozinc 11	Date / Time Mixed: N/A	Sweat-In Time: N/A	Spray Tip Size: N/A
Color: Green	Kit Size: N/A	Duration of Sweat-In Time: N/A	Approximate Coverage by Coating Applied: N/A
Batch # Part A: 20LD5333L	Caulk Applied (tubes): N/A	Pot Life: N/A	Lighting Conditions During Application 20-50 Ft. Candles: N/A
Batch # Part B: 20MD8702Z	Type of Thinner Added: N/A	Start Application: N/A	Number of Ft. Candles: N/A
Batch # Part C: N/A	Thinner Batch #: N/A	Stop Application: N/A	

PRODUCT / MIXING 2

Coating Product Type: Epoxy coating	Batch # Part D: N/A	Percentage Thinner Added: N/A	Application Equipment Used: N/A
Manufacturer: Carboline	Material Temperature: N/A	Mixing Method: N/A	Quantity Mixed / Applied: N/A
Catalog No. / Name: Carboguard 890	Date / Time Mixed: N/A	Sweat-In Time: N/A	Spray Tip Size: N/A
Color: Buff	Kit Size: N/A	Duration of Sweat-In Time: N/A	Approximate Coverage by Coating Applied: N/A
Batch # Part A: A20KD0189N	Caulk Applied (tubes): N/A	Pot Life: N/A	Lighting Conditions During Application 20-50 Ft. Candles: N/A
Batch # Part B: 19CD1945L	Type of Thinner Added: N/A	Start Application: N/A	Number of Ft. Candles: N/A
Batch # Part C: N/A	Thinner Batch #: N/A	Stop Application: N/A	

PRODUCT / MIXING 3

Coating Product Type: Polyurethane top coat	Batch # Part D: N/A	Percentage Thinner Added: N/A	Application Equipment Used: N/A
Manufacturer: Carboline	Material Temperature: N/A	Mixing Method: N/A	Quantity Mixed / Applied: N/A
Catalog No. / Name: Carbothane 134HG	Date / Time Mixed: N/A	Sweat-In Time: N/A	Spray Tip Size: N/A
Color: Grey A732	Kit Size: N/A	Duration of Sweat-In Time: N/A	Approximate Coverage by Coating Applied: N/A
Batch # Part A: 20KR0152N	Caulk Applied (tubes): N/A	Pot Life: N/A	Lighting Conditions During Application 20-50 Ft. Candles: N/A
Batch # Part B: 21BF8885B	Type of Thinner Added: N/A	Start Application: N/A	Number of Ft. Candles: N/A
Batch # Part C: N/A	Thinner Batch #: N/A	Stop Application: N/A	

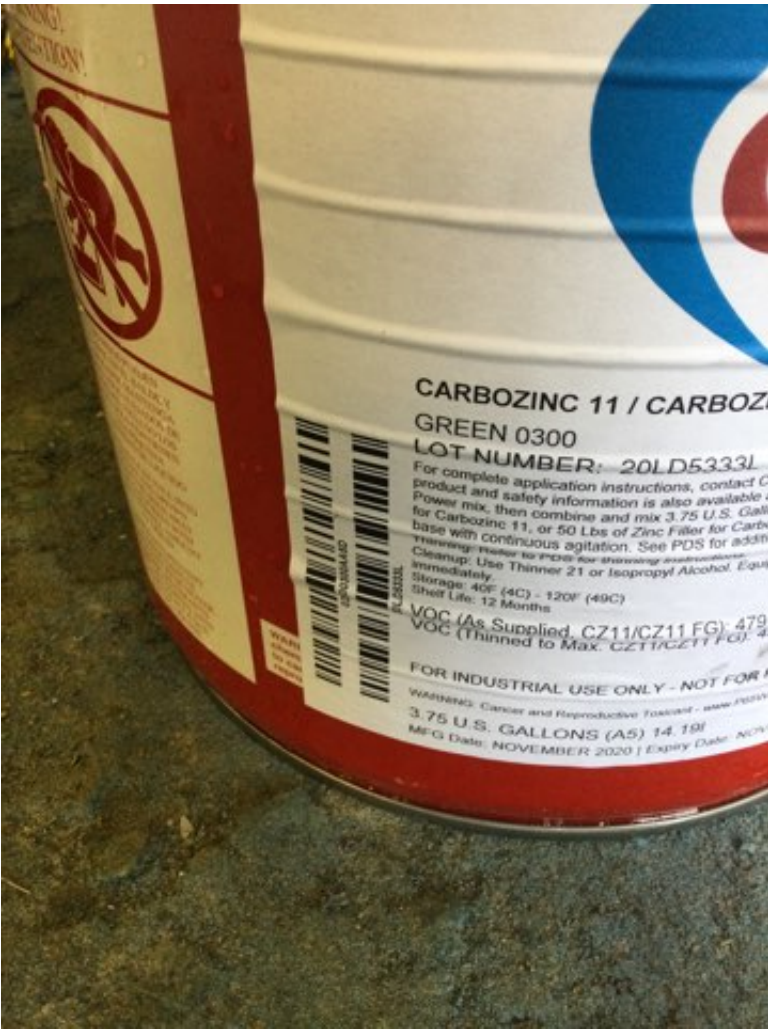


Photo Description: Carbozinc 11 part A



Photo Description: Carbozinc 11 part B batch

Photo Description: Carbozinc 11 part B



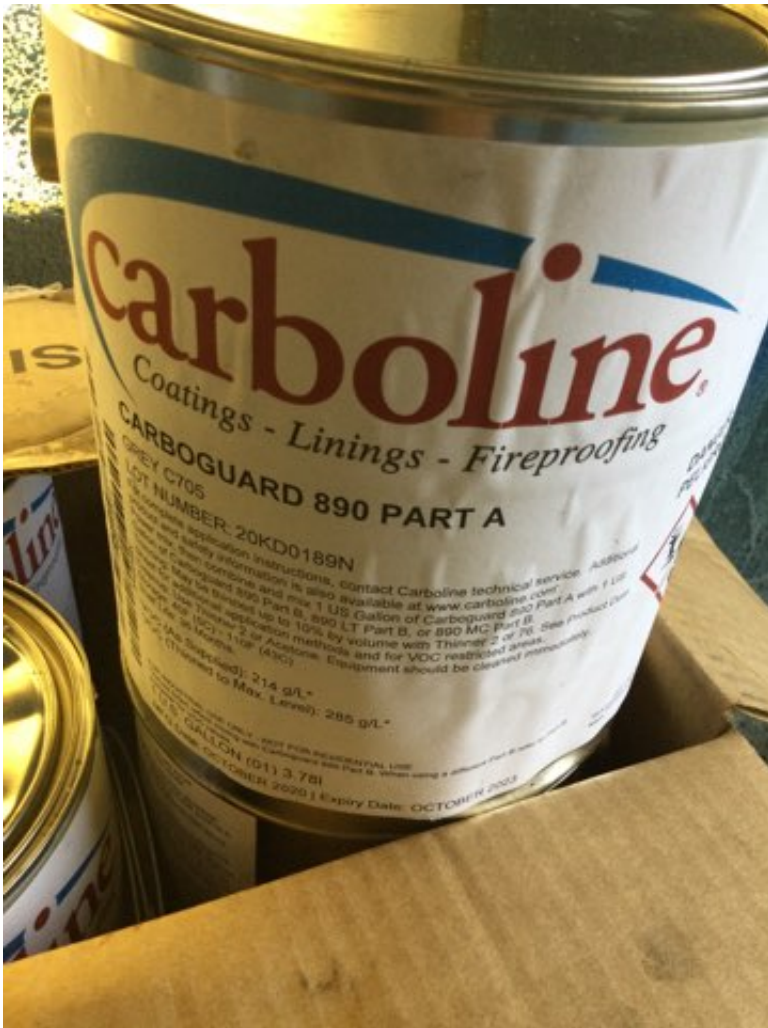


Photo Description: Carboguard 890 part A

Photo Description: Carboguard 890 part B

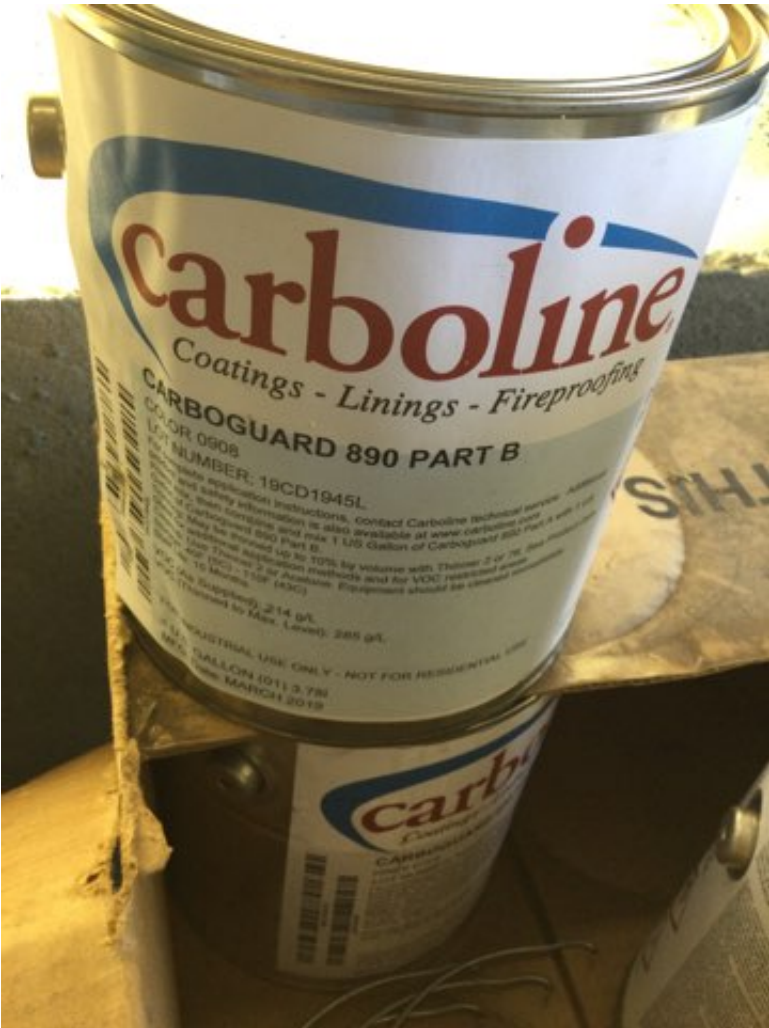




Photo Description: Carbothane 134HG part A



Photo Description: Carbothane 134HG part A

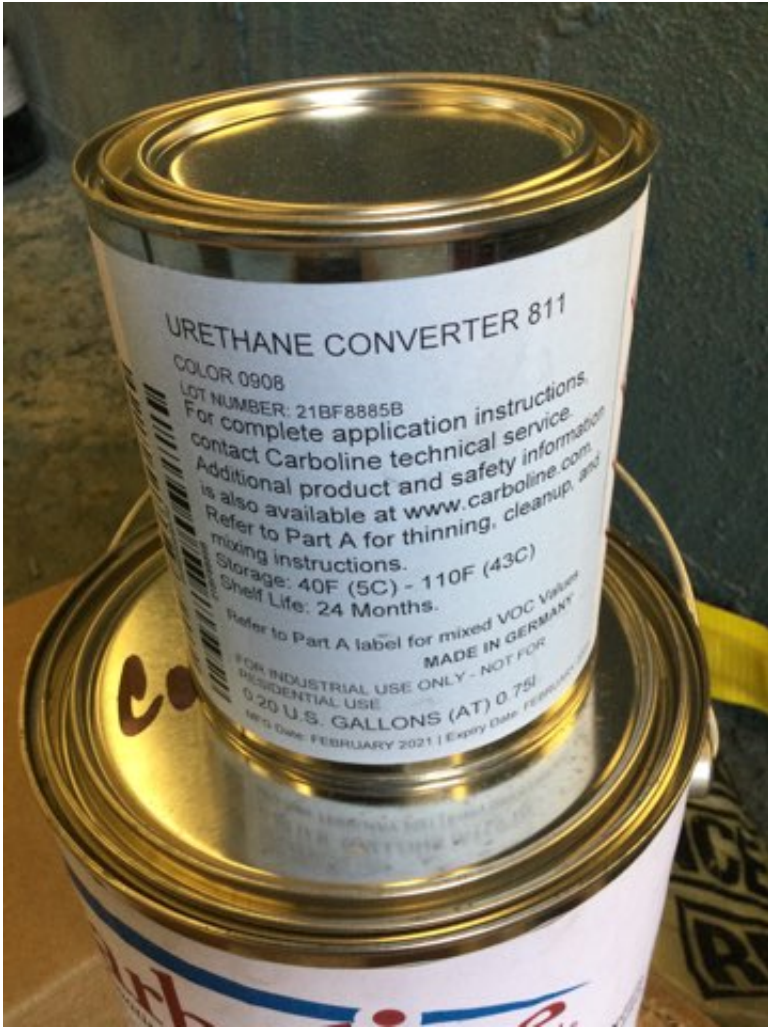


Photo Description: Carbothane 134HG part B

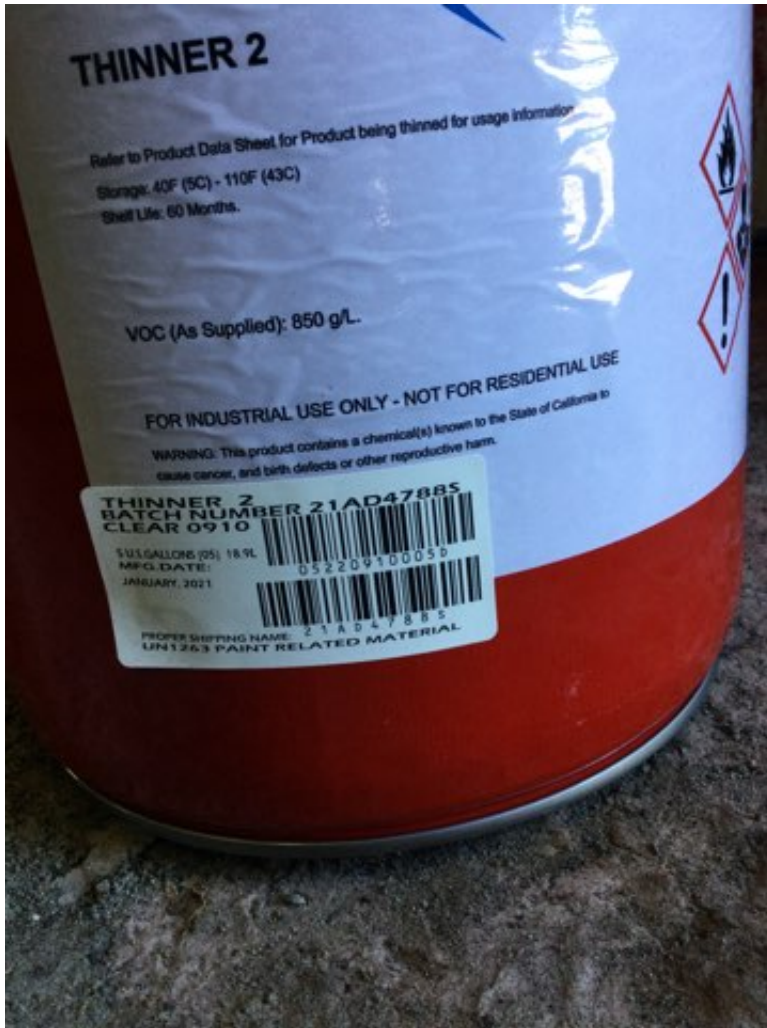


Photo Description: Thinner # 2

Photo Description: Thinner # 33

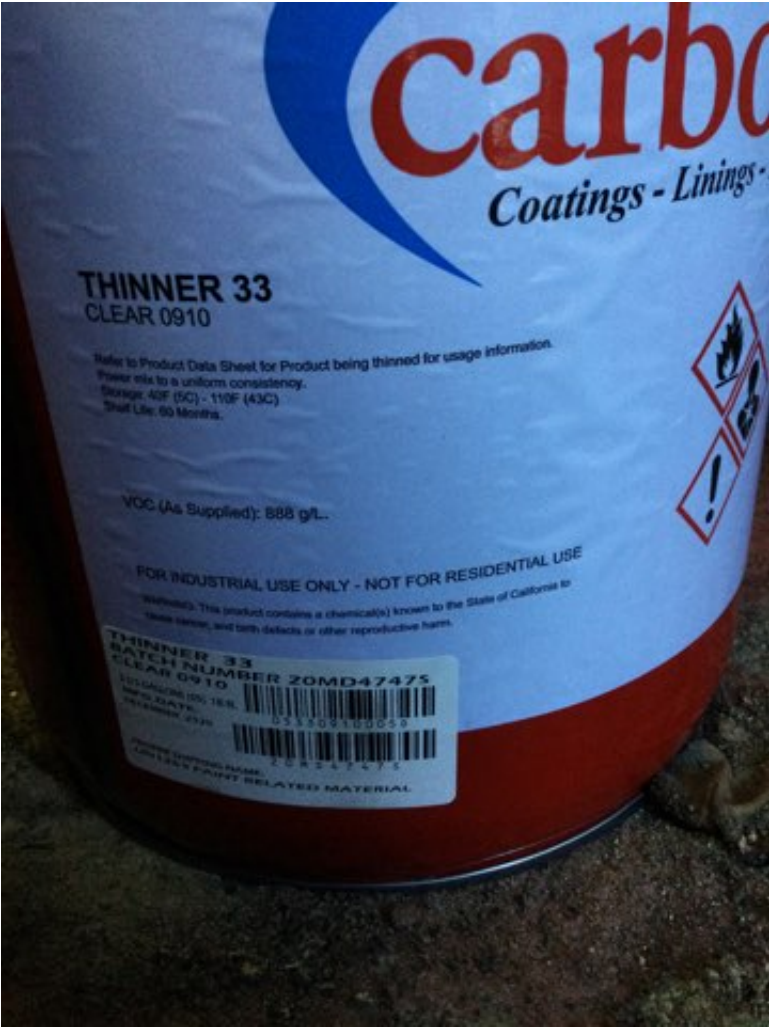
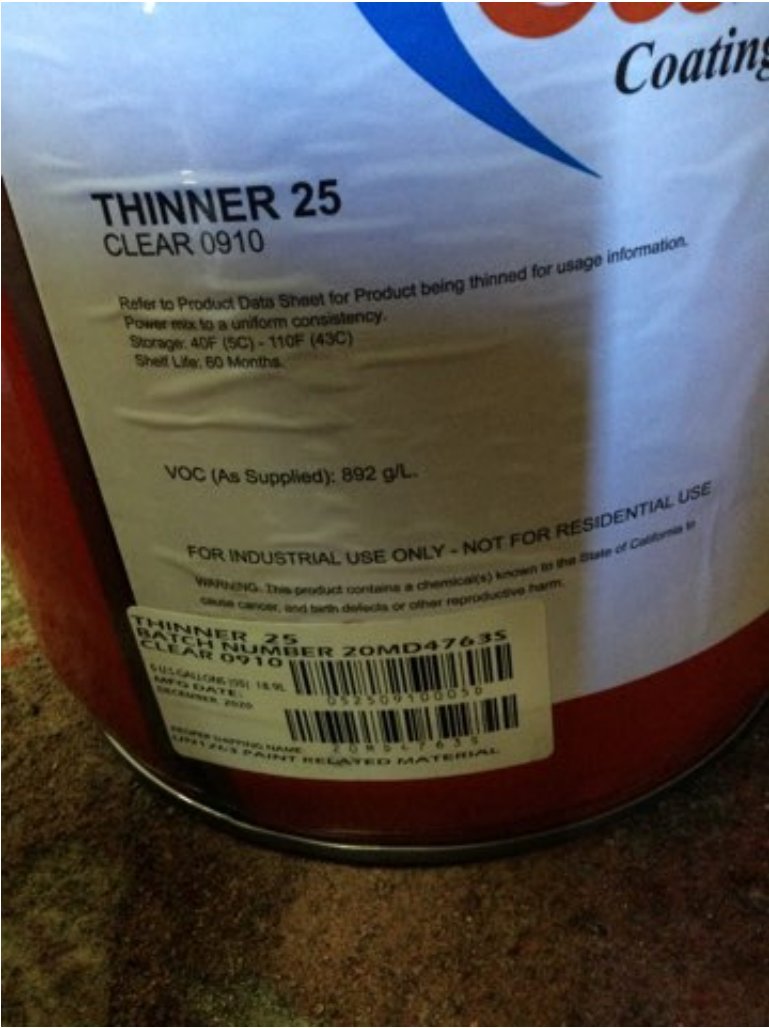


Photo Description: Thinner # 25



WET / DRY FILM THICKNESS

MIX 1

Coating: Carboline Carbozinc 11 **Application Date:** 03/15/2021, **Specified (Mils):** 2.00 - 3.00
 CDT

Description: Zinc rich primer

Location: Exterior only **Application Time:** 5:30 PM
 CDT

Range Achieved (Mils): 2.10
 - 4.20

Approximate Area: N/A

Area	Spot Reading 1	Spot Reading 2	Spot Reading 3	Total	Average
Area 1	3.20	4.00	2.50	9.7	3.23
	4.20	3.00	4.20	11.4	3.8
	3.80	2.10	3.50	9.4	3.13
	4.10	3.00	3.50	10.6	3.53
	4.10	3.00	3.50	10.6	3.53
			Total	51.7	3.45
Area 2	4.20	2.80	3.60	10.6	3.53
	2.80	2.20	3.20	8.2	2.73
	3.10	2.50	2.40	8	2.67
	3.10	2.80	3.40	9.3	3.1
	2.70	3.00	2.10	7.8	2.6
			Total	43.9	2.93
Total				95.6	3.19

MIX 2

Coating: Epoxy

Application Date: 03/16/2021, **Specified (Mils):** 4.00 - 6.00
CDT

Location: Exterior

Application Time: 2:00 PM
CDT

Description: Epoxy
intermediate coat

Approximate Area: N/A

Range Achieved (Mils): 5.80
- 10.60

Area	Spot Reading 1	Spot Reading 2	Spot Reading 3	Total	Average
Area 1	8.20	5.80	9.10	23.1	7.7
	8.90	6.40	9.60	24.9	8.3
	7.00	9.10	8.10	24.2	8.07
	7.20	9.00	7.00	23.2	7.73
	6.90	9.30	8.60	24.8	8.27
			Total	120.2	8.01
Area 2	6.90	7.50	8.20	22.6	7.53
	9.10	7.10	9.40	25.6	8.53
	10.30	10.60	7.20	28.1	9.37
	8.40	9.30	8.80	26.5	8.83
	8.30	8.70	7.90	24.9	8.3
			Total	127.7	8.51
Total				247.9	8.26

MIX 3

Coating: Polyurethane top coat

Application Date: 03/17/2021, **Specified (Mils):** 2.00 - 3.00
CDT

Description: Polyurethane top coat

Location: Exterior

Application Time: 1:00 PM
CDT

Range Achieved (Mils): 8.90 - 14.10

Approximate Area: N/A

Area	Spot Reading 1	Spot Reading 2	Spot Reading 3	Total	Average
Area 1	9.00	8.90	12.60	30.5	10.17
	12.90	12.00	13.40	38.3	12.77
	13.60	11.50	11.60	36.7	12.23
	12.60	11.10	10.70	34.4	11.47
	9.30	12.30	14.10	35.7	11.9
			Total	175.6	11.71
Area 2	10.20	11.00	12.90	34.1	11.37
	11.40	12.40	11.60	35.4	11.8
	11.50	12.40	9.80	33.7	11.23
	11.30	12.80	12.80	36.9	12.3
	10.90	10.20	11.60	32.7	10.9
			Total	172.8	11.52
Total				348.4	11.61



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement

Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



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Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement

Photo Description: Zinc coating dry film measurement





Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coating dry film measurement



Photo Description: Zinc coated



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy coated



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy coated



Photo Description: Epoxy dry film thickness measurement



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Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy dry film thickness measurement



Photo Description: Epoxy dry film thickness measurement



Photo Description: Grey top coat coated



Photo Description: Grey top coated



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Top coated



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Top coated



Photo Description: Top coated



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



Photo Description: Polyurethane dry film thickness measurement



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Photo Description: Polyurethane dry film thickness measurement

INSTRUMENT HISTORY SHEET

INSTRUMENT 1

Instrument Type: Mil Gage	Instrument Brand: DeFelsko	Remarks Codes: N/A	Completed By: Art Medina
Serial Number: 285369	Instrument Model: Positector 6000	Calibration Due: 04/06/2021, CDT	Comments: Verified 3/15/21

INSPECTOR REMARKS AND SIGNATURES

Remarks:

Coated with self-cured Inorganic Zinc , Epoxy Intermediate & Aliphatic Polyurethane three coat system in accordance with COM-SU-5191-D.1 (October 2018) system 3.1

Ajt Medina

Name: QC Manager
Type: Quality Control Manager
Date: 03/20/2021, 9:30 AM
CDT

DAILY INSPECTION REPORT APPROVED SIGNATURE

Ajt Medina

Name: QC Manager
Date: 03/22/2021, 5:02 PM CDT



DeFelsko Corporation
 800 Proctor Avenue
 Ogdensburg, New York 13669-2205 USA

Certificate of Calibration

Certificate Number: 19-596201

Nomenclature: Coating Thickness Instrument Laboratory Environment
 Manufacturer: DeFelsko Corporation Temperature: 23 ± 5°C
 Model: PosiTector 6000 F Probe Relative Humidity: Up to 95%
 Probe Serial No: 285369
 Note: Probe serial # on connector Date of Calibration: November 22, 2019

Date in Service†: 4-6-2020
To be completed by the end user, in ink

Test Method: This coating thickness instrument was calibrated to manufacturer's specifications according to procedure MP 2530 using Certified Thickness Standards traceable to PTB through certificates 40151 PTB 11, 74055 PTB 15, 74056 PTB 15, 02759052 D-K-15105 2016-11 and 0591 D-K-19342 2016-11.

Thickness Standard Serial #	Standard Thickness *		Instrument Reading (microns)
	Min	Max	
31443F	69.65	72.37	72
23572F	243.97	248.45	246
29010F	1472.18	1489.07	1486

*Maximum uncertainty ± 0.43 microns

Calibration Performed by: Charles Pothier

Technician

DeFelsko Corporation operates under Management Procedures intended to implement the requirements of ISO 9001, ISO 10012-1, ISO 17025 and ANSI/NCSL Z540-1. This document certifies that the instrument met published specifications of:

0-50 microns ± (1.0 microns + 1% of reading)

>50 microns ± (2.0 microns + 1% of reading)

†There are no components in this product which have a specific shelf life. Therefore, the calibration interval of this instrument begins on the date that the product is first put into service by the end user. Calibration interval will vary based on usage, handling and storage conditions.

This certificate shall not be reproduced, except in full, without the written approval of DeFelsko Corporation.