HI-SPEED
INDUSTRIAL SERVICE

KEEPING YOUR FACILITY UP TO SPEED
EVERY DAY SINCE 1946

Motor Shop Repairs

Job Number 97687

Prepared for Reynolds Metals company

1333 highway 270
Malvern AR 72104

Table of Contents

Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Recondition Repair Report

FolderID: 97687
FormID: 9674470

Reynolds Metals company
1333 highway 270
Malvern, AR 72104

Priorities Found: **1 - High** **7 - Good**

General

1.	Job Number	**97687**
2.	Report Date	
3.	Customer	**REYNOLDS**

Name Plate Information

4. Manufacturer

Coupling 1.04" past shaft end

5. Model
6. Serial Number
7. Horsepower
8. KW
9. Volts
10. Amps
11. RPM
12. Frame

13.	Enclosure	
14.	Cycles	
15.	Phase	
16.	Service Factor	
17.	Motor Mount Position	
Initial Inspection		
18.	Number of Leads	**12**
19.	Lead Length	**4 Inches**
20.	Lead Size	**10**
21.	Lead Condition	
22.	Lead Markings	
23.	Lug Size, Condition, and Type	
24.	Winding RTD's	
25.	Winding Rtd's Condition	
26.	Shaft Run Out	
27.	Does Shaft Turn Freely	
28.	Does Shaft Have Visible Damage	
29.	Bearing Rtd's	
30.	Bearing Rtd's Condition	
31.	Contamination	
32.	Frame Condition	
33.	Fan Condition	
34.	Broken or missing components	
Initial Electric Test		
35.	Resistance to Ground	**Mohm**
36.	Winding Resistance 1-2	**4.556 Ohm**
37.	Winding Resistance 2-3	**5.002 Ohm's**
38.	Winding Resistance 1-3	**5.006 Ohm's**
39.	Resistive Imbalance	**10 %**
40.	Hi-Pot	**Ua**
41.	Surge Test	**(F) Fail**
42.	Stator Condition	**Rewind stator and wound rotor**
	Resistive imbalance. Wound rotor shorted to ground	

43.	Failure Location	

Initial Rotor Inspection

44.	Rotor Type	**wound rotor**
45.	Air Gap <10% Variation	
46.	Number of Rotor Bars	
47.	Number of Broken Rotor Bars	
48.	Growler Test	
49.	Rotor Condition	**(P) Pass**

Mechanical Inspection

50.	Bearing Manufacture	**NTN**

51.	Bearing DE Size	**6303 2Z**
52.	Bearing DE Type	
53.	DE Bearing Qty.	
54.	Bearing ODE Size	**6306 2Z**
55.	Bearing ODE Type	
56.	ODE Bearing Qty.	
57.	Insulated Bearing	
58.	Lubrication Type	
59.	Grease Condition	
60.	Bearing Retainers	
61.	Shaft Grounding Device	
62.	DE Seal	**(NA) Not Applicable**
63.	DE Seal Type/Size	
64.	ODE Seal	**(NA) Not Applicable**
65.	ODE Seal Type/Size	

Root Cause of Failure

66.	Component Failure	***N*ound rotor shorted to ground**
67.	Cause of Failure	
68.	Comments ***Rewind stator and rotor***	
69.	Service Technician	**David Maclin**

Machine Fit Inspection Report

70.	Shaft Run Out	
71.	Initial Shaft Run Out	
72.	Final Shaft Run Out	
73.	DE Bearing Shaft Fit	**(P) Pass**
74.	DE Initial Shaft Bearing Fit Size 1	**1.1812 "**
75.	DE Initial Shaft Bearing Fit Size 2	**1.1813 "**
76.	DE Initial Shaft Bearing Fit Size 3	**1.1812 "**
77.	DE Finial Shaft Bearing Fit Size 1	
78.	DE Finial Shaft Bearing Fit Size 2	
79.	DE Finial Shaft Bearing Fit Size 3	
80.	ODE Bearing Shaft Fit	**(P) Pass**
81.	ODE Initial Shaft Bearing Fit Size 1	**1.1811 "**
82.	ODE Initial Shaft Bearing Fit Size 2	**1.1811 "**
83.	ODE Initial Shaft Bearing Fit Size 3	**1.1812 "**
84.	ODE Finial Shaft Bearing Fit Size 1	
85.	ODE Finial Shaft Bearing Fit Size 2	
86.	ODE Finial Shaft Bearing Fit Size 3	
87.	DE Air Seal Shaft Fit	
88.	DE Initial Air Seal Shaft Size	
89.	DE Final Air Seal Shaft Size	
90.	ODE Air Seal Shaft Fit	

	91. ODE Initial Air Seal Shaft Size	
	92. ODE Final Air Seal Shaft Size	
●	93. DE Endbell Fit	**(P) Pass**
	94. DE Initial Endbell Fit Size 1	**2.8348 "**
	95. DE Initial Endbell Fit Size 2	**2.8348 "**
	96. DE Initial Endbell Fit Size 3	**2.8347 "**
	97. DE Final Endbell Fit Size 1	
	98. DE Finial Endbell Fit Size 2	
	99. DE Final Endbell Fit Size 3	
	100. DE Endbell Fit Insulated	
	101. DE Endbell Air Seal Fit	
	102. Initial Endbell Air Seal Fit Size	
	103. Finial Endbell Air Seal Fit Size	
●	104. ODE Endbell Fit	**(P) Pass**
	105. ODE Initial Endbell Fit Size 1	**2.8351 "**
	106. ODE Initial Endbell Fit Size 2	**2.835 "**
	107. ODE Initial Endbell Fit Size 3	**2.8349 "**
	108. ODE Final Endbell Fit Size 1	
	109. ODE Final Endbell Fit Size 2	
	110. ODE Final Endbell Fit Size 3	
	111. ODE Endbell Fit Insulated	
	112. ODE Endbell Air Seal Fit	
	113. ODE Initial Endbell Seal Fit Size	
	114. ODE Finial Endbell Seal Fit Size	
	115. Foot Flatness	**(NA) Not Applicable**
	116. Foot Condition	**(NA) Not Applicable**
●	117. Flange Condition	**(P) Pass**
	118. Service Technician	**David Maclin**

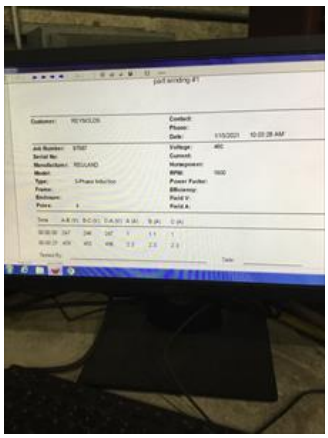
Balancing Report

	119. Balance Type	
	120. Balance Operating Speed	
	121. Start Left End	
	122. Start Right End	
	123. Balancing Specification	
	124. Finish Left End	
	125. Finish Right End	
	126. Service Technician	

Assembly and Final Test

127.	Meggar Testing Reading	**138500 Mohm**

128.	Surge Test	**(P) Pass**
129.	Hi-Pot	
130.	Winding Resistance 1-2	
131.	Winding Resistance 2-3	
132.	Winding Resistance 1-3	
133.	Test Run Voltage Phase A	**455 Volts**



134.	Test Run Amps A	**2.3 Amps**
135.	Test Run Voltage Phase B	**453 Volts**

136.	Test Run Amps B	**2.3 Amps**

137.	Test Run Voltage Phase C	**455 Volts**

138.	Test Run Amps C	**2.3 Amps**
139.	DE Horizontal Vibration Reading	
140.	DE Vertical Vibration Reading	
141.	DE Axial Vibration Reading	
142.	ODE Horizontal Vibration Reading	
143.	ODE Vertical Vibration Reading	
144.	ODE Axial Vibration Reading	
145.	Ambient Temp at start of Test Run	
146.	Temp at 5 minutes	
147.	Temp at 10 minutes	
148.	Temp at 15 minutes	
149.	Temp at 20 minutes	
150.	Temp at 25 minutes	
151.	Temp at 30 minutes	
152.	Temp at 35 minutes	
153.	Temp at 40 minutes	
154.	Temp at 45 minutes	
155.	Temp at 50 minutes	
156.	Temp at 55 minutes	
157.	Temp at 60 minutes	
158.	Motor Paint	

159. Service Technician	**RW**

Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Random Coil Rewind Report

FolderID: 97687
FormID: 9780482

Reynolds Metals company
1333 highway 270
Malvern, AR 72104

Priorities Found:

General	
1.	Job Number
2.	Report Date
3.	Customer
Name Plate Information	
4.	Manufacturer
5.	Model
6.	Serial Number
7.	Horsepower
8.	KW
9.	Volts
10.	Amps
11.	RPM
12.	Frame
13.	Enclosure
14.	Cycles
15.	Phase
16.	Service Factor
17.	Motor Mount Position
Initial Inspection	
18.	Number of Leads
19.	Lead Length
20.	Lead Size
21.	Lead Condition
22.	Lead Markings
23.	Lug Size, Condition, and Type
24.	Winding RTD's
25.	Winding Rtd's Condition
26.	Shaft Run Out
27.	Does Shaft Turn Freely
28.	Does Shaft Have Visible Damage
29.	Bearing Rtd's
30.	Bearing Rtd's Condition
31.	Contamination
32.	Frame Condition
33.	Fan Condition
34.	Broken or missing components

Initial Electric Test		
35.	Resistance to Ground	
36.	Winding Resistance 1-2	
37.	Winding Resistance 2-3	
38.	Winding Resistance 1-3	
39.	Resistive Imbalance	
40.	Hi-Pot	
41.	Surge Test	
42.	Stator Condition	
43.	Failure Location	
Initial Rotor Inspection		
44.	Rotor Type	
45.	Air Gap <10% Variation	
46.	Number of Rotor Bars	
47.	Number of Broken Rotor Bars	
48.	Growler Test	
49.	Rotor Condition	
Mechanical Inspection		
50.	Bearing Manufacture	
51.	Bearing DE Size	
52.	Bearing DE Type	
53.	DE Bearing Qty.	
54.	Bearing ODE Size	
55.	Bearing ODE Type	
56.	ODE Bearing Qty.	
57.	Insulated Bearing	
58.	Lubrication Type	
59.	Grease Condition	
60.	Bearing Retainers	
61.	Shaft Grounding Device	
62.	DE Seal	
63.	DE Seal Type/Size	
64.	ODE Seal	
65.	ODE Seal Type/Size	
Root Cause of Failure		
66.	Component Failure	
67.	Cause of Failure	
68.	Comments	
69.	Service Technician	
Stator Winding		
70.	Core Length	**2.75 "**
71.	Core ID	**"**
72.	Back Iron Depth	**1.125 "**
73.	Slot Depth	**0.5 "**
74.	Tooth Width	**0.375 "**
75.	Number of Vents	
76.	Vent Width	

77.	Before Burnout Core loss	
78.	Flux Before Burnout	
79.	Watts before burnout	
80.	Watts loss per lb. before burnout	
81.	After Burnout Core Loss	
82.	Flux After burnout	
83.	Watts After Burnout	
84.	Watts loss per lb After Burnout	
85.	Core Iron Condition	
86.	RTD's	
87.	RTD's Reading	
88.	Motor Heaters	
89.	Heater Qty.	
90.	Heater Voltage	
91.	Heater Wattage	
92.	Thermistors	
93.	Number of Poles	**4**
94.	Slots	**24**
95.	Number of Coils	**24**
96.	Coil Weight	**3 Lbs.**
97.	Lead Markings	
98.	Grouping	
99.	Multiple Wires	
100.	Wire Size ***2#20***	
101.	Turns per coil	**13**
102.	Pitch 1 to:	**6**
103.	Connection ***1y***	
104.	Lead Length	**3 "**
105.	Lead Size	**18**
106.	Number of Leads	**3**
107.	Megger Reading After Rewind	
108.	Coil Machine Slot	
109.	Coil Machine Tip	
110.	Coil Machine Pitch	
111.	Hi Pot Reading After Rewind	
112.	Surge Pattern After Rewind	
113.	Service Technician	

Machine Fit Inspection Report

114.	Shaft Run Out	
115.	Initial Shaft Run Out	
116.	Final Shaft Run Out	
117.	DE Bearing Shaft Fit	
118.	DE Initial Shaft Bearing Fit 1	
119.	DE Initial Shaft Fit	
120.	DE Finial Shaft Bearing Fit 1	

121.	DE Initial Shaft Bearing Fit 2
122.	DE Finial Shaft Bearing Fit 2
123.	DE Initial Shaft Bearing Fit 3
124.	DE Finial Shaft Bearing Fit 3
125.	ODE Bearing Shaft Fit
126.	ODE Initial Shaft Bearing Fit 1
127.	ODE Finial Shaft Bearing Fit 1
128.	ODE Initial Shaft Bearing Fit 2
129.	ODE Finial Shaft Bearing Fit 2
130.	ODE Initial Shaft Bearing Fit 3
131.	ODE Finial Shaft Bearing Fit 3
132.	DE Air Seal Shaft Fit
133.	DE Initial Air Seal Shaft Size
134.	DE Final Air Seal Shaft Size
135.	ODE Air Seal Shaft Fit
136.	ODE Initial Air Seal Shaft Size
137.	ODE Final Air Seal Shaft Size
138.	DE Endbell Fit
139.	DE Initial Endbell Fit Size 1
140.	DE Final Endbell Fit Size 1
141.	DE Initial Endbell Fit Size 2
142.	DE Finial Endbell Fit Size 2
143.	DE Initial Endbell Fit Size 3
144.	DE Final Endbell Fit Size 3
145.	DE Endbell Fit Insulated
146.	DE Endbell Air Seal Fit
147.	Initial Endbell Air Seal Fit Size
148.	Finial Endbell Air Seal Fit Size
149.	ODE Endbell Fit
150.	ODE Endbell Fit Insulated
151.	ODE Endbell Air Seal Fit
152.	ODE Initial Endbell Seal Fit Size
153.	ODE Finial Endbell Seal Fit Size
154.	Foot Flatness
155.	Foot Condition
156.	Flange Condition
157.	Service Technician

Balancing Report

158.	Balance Type
159.	Balance Operating Speed
160.	Start Left End
161.	Start Right End
162.	Balancing Specification
163.	Finish Left End
164.	Finish Right End
165.	Service Technician

Assembly and Final Test

166. Meggar Testing Reading
167. Surge Test
168. Hi-Pot
169. Winding Resistance 1-2
170. Winding Resistance 2-3
171. Winding Resistance 1-3
172. Test Run Voltage Phase A
173. Test Run Amps A
174. Test Run Voltage Phase B
175. Test Run Amps B
176. Test Run Voltage Phase C
177. Test Run Amps C
178. DE Horizontal Vibration Reading
179. DE Vertical Vibration Reading
180. DE Axial Vibration Reading
181. ODE Horizontal Vibration Reading
182. ODE Vertical Vibration Reading
183. ODE Axial Vibration Reading
184. Ambient Temp at start of Test Run
185. Temp at 5 minutes
186. Temp at 10 minutes
187. Temp at 15 minutes
188. Temp at 20 minutes
189. Temp at 25 minutes
190. Temp at 30 minutes
191. Temp at 35 minutes
192. Temp at 40 minutes
193. Temp at 45 minutes
194. Temp at 50 minutes
195. Temp at 55 minutes
196. Temp at 60 minutes
197. Motor Paint
198. Service Technician

Hi-Speed Industrial Service
7030 Ryburn Dr
Millington, Tn 38053
901-873-5300

AC Random Coil Rewind Report

FolderID: 97687
FormID: 9780460

Reynolds Metals company
1333 highway 270
Malvern, AR 72104

Priorities Found:

General	
1.	Job Number
2.	Report Date
3.	Customer
Name Plate Information	
4.	Manufacturer
5.	Model
6.	Serial Number
7.	Horsepower
8.	KW
9.	Volts
10.	Amps
11.	RPM
12.	Frame
13.	Enclosure
14.	Cycles
15.	Phase
16.	Service Factor
17.	Motor Mount Position
Initial Inspection	
18.	Number of Leads
19.	Lead Length
20.	Lead Size
21.	Lead Condition
22.	Lead Markings
23.	Lug Size, Condition, and Type
24.	Winding RTD's
25.	Winding Rtd's Condition
26.	Shaft Run Out
27.	Does Shaft Turn Freely
28.	Does Shaft Have Visible Damage
29.	Bearing Rtd's
30.	Bearing Rtd's Condition
31.	Contamination
32.	Frame Condition
33.	Fan Condition
34.	Broken or missing components

Initial Electric Test	
35.	Resistance to Ground
36.	Winding Resistance 1-2
37.	Winding Resistance 2-3
38.	Winding Resistance 1-3
39.	Resistive Imbalance
40.	Hi-Pot
41.	Surge Test
42.	Stator Condition
43.	Failure Location
Initial Rotor Inspection	
44.	Rotor Type
45.	Air Gap <10% Variation
46.	Number of Rotor Bars
47.	Number of Broken Rotor Bars
48.	Growler Test
49.	Rotor Condition
Mechanical Inspection	
50.	Bearing Manufacture
51.	Bearing DE Size
52.	Bearing DE Type
53.	DE Bearing Qty.
54.	Bearing ODE Size
55.	Bearing ODE Type
56.	ODE Bearing Qty.
57.	Insulated Bearing
58.	Lubrication Type
59.	Grease Condition
60.	Bearing Retainers
61.	Shaft Grounding Device
62.	DE Seal
63.	DE Seal Type/Size
64.	ODE Seal
65.	ODE Seal Type/Size
Root Cause of Failure	
66.	Component Failure
67.	Cause of Failure
68.	Comments
69.	Service Technician
Stator Winding	
70.	Core Length
71.	Core ID
72.	Back Iron Depth
73.	Slot Depth
74.	Tooth Width
75.	Number of Vents
76.	Vent Width

77.	Before Burnout Core loss
78.	Flux Before Burnout
79.	Watts before burnout
80.	Watts loss per lb. before burnout
81.	After Burnout Core Loss
82.	Flux After burnout
83.	Watts After Burnout
84.	Watts loss per lb After Burnout
85.	Core Iron Condition
86.	RTD's
87.	RTD's Reading
88.	Motor Heaters
89.	Heater Qty.
90.	Heater Voltage
91.	Heater Wattage
92.	Thermistors
93.	Number of Poles
94.	Slots
95.	Number of Coils
96.	Coil Weight
97.	Lead Markings
98.	Grouping
99.	Multiple Wires
100.	Wire Size
101.	Turns per coil
102.	Pitch 1 to:
103.	Connection
104.	Lead Length
105.	Lead Size
106.	Number of Leads
107.	Megger Reading After Rewind
108.	Coil Machine Slot
109.	Coil Machine Tip
110.	Coil Machine Pitch
111.	Hi Pot Reading After Rewind
112.	Surge Pattern After Rewind
113.	Service Technician
Machine Fit Inspection Report	
114.	Shaft Run Out
115.	Initial Shaft Run Out
116.	Final Shaft Run Out
117.	DE Bearing Shaft Fit
118.	DE Initial Shaft Bearing Fit 1
119.	DE Initial Shaft Fit
120.	DE Finial Shaft Bearing Fit 1
121.	DE Initial Shaft Bearing Fit 2
122.	DE Finial Shaft Bearing Fit 2

123.	DE Initial Shaft Bearing Fit 3
124.	DE Finial Shaft Bearing Fit 3
125.	ODE Bearing Shaft Fit
126.	ODE Initial Shaft Bearing Fit 1
127.	ODE Finial Shaft Bearing Fit 1
128.	ODE Initial Shaft Bearing Fit 2
129.	ODE Finial Shaft Bearing Fit 2
130.	ODE Initial Shaft Bearing Fit 3
131.	ODE Finial Shaft Bearing Fit 3
132.	DE Air Seal Shaft Fit
133.	DE Initial Air Seal Shaft Size
134.	DE Final Air Seal Shaft Size
135.	ODE Air Seal Shaft Fit
136.	ODE Initial Air Seal Shaft Size
137.	ODE Final Air Seal Shaft Size
138.	DE Endbell Fit
139.	DE Initial Endbell Fit Size 1
140.	DE Final Endbell Fit Size 1
141.	DE Initial Endbell Fit Size 2
142.	DE Finial Endbell Fit Size 2
143.	DE Initial Endbell Fit Size 3
144.	DE Final Endbell Fit Size 3
145.	DE Endbell Fit Insulated
146.	DE Endbell Air Seal Fit
147.	Initial Endbell Air Seal Fit Size
148.	Finial Endbell Air Seal Fit Size
149.	ODE Endbell Fit
150.	ODE Endbell Fit Insulated
151.	ODE Endbell Air Seal Fit
152.	ODE Initial Endbell Seal Fit Size
153.	ODE Finial Endbell Seal Fit Size
154.	Foot Flatness
155.	Foot Condition
156.	Flange Condition
157.	Service Technician
Balancing Report	
158.	Balance Type
159.	Balance Operating Speed
160.	Start Left End
161.	Start Right End
162.	Balancing Specification
163.	Finish Left End
164.	Finish Right End
165.	Service Technician
Assembly and Final Test	
166.	Meggar Testing Reading

167.	Surge Test
168.	Hi-Pot
169.	Winding Resistance 1-2
170.	Winding Resistance 2-3
171.	Winding Resistance 1-3
172.	Test Run Voltage Phase A
173.	Test Run Amps A
174.	Test Run Voltage Phase B
175.	Test Run Amps B
176.	Test Run Voltage Phase C
177.	Test Run Amps C
178.	DE Horizontal Vibration Reading
179.	DE Vertical Vibration Reading
180.	DE Axial Vibration Reading
181.	ODE Horizontal Vibration Reading
182.	ODE Vertical Vibration Reading
183.	ODE Axial Vibration Reading
184.	Ambient Temp at start of Test Run
185.	Temp at 5 minutes
186.	Temp at 10 minutes
187.	Temp at 15 minutes
188.	Temp at 20 minutes
189.	Temp at 25 minutes
190.	Temp at 30 minutes
191.	Temp at 35 minutes
192.	Temp at 40 minutes
193.	Temp at 45 minutes
194.	Temp at 50 minutes
195.	Temp at 55 minutes
196.	Temp at 60 minutes
197.	Motor Paint
198.	Service Technician

STANDARD TERMS AND CONDITIONS FOR PURCHASE OF GOOD AND/OR SERVICES

1. **APPLICABILITY.** The sale of any and all goods and/or services by Mock, Inc. d/b/a Hi-Speed Industrial Service ("Hi-Speed") shall be specifically conditioned upon and subject to the following terms and conditions which are incorporated by reference into any contracts and purchase orders with Hi-Speed, and which shall form and become a part of any agreement related thereto. Buyer's acceptance of any offer or quotation made by Hi-Speed for sale of any goods or services is expressly made subject to the terms and conditions set forth herein and to be so effective, Buyer need not sign or approve these Terms and Conditions to be bound hereunder provided a copy of same is provided to Buyer through any means. None of the terms and conditions contained herein may be added to, expanded, changed, modified, superseded or otherwise altered except as revised in writing and duly executed by Hi-Speed, and all orders received by Hi-Speed shall be governed only by the terms and conditions contained herein, notwithstanding any terms, conditions or provisions of any purchase order, release order, authorization or any other form issued by the Buyer. Hi-Speed hereby objects to any additional, modified, changed, deleted, altered or other terms and conditions not contained herein and notifies Buyer that any such terms or provisions are expressly rejected by Hi-Speed.
2. **PRICE.** All quoted prices shall remain firm and binding for a period of thirty (30) days from the date of quotation or for the period specifically stated in the quotation. The price for any and all goods and/or services ordered or approved by Buyer after thirty (30) days from the date of any quotation are subject to any increase in price that may occur after the expiration of thirty (30) days from the issuance of the quotation and the date the Buyer releases any shipment.
3. **SCOPE OF GOODS AND/OR SERVICES.** The goods and/or services provided by Hi-Speed pursuant to any quotation shall be limited exclusively to those goods and/or services expressly identified therein. Hi-Speed does not assume any responsibility and/or liability for the failure to provide any other goods and/or services not identified in any quotation. Modifications, additions or deletions to or from the scope referenced in any quotation shall only bee effective if evidenced in writing and signed by Hi-Speed. The sale of any of all goods and/or services affected by such modification, addition or deletion shall be subject to these same Standard Terms and Conditions whether or not referenced therein.
4. **BILLING AND PAYMENT TERMS.** Hi-Speed shall invoice Buyer for all goods and/or services as same are rendered at the address listed on the quotation. Payments for all goods and/or services shall be due thirty (30) days from the date of the current invoice or as otherwise set forth in the quotation. Late payments are subject to a late fee of 5% of the total invoice amount. Recurring late payments may lead to a deposit requirement on future services or sale of goods. Buyer shall be liable to Hi-Speed for any and all fees and expenses incurred by Hi-Speed to collect any invoices or to enforce these Standard Terms and Conditions, including but not limited to, attorney's fees.
5. **DELIVERY OF GOODS AND/OR SERVICES.** Unless otherwise identified in the quotation, all shipments are F.O.B. Hi-Speed's warehouse and the title to and all risk of loss with respect to any goods shipped shall pass to Buyer when such goods are delivered to the carrier at Hi-Speed's warehouse. Hi-Speed will use its best efforts to affect delivery by the date or dates specified in the quotation. However, Hi-Speed shall not be liable for delay in or failure to make shipment, or to perform services, by any identified date for any reason whatsoever, including but not limited to, causes beyond its reasonable control, such as strikes, fires, floods, epidemics, quarantines, restrictions, severe weather, embargos, acts of God, or public enemy, war, riot, delays in transportation or the inability to obtain necessary labor, materials or manufacturing facilities.
6. **DELIVERY SITE AND TIME FOR PERFORMANCE.** Hi-Speed and Buyer agree that time is of the essence for the purchase order and that Buyer shall fully cooperate with Hi-Speed in order to allow Hi-Speed full access to prosecute its work diligently and in an orderly manner. Buyer shall assist Hi-Speed in every way possible to avoid delaying, disrupting or interfering with the progress of Hi-Speed's work at the project site. In the event Hi-Speed's work is delayed, hindered, suspended, disrupted, re-sequenced or interfered with or rendered less efficient or more costly or adversely affected in any way as a result of acts or omissions of Buyer or other contractors or employees of Buyer or by any other reason beyond Hi-Speed's control and without the fault of Hi-Speed, then, in such event, Buyer shall be liable to Hi-Speed for any damages, additional costs, expenses, labor, materials, man hours, acceleration costs, overtime, additional jobsite overhead, extended home office overhead, and any and all other direct and indirect expenses of whatsoever nature or kind, caused in whole or in part, as a result of any of the above-referenced occurrences. Hi-Speed's project records will be the basis for computing the additional costs and damages of Hi-Speed's labor, materials, expenses and overhead related to such changes. BUYER WARRANTS THAT THE SITE FOR DELIVERY OR INSTALLATION OF ANY GOODS AND/OR FOR THE PERFORMANCE OF ANY SERVICES SHALL BE READY AND ADEQUATE FOR HI-SPEED'S DELIVERY OF GOODS AND/OR PERFORMANCE OF SERVICES AND THAT HI-SPEED SHALL HAVE FULL ACCESS THERETO, FREE OF ALL OBSTRUCTIONS. BUYER SHALL ASSUME ALL EXTRA COSTS ASSOCIATED WITH HI-SPEED'S INABILITY TO INSTALL ANY GOODS OR PERFORM ANY SERVICES AS A RESULT OF BUYER'S FAILURE TO COMPLY WITH THIS PROVISION. HI-SPEED MAY NOT INSPECT THE SITE PRIOR TO DELIVERY AND/OR INSTALLATION OF GOODS AND/OR PERFORMANCE OF SERVICES AND MAKES NO WARRANTY AS TO THE SUFFICIENCY OF THE SITE FOR THE DELIVERY AND/OR INSTALLATION OF GOODS AND/OR THE PERFORMANCE OF SERVICES AT SUCH SITE.
7. **INSPECTION/ACCEPTANCE.** All goods and services ordered pursuant to any quotation shall be subject to inspection by Buyer after delivery or performance to determine conformity with the quotation and/or purchase order and Hi-Speed's advertised or published specifications. Buyer shall have a period of thirty (30) days from shipment of goods at the delivery destination specified in the quotation within which to inspect the goods for conformity with the quotation, order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. Buyer shall have a period of thirty (30) days following completion of any services within which to inspect the services for conformity with the quotation, purchase order and/or Hi-Speed's advertised and published specifications and to provide Hi-Speed with written notice of any discrepancy or rejection. If the goods delivered or services performed do not so conform, upon delivery of notice to Hi-Speed of any discrepancy, nonconformance or rejection, Hi-Speed shall have sixty (60) days to cure the alleged discrepancy and/or nonconformance. If Hi-Speed fails to cure in this time period, Buyer shall have the right to reject such goods or services. After the cure period, goods that have been delivered and rejected, in whole or in part, shall be returned to Hi-Speed. Buyer shall notify Hi-Speed and arrange for the return of the goods as required. Should such non-conforming services be rejected Hi-Speed shall, at its sole cost, re-perform the non-conforming services. Inspection or failure to inspect on any occasion shall not affect Buyer's rights under the warranty provisions herein.
8. **WARRANTIES.** Hi-Speed warrants that all goods shall conform in all material aspects to the goods identified in the quotation to Buyer and/or purchase order, and Hi-Speed makes to Buyer the manufacturer's express warranty for any goods sold to Buyer, which is offered by the manufacturer at the time of acceptance of any quotation by Buyer. This warranty is conditioned upon the installation, operation, and maintenance of the goods in accordance with the manufacturer's recommendations and/or standard industry practice and the goods at all times being operated or used under normal operating conditions for which they were designed. Hi-Speed, at its sole option, will repair or

replace any defective or non-conforming goods in accordance with the applicable manufacturer's warranty. Warranty for any defective or incorrect parts is limited to the repair or replacement of those parts. Hi-Speed warrants that all services will conform in all material respects to the description of services identified in the quotation and will be performed in a good and workmanlike manner in accordance with industry practices and standards. Should the services be reasonably rejected or not conform with the foregoing warranties, Hi-Speed shall, at its sole cost, re-perform the defective or nonconforming services. Notwithstanding the foregoing, these warranties do not extend to goods or services to the extent that such goods have been subject to misuse, neglect or abuse not caused by Hi-Speed or have been used in violation of the approved written instructions furnished to Buyer. THE FOREGOING REPRESENTS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY HI-SPEED WITH RESPECT TO ALL GOODS SOLD AND IS IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESS OR IMPLIED. HI-SPEED EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICLAR USE OR PURPOSE. BUYER WAIVES ANY CLAIM THAT THESE EXCLUSIONS OR LIMITATIONS DEPRIVE IT OF AN ADEQUATE REMEDY AT EQUITY OR LAW OR CAUSE THIS AGREEMENT TO FAIL IN ITS ESSENTIAL PURPOSE. BUYER SHALL BE ENTITLED TO NO OTHER REMEDY OTHER THAN AS SET FORTH HEREIN, REGARDLESS OF THE CLAIM OR CAUSE OF ACTION, WHETHER BASED IN CONTRACT, TORT, NEGLIGENCE, GOODS LIABILITY, STRICT LIABILITY OR OTHERWISE.

9. **LIMITATION OF DAMAGES.** HI-SPEED SHALL HAVE NO LIABILITY TO BUYER WITH RESPECT TO THE SALE OR DELIVERY OF ANY GOODS OR THE REPAIR THEREOF OR WITH RESPECT TO THE SALE OR PERFORMANCE OF ANY SERVICES, FOR LOST PROFITS, SPECIAL, CONSEQUENTIAL, EXEMPLARY, PUNITIVE OR INCIDENTAL DAMAGES OF ANY KIND OR NATURE WHETHER ARISING IN CONTRACT, TORT, GOODS LIABILITY OR OTHERWISE, EVEN IF HI-SPEED WAS ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGES. HI-SPEED SHALL NOT BE LIABLE FOR ANY DAMAGES OR DELAYS CAUSED BY ANY FAILURE TO MAKE ANY DELIVERY OF GOODS BY ANY EXPECTED TIME OR DATE OR THE FAILURE TO PROVIDE OR COMPLETE ANY SERVICES BY ANY EXPECTED DATE OR TIME. IN NO EVENT SHALL HI-SPEED BE LIABLE TO BUYER FOR ANY DAMAGES WHATSOEVER IN EXCESS OF THE TOTAL PRICE PAID FOR ALL GOODS AND/OR SERVICES HEREUNDER OR REFERENCED IN ANY QUOTATION OR THE PURCHASE ORDER.
10. **SEVERABILITY.** The partial or complete invalidity of any provision of these Standard Terms and Conditions shall not affect the enforceability of the remainder of these Standard Terms and Conditions. If any provision is found to be invalid or unenforceable, that portion shall be modified to make it enforceable or shall be stricken and the remainder of these Standard Terms and Conditions shall enforced.
11. **GOVERNING LAW AND JURISDICTION.** Any controversy arising out of any quotation, the purchase order, the goods sold or delivered, repair or replacement thereof, or any services provided pursuant to any quotation or any purchase order, or these Standard Terms and Conditions shall be governed by the laws of the state of Tennessee without regard to any choice of law provisions and any cause of action related in any manner thereto shall be brought only in the state or federal courts of Shelby County, Tennessee.
12. **ABANDONED EQUIPMENT.** Hi-Speed requires that Buyer promptly pick up or provide shipment instructions for Buyer equipment or other Buyer property in Hi-Speed's possession. If equipment or other Buyer property is left with Hi-Speed and not picked up within six (6) months after Hi-Speed's final action related to the applicable property (e.g. evaluation, teardown, estimate, completion of services), Hi-Speed will consider such property abandoned and may dispose of it in accordance with applicable law. Buyer agrees to hold Hi-Speed harmless for any damage or claim for such abandoned property and acknowledges that Hi-Speed may discard or recycle it at Hi-Speed's sole and absolute discretion. Specifically, Hi-Speed may sell Buyer's abandoned property at a private or public sale and retain the proceeds to offset Hi-Speed's storage, inspection and servicing costs. For the avoidance of doubt, Hi-Speed reserves its statutory and other lawful liens for unpaid charges related to abandoned property.
13. **FORCE MAJEURE.** Neither party shall be responsible for any delay or failure in performance of any party of the quotation, purchase order or these Standard Terms and Conditions to the extent that such delays or failures are caused by fire, flood, earth quake, explosion, war, embargo, government requirement, civil or military authority, acts of God, or any other circumstances beyond its reasonable control and not involving any fault or negligence on the party affected ("Condition"). If any such Condition occurs, the party delayed or unable to perform shall promptly give written notice to the other party and, if such Condition remains at the end of thirty (30) days, the party affected by the other party's delay and inability to perform may elect to (i) terminate such order or part thereof, or (ii) suspend the order for the duration of the Condition, if the Buyer is the suspending party, buy elsewhere comparable material to be sold under the order and apply to any commitment the purchase price of such purchase, and resume performance of the order once the Condition ceases, with an option in the affected party to extend the period of this order up to the length of the time the Condition endures.
14. **NONWAIVER.** No course of dealing or failure of either party to strictly enforce any term, right, or condition of these Standard Terms and Conditions will be construed as a waiver of such term, right or condition. Any waiver by Hi-Speed will only be in writing and will waive no succeeding breach of a term, right or condition.
15. **ASSIGNMENT.** The rights and obligations of the parties shall neither be assigned nor delegated without the prior written consent of the other party. However, any party may assign or delegate its respective rights and obligations, in whole or in part, (i) to any subsidiary, (ii) pursuant to other financing, merger or reorganization or (iii) pursuant to any sale or transfer of substantially all of the assets of the assigning party. These Standard Terms and Conditions shall bind the heirs, successors and assigns of the parties hereto.
16. **NO INDIVIDUAL LIABILITY.** Notwithstanding any other agreement to the contrary, the Buyer agrees that in no event will the Buyer hold and HI-Speed owner, director, officer or employee personally liable for unintentional tortious conduct or conduct that constitutes the breach of any contract between HI-Speed and the Buyer, even if the HI-Speed owner, director, officer or employee is or could be construed to be a party to such contract.