

PICK TICKET

A. L. Patterson Inc.
 300 BEN FAIRLESS DRIVE
 FAIRLESS HILLS, PA 19030
 215-736-2030

Pick Ticket Number	
2092905	
Pick Date	Page
3/31/2015 15:42:25	1 of 1
Order Number	
1083591	

Bill To:
 JOSEPH P. CARRARA & SONS, INC.
 P O BOX 60
 NORTH CLARENDON, VT 05759
 US
 (802) 388-6361

Ship To:
 JOSEPH P. CARRARA & SONS, INC.
 2148 CASE STREET
 ATTN: WILLIAM WARNER
 MIDDLEBURY, VT 05753
 US

Ordered By: Mr. JOE CARRARA

Customer ID: 1185

FR

Order Date	PO Number	Route	Carrier	Taker
3/31/2015	102838	SP	BESTWAY	JOHNEMS
Quantities				Item ID
Ordered	Allocated	To Pick	Disp.	Item Description
6,500.00	6,500.00	6,500.00		SCMS12D MONOSTRAND 1/2" GREASED&SHEATHED 50 MIL DOMESTIC PACK #
				UOM
				FT
				BIN: MINI-1 Qty: 6500.00 - FT 6603

*ST MD*25719.2.9*517D*

Total Lines: 1
 Total Pieces: 6500

Notification of shipment damage or shortages must be made within 5 business days of receipt of goods to receive proper credit.

J
*4010**

STRAIGHT BILL OF LADING - SHORT FORM - NOT NEGOTIABLE

OFFICE COPY

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading.

Memo No. **49672**

At **WOODBIDGE, VA 22191**

Date **January 16, 2015**

From **SUNCOAST POST-TENSION, LTD.**

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.

ON COLLECT ON DELIVERY SHIPMENTS THE LETTERS "COD" MUST APPEAR BEFORE CONSIGNEE'S NAME --- OR AS OTHERWISE PROVIDED IN ITEM 430, SEC. 1.

COMPANY:	A.L. PATTERSON, INC
PROJECT NAME:	BULK SALES
PROJECT ADDRESS:	300 BEN FAIRLESS CRIVE
PROJECT CITY, ST ZIP:	FAIRLESS HILLS, PA 19030
Customer Order # / Job #:	130-0803
CONTACT:	ANDY
PHONE:	215-736-2030

Bill Freight To:	SUNCOAST POST TENSION
Bill Freight To: ADDRESS, CITY, STATE ZIP	15041 FARM CREEK DRIVE, WOODBRIDGE VA 22191 USA
DELIVERY COMPANY:	MARK SPRAGUE
BILL TRUCK NUMBER: TO	
TRUCKING CO. PHONE #:	
Ship Date:	1/16/2015
Time:	
ETA:	
NOTES:	PO# 5025749

CONSIGNEE TO AND DESTINATION

No. Packages	Item #	Quantity	UOM	Description of Articles, Special Marks and Exceptions	¹ Weight (Sub. To Cor.)	Class or Rate	Check Column	Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
1				COIL STEEL CABLE STM 25719.2.1 6675 ft	3,727	50		(Signature of Consignor.)
1				COIL STEEL CABLE STM 25719.2.1 6643 ft	3,767	50		
1				COIL STEEL CABLE STM 25719.2.2 6675 ft	3,725	50		
1				COIL STEEL CABLE STM 25719.2.2 6655 ft	3,780	50		
1				COIL STEEL CABLE STM 25719.2.3 6726 ft	3,745	50		
1				COIL STEEL CABLE STM 25719.2.3 6675 ft	3,740	50		
1				COIL STEEL CABLE STM 25719.2.4 6665 ft	3,745	50		
1				COIL STEEL CABLE STM 25719.2.4 6603 ft	3,740	50		
1				COIL STEEL CABLE STM 25719.2.5 6670 ft	3,745	50		
1				COIL STEEL CABLE STM 25719.2.4 6627 ft	3,741	50		
1				COIL STEEL CABLE STM 25719.2.8 6690 ft	3,223	50		
1				COIL STEEL CABLE STM 25719.2.4 6638 ft	3,212	50		
				79942 ft				
12				Total	44,833			

Collect on Delivery	and remit to	C.O.D. Charge to be paid by	Shipper <input checked="" type="checkbox"/> Consignee <input type="checkbox"/>
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¹If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.
NOTE - Where the rate is dependant on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding per

SPECIAL INSTRUCTIONS:

*This is to certify that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation, according to the applicable regulations of the Department of Transportation *
SUNCOAST POST-TENSION, LTD.
 15041 FARM CREEK DR. WOODBRIDGE, VA 22191
 Permanent post-office address of shipper.
 Shipper Per
 Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading
 * MARK WITH "X" TO DESIGNATE HAZARDOUS MATERIAL AS DEFINED IN TITLE 49 OF FEDERAL REGULATIONS.



STRAND TECH MARTIN Inc.

PC STRAND AND WIRE MANUFACTURING FACILITIES

Dom
TRK 517

CUSTOMER: SUNCOAST POST TENSION

DATE: 12/05/2014

LOCATION: WOODBRIDGE, VA 22919

CERTIFICATION NUMBER: QA45918

PURCHASE ORDER: 97559

CERTIFICATION STANDARD: ASTM A 416/A416M

PRODUCT DESCRIPTION: 1/2" (12.70 mm) DIAMETER 270 (1860) GRADE LOW RELAXATION SEVEN WIRE STRAND

COIL IDENTIFICATION

COIL # 'S	HEAT #
25719.2.1	DL14106969
25719.2.2	DL14106969
25719.2.3	DL14106969
25719.2.4	DL14106969
25719.2.5	DL14106969
25719.2.6	DL14106969
25719.2.8	DL14106969

TESTS AND SAMPLE INFORMATION

ATTACHED ARE ACTUAL TEST RESULTS FOR SAMPLES TAKEN FROM THE MATERIAL BEING PROVIDED. ADDITIONAL TESTS AND MANUFACTURING DATA AVAILABLE AS REQUIRED BY ASTM. ROD HEAT AND CHEMISTRY INFORMATION ON FILE.

COMMENTS

"THE MATERIAL DESCRIBED IN THIS CERTIFICATION WILL BOND TO CONCRETE OF A NORMAL STRENGTH AND CONSISTENCY IN CONFORMANCE WITH THE PREDICTION EQUATIONS FOR TRANSFER AND DEVELOPMENT LENGTH GIVEN IN THE ACI/ AASHTO SPECIFICATIONS."

COMMENTS

Prestressed concrete strand identified on this certification was produced by Strand Tech Martin Inc. and meets the requirements for "Domestic Origin" as defined by the Surface Transportation Act of 1978, and amended 1982, and meets all of the requirements set forth in Federal Highway Administration rules and regulations with regard to "Domestic Origin." All materials listed above was produced and fabricated in the United States of America. Meets certification ASTM A416/A416M

STRAND-TECH MARTIN, INC.
P.O. BOX 2220
SUMMERVILLE, SC 29484
TOLL FREE (877) 783-3305

CERTIFICATION PREPARED BY:

CHRIS LEWIS
12/05/2014

Strand-Tech Martin, Inc.
 Manufacturer of PC Strand & Wire
 258 Deming Way
 Summerville, SC 29483

Z-Wire Strand ASTM A416

Test Date: 12/05/2014
 Tested By: 108 DE
 Size: 1/2" 270 LR
 Sample ID: 05

LOW RELAXATION PC STRAND

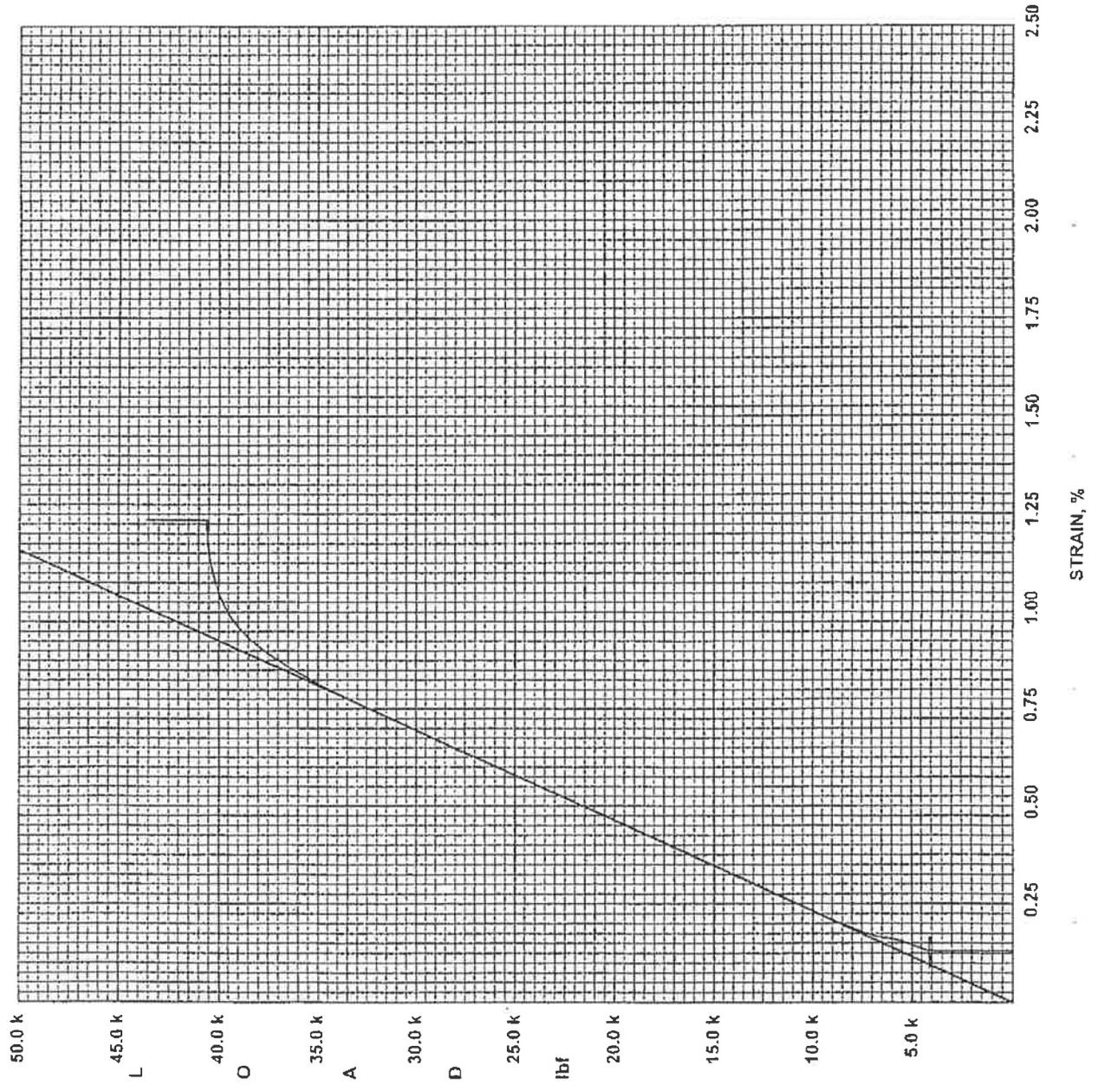
Lot: 25719.2
 Heat Number: DL14106969
 Test #: 1
 Ultimate, lbf: 43600
 Ultimate, kN: 194.1
 Load @, lbf: 39500
 Load @, kN: 175.8
 Elongation, %: 6.56
 Nominal Area, in²: 0.153
 Nominal Area, mm²: 98.7
 Actual, in²: 0.1516
 Actual, mm²: 97.83
 Strand Diameter, in: 0.502
 Modulus, Mpsi: 28.5
 Modulus, MPa: 196400
 Minimum, in: 0.006

1/2 270

25719.2.1 25719.2.4
 25719.2.2 25719.2.5
 25719.2.3 25719.2.6

25719.2.8

Dec 5, 2014 4:17:30 AM
 SN: 205440-R3 V7.02.10





Lang Tendons, Inc.
 1263 Newark Road
 Toughkenamon, PA 19374
 Tel: (610) 268-2221
 Fax: (610) 268-3053

**CORROSION
 PROTECTED
 POLYSTRAND**

STEEL SPECIFICATIONS FOR POLYSTRAND™

STANDARD SPECIFICATIONS, ASTM 416-84
 FOR SEVEN-WIRE STRESS RELIEVED STEEL STRAND FOR PRESTRESSED CONCRETE
 Grade 270 ksi, Ultimate Stress = 270,000 psi

Strand Designation	23K 3/8"		41K 1/2"		58K 6/10"	
	Strand Diameter (nominal)	0.375 inch	9.52 mm	0.50 inch	12.70 mm	0.60 inch
Steel area (nominal)	0.085 sq. in.	54.84 mm ²	0.157 sq. in.	101.29 mm ²	0.217 sq. in.	139.99 mm ²
Steel Weight/LF	0.29 #/LF	0.43 kg/m	.52 #/LF	0.78 kg/m	0.74 #/LF	1.10 kg/m
Modulus of Elasticity	28.5 x 10 ⁶ psi	1.96 x 10 ⁶ bar.	28.5 x 10 ⁶ psi	1.96 x 10 ⁶ bar.	28.5 x 10 ⁶ psi	1.96 x 10 ⁶ bar.
Minimum Guaranteed Ultimate Tensile Strength (GUTS)	23.0 kips	102.31 kN	41.3 kips	183.71 kN	58.6 kips	260.67 kN
Temporary Jacking Force (Max 80% of GUTS)	18.4 kips	81.85 kN	33.0 kips	146.79 kN	46.9 kips	208.62 kN
Initial Lockoff Load (70% of GUTS)	16.1 kips	71.62 kN	28.9 kips	128.55 kN	41.0 kips	182.38 kN
Design Load (60% of GUTS)	13.8 kips	61.39 kN	24.8 kips	110.32 kN	35.2 kips	156.68 kN

These data are representative. Mill test certification of actual values are provided with each order of POLYSTRAND.

Conversion Factors

1 in = 25.4 mm
 1 mm = 0.039 inch
 1 mm² = 0.0016 inch²
 1 in² = 645.16 mm²
 1 kN = 224.8 lbf
 1 Kip = 4.45 kN

Nomenclature

Aps = Area prestress steel, nominal
 Fpu = Force, minimum ultimate = Kips (kN)
 fpu = Stress, minimum ultimate = ksi (N/mm²)





Lang Tendons, Inc.
1263 Newark Road
Toughkenamon, PA 19374
Tel: (610) 268-2221
Fax: (610) 268-3053

SPECIFICATIONS FOR POLYSTRAND™

1.0 SCOPE

This specification is for corrosion protected 7-wire strand, grade 270K, prestressing steel used for unbonded post-tensioning. The tendons shall be seamless extrusion coated POLYSTRAND™, as manufactured by Lang Tendons, Inc., 1263 Newark Road, Toughkenamon, PA 19374, or an approved equal.

2.0 REFERENCE

Except as modified by this specification, the corrosion protection shall comply with "GUIDE SPECIFICATIONS FOR POST-TENSIONING MATERIALS", Post-Tensioning Manual (5th Edition), Post-Tensioning Institute, Phoenix, AZ.

3.0 MATERIAL

The material shall be as follows:

- 3.1 Prestressing steel shall be 7-wire strand, grade 270K, stress relieved or low relaxation steel, ASTM A-416 (latest edition).
- 3.2 The organic corrosion inhibitor shall be as set forth by the above referenced specification.
- 3.3 Polymer sheathing used for extrusion coating of the strand shall be either polypropylene or polyethylene, as follows:
 - 3.3.1 Polypropylene: Cell classification PP 210 B55542, as defined by ASTM D-4101 (or approved equal).
 - 3.3.2 Polyethylene: High Density Type III, as defined by ASTM D-3350 and ASTM D-1248 (or approved equal).

4.0 CORROSION PROTECTION

Corrosion protection shall be as follows:

- 4.1 The unbonded tendons strand shall be fully coated by corrosion inhibitor and then encapsulated by a seamless polypropylene or polyethylene sheath.
 - 4.1.1 Corrosion inhibitor shall fill all space between strand wires and between the strand and the extruded sheath. The diameter of the corrosion inhibitor film covering the strand shall be 0.005 to 0.010 inches greater than the diameter of the bare strand.
 - 4.2.1 The strand sheath shall have a minimum wall thickness of 0.040 inches. This sheath shall be hot-melt extruded over the corrosion inhibitor encased strand.

5.0 QUALITY CONTROL

- 5.1 Manufacturer of the seamless extrusion coated strand shall certify that the requirements of this specification have been satisfied.
- 5.2 Field inspection shall verify the following:
 - 5.2.1 Full coating with corrosion inhibitor. Determine by visual inspection smoothness of extruded sheath. Reject if the helical lay of the strand wire is seen as relief on the exterior of the sheath.
 - 5.2.2 Minimum wall thickness of sheath. Reject if outside diameter of extruded sheath is less than diameter of bare prestressing strand plus 0.010 inches plus two times the specified wall thickness.
 - 5.2.3 Integrity of the sheath. Inspect for presence of corrosion inhibitor. Remove corrosion inhibitor and examine for sheath damage. Repair sheath in accordance with the recommendation of the manufacturer.