

LOWER CHURCHILL PROJECT	CHANGE ORDER Between Muskrat Falls Corporation and Andritz Hydro Canada Inc.	CHO-CH0030001-0021
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Agreement No:	CH0030	CHO No.	021
Agreement Title:	Supply & Install Turbines & Generators	Rev. No:	00
Company:	Muskrat Falls Corporation	CHR No.	287 Rev. 01 & 290 Rev. 00
Contractor/Supplier:	Andritz Hydro Canada Inc.	Date:	18-Dec-2015
Change Title:	Various Change Requests		

Description of Changes:

- CHR-287 Rev.01 – Turbine Servomotor Long-Term Protection CAD\$ 45,513.00

Terms of Payment:

- 20% upon signing of the Change Order by both Parties
- 20% upon delivery of U1 Servomotors to the designated warehouse in Canada
- 20% upon delivery of U2 Servomotors to the designated warehouse in Canada
- 20% upon delivery of U3 Servomotors to the designated warehouse in Canada
- 20% upon delivery of U4 Servomotors to the designated warehouse in Canada

- CHR-290 Rev. 00 – PDA Coupler Long-Term Packaging CAD\$ 1,936.00

Terms of Payment:

- 100% upon delivery of the PDA Couplers to the designated warehouse for all four (4) units

Supporting information that forms part of this Change Order:

Refer to the above listed Change Requests.

Change Includes: <input checked="" type="checkbox"/> Price <input type="checkbox"/> Schedule	Original Contract Prices	CAD 124,517,329.25
		USD 36,635,422.14
		Euro 4,204,787.04
Adjustment Type: <input checked="" type="checkbox"/> Lump Sum <input type="checkbox"/> Unit Rate	Previous Change Orders Price	CAD 7,825,320.54
<input type="checkbox"/> Fixed Amount <input type="checkbox"/> Estimate	Backcharges <i>(Included in above and below Prices)</i>	CAD (71,700.00)
<input type="checkbox"/> Reimbursable	This Change Order Price	CAD 47,449.00
	Total Contract Prices to Date	CAD 132,390,098.79
		USD 36,635,422.14
		Euro 4,204,787.04


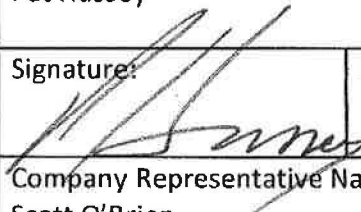
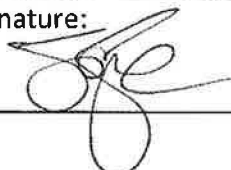
LOWER CHURCHILL PROJECT	CHANGE ORDER Between Muskkrat Falls Corporation and Andritz Hydro Canada Inc.
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Impact on Control Schedule: None

Revised Finished Date: N/A

This Change Order shall form and be read and construed as an integral part of the above-noted Agreement. The above adjustment to the Contract Price constitutes full compensation (including all impacts costs) to the Contractor for the above Change.

APPROVAL

Issued by Company:		Acknowledgement of Contractor Receipt: Contractor Representative Name:	
Supply Chain Manager: Pat Hussey		 _____ Signature:	
Signature:	Date:		
 _____ Signature:	_____ Date:	J. Ruddatz Andritz Hydro	_____ Date:
Company Representative Name: Scott O'Brien		_____ Date:	
Signature:	Date:	_____ Date:	
 _____ Signature:	_____ Date:	_____ Date:	
_____ Date:		_____ Date:	

LOWER CHURCHILL PROJECT	CHANGE REQUEST
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Change Request Title:	Turbine Servomotor Long-term Protection	CHR No. (Reference):	CHR-287
Agreement No:	CH0030		
Agreement Title:	Lower Churchill Project – Turbines & Generators	Rev. No:	01
Company:	Muskat Falls Corporation	CHO No.:	
Contractor/Supplier:	Andritz Hydro Canada Inc.	Date:	27-Oct-2015
		Aconex No.:	CHR-CH0030001-0094
		DAN No.:	DAN-1495
		PCN No.:	

Description of Change Request and Reason (attach all supporting information):

Turbine Servomotor Long-term Protection (AI 203.1):

Due to LCP’s schedule delay, a special long-term protection is required for the servomotors in order to avert the risk of rust and contamination on the internal parts. The AH supplier (Arcos) submitted a proven long-term protection method for the servomotors. It consists of a low pressure accumulator filled with hydraulic oil and connected to one of the ports. This device ensures that the internal parts are constantly immersed in oil. The servomotor exterior is painted and the other machined surfaces will follow the usual protection with the Metal Protect 5000 and the Intercept.

The supplier has confirmed that the proposed protection method would be effective for up to a two (2) year storage period. The supplier has further indicated that they could only guarantee the integrity of the materials for a storage period of six (6) months without this special protection.

AH is seeking compensation from LCP to cover the additional costs of this special protection. The detailed Pricing Sheet is included in Attachment #1.

Please review and comment on this Change Request by Friday, November 6th, 2015.

Supporting information that forms part of this Change Request:

Attachment #1: Detailed Pricing Sheet
Attachment #2: AI 203.1

Description of impact on Control Schedule:

No impact on Control Schedule.

Revised Finish Date: N/A

Lump sum price (or estimated cost) and adjustment to the Contract Price:

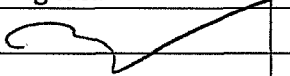
Item	Description	UOM	QTY	Unit Price	Extended Price
1	Turbine Servomotor Long-term Protection	Lot	4	\$11,378	\$45,513
	Proposed Payment Milestones:				
	- 20% upon signing of the Change Order by both				

LOWER CHURCHILL PROJECT	CHANGE REQUEST
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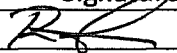
	LCP and AH - 20% upon delivery of U1 Servomotors to the designated warehouse in Canada - 20% upon delivery of U2 Servomotors to the designated warehouse in Canada - 20% upon delivery of U3 Servomotors to the designated warehouse in Canada - 20% upon delivery of U4 Servomotors to the designated warehouse in Canada				
	13% HST will be charged extra.				

Value of this Change Request: **\$45,513**

ORIGINATOR COMPANY CONTRACTOR/SUPPLIER

Title	Name	Signature	Date
Project Manager	Joanne Raddatz		27-Oct-2015

RECEIVED BY:

Title	Name	Signature	Date
PACKAGE LEAD	RICHARD SEEVERS		2. Nov. 2015

LOWER CHURCHILL PROJECT	CHANGE REQUEST
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Attachment #1



BUDGETARY PRICING SHEET

CUSTOMER: Muskrat Falls Corporation
SITE: Lower Churchill Project CH0030
CHANGE REQUEST (CR) NUMBER: CHR-287 (Rev1)
CVR NUMBER (ANDRITZ): N/A

DATE: 27-Oct-2015
CURRENCY: CAD\$
UNIT: 1

DESCRIPTION: Turbine Servomotor Long-term Protection

Andritz Office Staff	Description	Hours	Hourly Rate	Total
System Engineer		8	\$170.00	\$1,360
Engineering	PBS, Instruction, O&M manual, etc.	12	\$155.00	\$1,860
TOTAL - ANDRITZ OFFICE STAFF				\$3,220

Materials	Description	Quantity	Unit Price	Total
Accumulators	see Arcos' revised quote attached plus 15% markup	16	\$2,070.00	\$33,120
Terresso 46 Oil supply	see Lubri-Expert's quote (1,249 L) plus 15% markup	1	\$5,789.42	\$5,789
Air transportation of Terresso Oil	see SDV Logistics' quote plus 15% markup	1	\$3,383.38	\$3,383
TOTAL - MATERIALS				\$42,293

GRAND TOTAL	\$45,513
UNIT PRICE	\$11,378

Note: Taxes extra



Offer

Offer No. 28571 / 2	Clientcode 5144854184	Page 1 / 1
Offer date 2015-10-23	Date 2015-10-23	
Our reference Owe Lindkvist	Your reference Josée Desrochers	

Your VAT-No. 95-6002767 Inquiry No.

Delivery address NALCOR ENERGY - LCP - CH0030 Y 10KM SOUTH OF TRANSLABRADOR HWY AND HWY 510 JCT, 20KM WEST ON ACCESS ROAD, MUSKRAT FALLS, NL	Postal address Andritz VA Tech Hydro Ltd 6100 Autoroute Transcanadienne Pointe-Claire CA-H9R 1B9 Quebec
USA	CANADA

Terms of delivery
NL 01 - EX WORKS EXCL.PACKING
Way of delivery
With Servo
Period of validity
60 DAYS FROM OFFER
Telefax

Terms of payment
30 DAYS NET
Delivery time
with Servo
Goods mark
Servomotors - Muskrat Falls

Pos	Art. No.	Description	Qty	Price %	Amount
1		Long term storage 1 -2 Year At site indoor non- heated in temperatur range - 40° - +30° Offer consists: Servo will be: Filled up with oil provived by Andritz. Minus inlet port provived with a Bladder accumulator.	16,00 Pcs	1 800,00	28 800,00
Total excl V.A.T. (CAD)					28 800,00

Postal address
ARCOS HYDRAULIK AB
TEKNIKERGATAN 5
781 70 BORLÄNGE
SVERIGE
email@arcos.se

Visiting address
TEKNIKERGATAN 5
781 70 BORLÄNGE

www.arcos.se

Phone 0243-82075
Telefax 0243-10282
Reg.No. 556080-6464
VAT.No SE556080646401
Dom: BORLÄNGE
F-tax bill possessed

SWIFT SWEDSESS
Account No.
Swedbank AB

SOUSSION

02/10/2015

XXXXXXXX !03339

BW-4286700
ANDRITZ HYDRO CANADA INC.,
6100, ROUTE TRANSCANADA
POINTE-CLAIRE QC H9R 1B9

M E M E

TÉL.: 514-428-6700

TÉL.:

LUBRI-EXPERT INC.

SOUSSION

TERME: NET 30 JOURS

TRANSPORT: VOTRE TRANSPORT

A L'ATTENTION DE:

2105456209	MOBIL TERESSO 46 (208.2L) 6 X 208,2 LITRES.	1249.20	3.99	1 1	4984.31
.....DME	DME HUILES LUBRIFIANTES .04\$L BARIL(S) NON CONSIGNÉ(S)			1 1	49.97

POIDS TOTAL: 1200 KILOS.

5034.28

TPS/TVH

~~251.71~~

~~502.17~~

~~5788.16~~

~~5788.16~~



SDV Logistiques (Canada) Inc.
 3333 Douglas-B. Floreani
 St-Laurent, QC, H4S 1Y6
 Canada
 TEL (514) 956-7870
 FAX (514) 956-7871

AIR EXPORT QUOTATION

Requested by ANDRITZ HYDRO LTD, POINTE-CLAIRE, QC, CA	Date 10/7/2015
Att MIKE WADE	From MC LUSSIER Phone: 514.956.7870 Fax: 514.956.7871 E-Mail: mc.lussier@sdv.ca
Address ANDRITZ HYDRO CANADA INC. ACCOUNT PAYABLE 6100 TRANSCANADA HWY POINTE-CLAIRE H9R 1B9 CANADA	
	Validity 2015/11/06

Quotation N° CAYUL-0727292-001

DOOR LAVAL TO DOOR 78170 BORLANGE,
SWEDEN EXCL.DUTIES AND TAXES

CRM quotation ID 1-25BGU7
 Terms DAP - 78170 BORLANGE, SWEDEN INCLUDING CUSTOMS
 CLERANCE
 Customer Ref N° ARCOS Borlänge, Sweden
 Chargeable Weight 1,200.00 kg

Qty	Service	Commodity	Total Volume	Unit	Total Weight	Unit
2	AIR	Non Stackable Teresso Oil 46 Non dangerous cargo	3.625	m3	1200.000	kg
		Qty Type Length Width Height Unit	Volume	Unit	Weight	Unit
		2 PALLET 48.00 48.00 48.00 IN	3.625	m3	1,200.000	KG

Carrier TRANSIT TIME AIRPORT TO AIRPORT Flight
 Service Level Normal/Routine
 Frequency 3 FLIGHTS A WEEK Origin Departure LAVAL, CANADA
 Transit +3-4 DAYS Departure MONTREAL-DORVAL APT, CANADA
 Via Arrival STOCKHOLM - ARLANDA, SWEDEN
 Final Destination BORLANGE, SWEDEN

ORIGIN CHARGES						
Description	Min/Max	Qty	Unit Price	Per	Total Amount	
FUEL SURCHARGE TRUCKING	- / -	180.000	%	25.00	Percentage	CAD 45.00
ORIGIN HANDLING FEES	- / -	1.000	CAD	35.00	Flat amount	CAD 35.00
PICK UP CHARGES	35.00 / -	1,200.000	CAD	0.15	Per chargeable weight	CAD 180.00
<i>Sub-total</i>						260.00 CAD

AIR						
Description	Min/Max	Qty	Unit Price	Per	Total Amount	
AIR FREIGHT ALL IN	- / -	1,200.000	CAD	1.25	Per chargeable weight	CAD 1,500.00
<i>Sub-total</i>						1,500.00 CAD

DESTINATION CHARGES						
Description	Min/Max	Qty	Unit Price	Per	Total Amount	
TERMINAL FEES OVERSEAS /base	- / -	1.000	SEK	275.00	Flat amount	CAD 46.64
TERMINAL FEES OVERSEAS /PER KILO	- / -	1,200.000	SEK	1.50	Per chargeable weight	CAD 305.27
DELIVERY CHARGES /per kilo	- / -	1,200.000	SEK	2.30	Per chargeable weight	CAD 468.08
BROKERAGE - FOREIGN	- / -	1.000	SEK	1,150.00	Flat amount	CAD 195.03
DESTINATION HANDLING FEES	- / -	1.000	SEK	490.00	Flat amount	CAD 83.10
DELIVERY CHARGES /base	- / -	1.000	SEK	495.00	Flat amount	CAD 83.95
<i>Sub-total</i>						1,182.07 CAD
Total Amount						2,942.07 CAD

Not included: insurance, duties, taxes and storage (Storage charges 100 SEK/100kg/day (the 2 first days are free)
 Insurance available upon written request: \$ 40.00 or \$ 0.30/\$100.00 of insured value

Freight rates are airport to airport, unless otherwise specified.

Transit times quoted are based on carrier estimates, airport to airport, and given as indication only -- they are not guaranteed by SDV

Subject to airline acceptance and booking

Airfreight rate is based on a weight/volume ratio of 1 KG = 6000 cc or cm³, whichever is greater

Quotations are subject to change without notice due to factors beyond SDV's control, including without limitation to fuel, security surcharges, peak season adjustments, currency exchange and changes in the market prices and conditions at time of departure.

Above rates exclude costs associated with customs clearance (i.e. duties and taxes), storage, tailgate or special equipment, unless otherwise specified

Screening fees may be applicable if not registered as a participant with Transport Canada.

Above rates are not applicable to personal effects, perishables, human remains or dangerous goods, unless otherwise specified.

We reserve the right to use carriers of our choice

Legalization charges and courier fee as per outlays

Insurance available upon written request.

Cargo insurance deductible of \$500.00 applies unless otherwise specified

Above is subject to prior approval by SDV Logistics (Canada) Inc. credit department.

All claim notifications must be received in writing within 7 days of cargo receipt by customer.

All transactions are subject to CIFFA Standard Trading Conditions

(Copy available on website www.ciffa.com)

All rates are private and confidential; not for third party viewing without written authorization by SDV Logistics (Canada) Inc.

LOWER CHURCHILL PROJECT	CHANGE REQUEST
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Attachment #2

Li Jeanne

From: Richard Severs <auto-reply-lhr@aconex.com>
Sent: Wednesday, October 07, 2015 2:41 PM
To: Li Jeanne
Subject: LCP-CM-EMAIL-058607: AI 203.1 - Servomotor Long-Term Protection ACNXREF<ICRttFHHkKpRDK9LhUJSB>

You have received a new [Email: LCP-CM-EMAIL-058607](#)

Project: Construction Mgmt
Type: Email
Mail Number: LCP-CM-EMAIL-058607
To: Mrs Joanne Raddatz, ANDRITZ HYDRO
Cc: Mr Yves Bergeron, ANDRITZ HYDRO
Mrs Jeanne Li, ANDRITZ HYDRO
Mr Frank Gillespie, Nalcor Energy
Ms Line Tremblay, Nalcor Energy
From: R Severs, Nalcor Energy
Sent: 07/10/2015 7:40:23 PM BST (GMT +01:00)
Attribute 1: General Correspondence
Attribute 2: CH0030-001 Turbine & Generators (AH)
Status: N/A
Subject: AI 203.1 - Servomotor Long-Term Protection

Joanne,

The following is LCP's response to action item 203.1;

203.1	Servomotor Long-Term Protection	The Supplier Arcos submitted a proved long term protection scheme for the servomotors. It consists of a low pressure accumulator filled with hydraulic oil and connected to one of the ports. This device ensures that the internal parts are constantly immersed in oil. The servomotor exterior is painting and the other machined surfaces will follow the usual protection with the Metal Protect 5000 and the Intercept. LCP to review the information and will reply to AH.
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The long term protection proposed for the servomotors is acceptable.

Regards,

Richard Severs, P.Eng.
Package Lead - Turbines and Generators
Lower Churchill Project

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Int: +44 845 22 66 391

Regards,
The Aconex Team

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LOWER CHURCHILL PROJECT	CHANGE REQUEST
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Change Request Title:	PDA Coupler Long-term Packaging	CHR No. (Reference):	CHR-290
Agreement No:	CH0030		
Agreement Title:	Lower Churchill Project – Turbines & Generators	Rev. No:	00
Company:	Muskrat Falls Corporation	CHO No.:	
Contractor/Supplier:	Andritz Hydro Canada Inc.	Date:	12-Nov-2015
		Aconex No.:	CHR-CH0030001-0098
		DAN No.:	
		PCN No.:	

Description of Change Request and Reason (attach all supporting information):

PDA Coupler Long-term Packaging:

It is the AH standard practice to package PDA couplers in a fibreglass polyester termination box. This packaging has been proven as an acceptable method for storage in the short and medium term. AH's bid price included this method of packaging based on its planned delivery schedule and the original milestone dates included in Exhibit 9 (Work & Milestone Schedule).

For medium to long term storage of the PDA couplers, wooden crates are the preferred method of packaging. Due to LCP's schedule delay, wooden crates are now required as the packaging method for the PDA Couplers. AH is seeking a reimbursement from LCP to cover the additional costs of this packaging material. The detailed Pricing Sheet is included in Attachment #1.

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Please review and comment on this Change Request by Friday, November 27<sup>th</sup>, 2015.

Supporting information that forms part of this Change Request:

Attachment #1: Detailed Pricing Sheet  
Attachment #2: IRIS Quotation

Description of impact on Control Schedule:

No impact on Control Schedule.

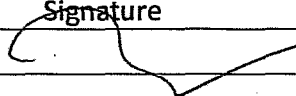
Revised Finish Date: N/A

| Lump sum price (or estimated cost) and adjustment to the Contract Price: |                                                                                             |     |     |            |                |
|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----|-----|------------|----------------|
| Item                                                                     | Description                                                                                 | UOM | QTY | Unit Price | Extended Price |
| 1                                                                        | PDA long-term packaging                                                                     | Lot | 4   | \$484      | \$1,936        |
|                                                                          | Proposed Payment Milestones:                                                                |     |     |            |                |
|                                                                          | - 100% upon delivery of the PDA Couplers to the designated warehouse for all four (4) units |     |     |            |                |
|                                                                          | 13% HST will be charged extra.                                                              |     |     |            |                |
| Value of this Change Request:                                            |                                                                                             |     |     |            | \$1,936        |

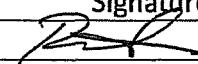


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| <b>LOWER CHURCHILL<br/>PROJECT</b> | <b>CHANGE REQUEST</b> |
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ORIGINATOR     COMPANY     CONTRACTOR/SUPPLIER

| Title           | Name           | Signature                                                                          | Date        |
|-----------------|----------------|------------------------------------------------------------------------------------|-------------|
| Project Manager | Joanne Raddatz |  | 12-Nov-2015 |

RECEIVED BY:

| Title        | Name            | Signature                                                                          | Date        |
|--------------|-----------------|------------------------------------------------------------------------------------|-------------|
| PACKAGE LEAD | RICHARD SEEVERS |  | 30 Nov 2018 |

|                                    |                       |
|------------------------------------|-----------------------|
| <b>LOWER CHURCHILL<br/>PROJECT</b> | <b>CHANGE REQUEST</b> |
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**Attachment #1**



**DETAILED PRICING SHEET**

**CUSTOMER:** Muskrat Falls Corporation  
**SITE:** Lower Churchill Project CH0030  
**CHANGE REQUEST (CR) NUMBER:** CHR-290  
**CVR NUMBER (ANDRITZ):** N/A

**DATE:** 12-Nov-2015  
**CURRENCY:** CAD\$  
**UNIT:** 1

**DESCRIPTION:** PDA Coupler Long-term Packaging

| Andritz Office Staff                | Description | Hours | Hourly Rate | Total        |
|-------------------------------------|-------------|-------|-------------|--------------|
| System Engineer                     |             | 3     | \$170.00    | \$510        |
| <b>TOTAL - ANDRITZ OFFICE STAFF</b> |             |       |             | <b>\$510</b> |

| Materials                                         | Description                                   | Units | Unit Price | Total          |
|---------------------------------------------------|-----------------------------------------------|-------|------------|----------------|
| IRIS - Wooden Crates Packaging - incremental cost | See enclosed quotation from IRIS + 15% markup | 4     | \$356.50   | \$1,426        |
| <b>TOTAL - MATERIALS</b>                          |                                               |       |            | <b>\$1,426</b> |

|                    |                |
|--------------------|----------------|
| <b>GRAND TOTAL</b> | <b>\$1,936</b> |
| <b>UNIT PRICE</b>  | <b>\$484</b>   |

Note: Taxes extra

|                                           |                              |
|-------------------------------------------|------------------------------|
| <p><b>LOWER CHURCHILL<br/>PROJECT</b></p> | <p><b>CHANGE REQUEST</b></p> |
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**Attachment #2**



Qualitrol Iris Power  
 3110 American Drive  
 Mississauga, Ontario L4V 1T2  
 Canada  
 Telephone: 905-677-4824  
 Fax: 905-677-8498  
 Website: [www.irispower.com](http://www.irispower.com)



Quotation: 50210640-1  
 Issued: 06-NOV-15

Page: 1 of 2  
 Expires: 31-DEC-15

To: Andritz Hydro Ltd.  
 6100 Transcanada Highway  
 Pointe Claire, QC H9R 1B9  
 Canada

Reference: End User - Nalcor, NL

End User:

Attention: Josee Desrochers  
 Phone:  
 Fax:

Sales Contact: Radu Udrescu  
 Sales Engineer  
[rudrescu@qualitrolcorp.com](mailto:rudrescu@qualitrolcorp.com)

Quote Currency: CAD

| Line | Part Number | Qty | UOM | Description                                                                                                                                                  | List Price | Unit Price | Extended Price |
|------|-------------|-----|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|----------------|
| 1    | P0710       | 4   | EA  | PDA Coupler Package (machines between 7 & 16kV) including: 6 Epoxy-mica capacitors (80pF, 16kV), fibreglass polyester termination box, and installation kit. |            |            |                |
| 2    | S&H         | 4   | EA  | Custom Packaging - Wooden crates for 4 EMC kits<br><i>for long term packaging.</i>                                                                           |            | 360.00     | 1,240.00       |