



November 2, 2006

Mr. Jack Jagger
5709 Riverview Drive
Lisle, IL 60532

Subject: P906 180° Magnet Saddle Coil
Everson Tesla Quotation Number 5002

Dear Mr. Jagger:

In response to your Request for Budgetary Quotation for the P906 180° Magnet Saddle Coil, we are pleased to provide budgetary price and delivery below.

Everson Part No. 52820 P906 180° Magnet Saddle Coil

Quantity: 2 each

Unit Price: \$ 351,640.00 each (Includes Conductor)

Tooling Charge: \$ 160,000.00 (a one time charge)

Shipping: \$ 3,500/each

Scope of Work: This is a budgetary quote for 2 saddle coils consisting of 7 pancakes per coil. Each pancake will have its own coolant circuit and temperature switch. Coil materials are aluminum conductor and B-stage tape.

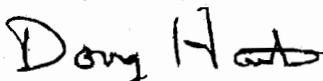
Delivery: Approximate delivery is 18-22 weeks ARO
FOB Argonne National Laboratory, IL

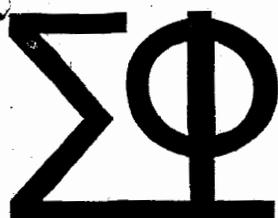
Payment Terms: Net 30
NOTE: Tooling will be invoiced upon acceptance of order.

Price Validity: 30 days

We thank you for your inquiry and look forward to working with you on this project. Please feel free to call with any questions or concerns.

Very truly yours,
EVERSON TESLA, INC.


Doug Hartman
Program/Account Manager



SIGMAPHI

Aimants pour accélérateurs de particules
Magnets for particle accelerators

PRICE PROPOSAL
N° A610/0598

ARGONNE NATIONAL LABORATORY
9700 South Cass Avenue
ARGONNE, IL 60439
USA

For the attention of Mr Paul E. REIMER
& Mr Jack M. JAGGER

Vannes on the 25th of October 2006

Y/Ref. : Your request for E-906 Magnet coils
O/Ref. : DD/A501-0340 / A610-0598

Dear Sirs,

Further to your above referenced inquiry, we reviewed our previous offer and are pleased to submit our budgetary proposal for the following equipment:

- 2 E-906 MAGNET COILS, following your documents dated 1/2/2005, our technical form 23401 review A, our drawings 14717-CE-401, 14717-CE-5000 A, 14717-CE-0001-MA B and 14717-CE-6000-TR C.

Technical remarks :

- **Material :**
 - Aluminium conductor, supplied by ANL
 - One to two splices per coil
 - Electrical and hydraulic connections as per specification
 - We would take responsibility of the insulation, guaranteeing that the coil passes the specified tests. Our standard system is 1 layer half overlapped of Cetaver fibreglas 0.20 mm thick for the conductor, 1 layer for the pancake insulation, and 2 layers of 0.25 mm half overlapped for the ground insulation, more depending of the specified electrical tests
- **Process :**
 - The main mines are very close to your analysis:
 - Conductor is pressure tested, unwound, straightened, cleaned on the winding line
 - It is wound on a mandrel with ajustable length
 - Keystoning effect is brought back within 1 mm
 - Each pancake is individually shaped on a specific tooling
 - Unless you have a specific constraint to have 2 sub coils, we would make each coil in one moulding. This simplifies a lot the mould design and moulding operation.
 - After ground insulation and suitable tests, the coil is vacuum impregnated with Araldite F resin in a single operation.

SIGMAPHI S.A. - Rue des Frères Montgolfier - Z.I. du Prat - F.56000 VANNES Cedex
Téléphone 33 (0)2 97 01 08 80 - Fax 33 (0)2 97 01 08 81 - E-mail : CONTACT@SIGMAPHI.FR - Site internet : www.sigmaphi.fr
S.A. au capital de 230 000 € - RCS Vannes 321 318 735 - Siret 321 318 735 00032 - TVA FR 93 321 318 735 - APE 316 C



ISO 9001:2000
N° certification 200309751

- Exits are shaped and electrical and hydraulic connections are welded
- Coils are clamped on a specific support for transportation.
- A specific control tool is made for each step (winding each pancake, shaping, before and after moulding).
- Electrical tests are made after each step.
- Expected tolerances are :
 - overall dimensions ± 30 mm.
 - Coil cross section $+^{10}_{-5}$ mm

▪ Toolings :

- One adjustable mandrel
- One winding line
- One shaping tool
- One mould
- One support per coil
- Control calipers
- Handling tools

Our price for these 2 coils is :

O/Ref. : 23401-ANL-0201 Total Price € 530.000,- X 1,3 = 689

As we had already made a reasonable analysis last year, we do not really need to change the price, apart from inflation.

It includes all design, toolings, labour, control and tests, and shipping supports.

It excludes aluminium conductor and freight.

We would propose to consider European made conductor if the coils are made in Europe; this would save time and money.

We could investigate this with the supplier of the CERN LHCb and Alice coils.

Some extra conductor should be foreseen for the setup of the winding and shaping tools (about 150 m)

All this is based on our experience with LHCb and Alice large aluminium coils for CERN LHC (see attached pictures).

DELIVERY TIME

- 10 months from order providing that conductor delivery occurs within 6 months.

PAYMENT CONDITIONS

- 30 % down with the order acknowledgement
- 20% after winding the 1st pancake
- 20% after factory acceptance tests
- 10% after delivery

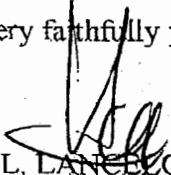
Net 30 days from invoice date

WARRANTY

Our equipment is guaranteed for two years from the delivery.

We are at your disposal for any complementary information you may need and we remain,

Very faithfully yours.


J. L. LANCELOT
Managing Director

Quotation No.092906

September 29, 2006

Jack Jagger

Budgetary estimate for P-906 coils

Jigs and Fixtures; \$ 74,081.00

Winding and Curing; \$ 428,513.00

Freight; \$ 9,260.00

Total cost less alum conductor; \$ 511,854.00 USD

- PREVIOUS B.T. - 46 7/2 310

Delivery: weeks, ARO

Payment terms: TBD

Ken Wadsworth
Alpha Magnetics
Production Engineer
Ph: 510-732-6698 ext. 105
Fax: 510-732-6185
E-mail ken@alphamag.com

Subj: **Quote: Aluminum 1350 Hollow Conductor**
Date: 10/5/2006 12:19:53 P.M. Central Standard Time
From: spowe@alconex.com
To: jagger@anl.gov
CC: jaggerlisle@aol.com, dvalade@alconex.com

Hi Jack,

I have attached our quote for the Aluminum Hollow Conductor 1.600" x 1.600" with .700" Dia. as per your fax of September 20, 2006.

A total of 18,600 feet (46,500 lbs) will be supplied on between 16-20 reels (72"x54"x30").

Per our discussions this material will not be required until the first quarter of 2007.

Please review our quotation and respond with any further questions or comments.

We appreciate the opportunity to quote and look forward to working with Argonne on this project in the near future.

With Regards,

Steve Powe
Account Manager
ALCONEX Specialty Products, Inc.
Fort Wayne, IN 46809
1-800-443-6481
(260) 744-3446 ext 223
(260) 745-1938 Fax
email: spowe@alconex.com
www.alconex.com

Friday, October 06, 2006 America Online: Jaggerlisle

ALCONEX SPECIALTY PRODUCTS, INC.
 4204 West Ferguson Road
 Fort Wayne, IN 46809

(260) 744-3446 Phone
 (260) 745-1938 Fax
 (800) 443-6481

PRELIMINARY HOLLOW QUOTATION

SOLD TO

Jack Jagger
 Argonne National Lab
 9700 S. Cass Ave
 Argonne IL 60439-4803
 630 252-4839 Tel email: jagger@anl.gov

SHIP TO

Same

Date 10/05/06
 Quoted By Steve Powe
 PO# _____
 Ship Date _____

BARE HOLLOW ALUMINUM ~ **1350 ALLOY** ~ O TEMPER

Size 1.600" x 1.600"
 Inside Corner Radius N/A
 Outside Corner Radius .100"
 Wall Thk .700" Dia (+/- .015)
 Overall Tolerances +/- .005
 Net Pounds 47,500
 Reel Size 72" x 54" x 30"
 Alconex Job No. N/A
 Die* New Dies required

Fabricator 3.93
 Metal Base 1.25
 Total Price/Pound **5.18**

The applicable metal base is applied at date of shipment.

Terms: Net 30 Upon Approval

Freight: FtW to Argonne Lab @ \$900 (2 trucks @ \$450 ea.)

Current Lead Time: Due 1st Qtr 2007

Reel Cost: \$ 210 each

Die Charge: * \$3200 (two dies)

SPECIAL NOTES:

6101 Aluminum not available
 Freight: Prepaid and Add to Invoice or Collect
 Total Length - 18,600 ft
 Total Weight - 47,500 lbs
 Require 16-20 Reels @ approx 3,000 lb ea.
 Multiple lengths okay @ 700 ft (if production problems)
 2.54 # per foot
 1400 feet per reel
 3500 # per reel
 FLOW TEST - \$80.00 per sample x 16 = \$1280
 PRESSURE TEST - \$765.00 per sample x 16 = \$12240
 FLARE TEST - \$10.00 per sample x 16 = \$160
 DIMENSIONAL TEST - Free

Estimated Total Cost to Argonne

@16 Reels: \$267,190
 3 TESTS = \$13,680
 DIE CHARGE = \$3,200
 REEL COST = \$3,360
 FAB PRICE = \$246,050
 FREIGHT = \$900

QF03001-F:\VOL1\USERS\DAYNA\2003\HOLLOW.XLS

Contract Review:

Production Approval: