Randy J. Strop
Despatch Industries
8860 207th Street West
Lakeville, MN 55044
February 3, 2011

Timothy Mahoney
Office of Exporter Services
Regulatory Policy Division
Bureau of Industry and Security
1401 Constitution Avenue, NW
Room 2705
Washington DC, 20230

Dear Mr. Mahoney:

I am writing in response to request for public comments to 15 CFR Part 774, Commerce Control List: Revising Descriptions of Items and Foreign Availability.

Despatch Industries seeks to inform BIS of the foreign availability of Low- and High-Temperature ("LT and HT") furnaces used in the production of carbon fiber. Despatch also wishes to emphasize our concerns that foreign competitors, even from within destinations noted in the request for inquiry, appear to face fewer legal obstacles to exporting equipment used to manufacture carbon fiber to emerging markets, particularly India and China. Since widespread foreign availability erodes the value of U.S. trade controls, Despatch believes the existing restrictions are hobbling U.S industry without actually preventing LT and HT furnaces, and other equipment used in carbon fiber production, sourced elsewhere from reaching the market.

Despatch directly knows of at least one company outside the U.S. and from destinations other than those noted in the request for inquiry, capable of manufacturing and supplying LT and HT furnaces. This company is;

Lian Chuan Jiuchung
Address: NO. 46-1, LANE 904, Chung-Shan Road, TAO-YUNG City
Taiwan (R.O.C.)
http://www.jiuhchuan-oven.com/
Product information as printed from the company website is attached later in this document. Despatch encourages BIS personnel to perform further research to obtain more information as may be needed for their overall assessment.

Despatch Industries
8860 207th Street West, Minneapolis, MN 55044
Telephone: 888-337-7282 International: 952-469-5424

Information and feedback received from our representatives in China seem to indicate that there are at least two companies within China also capable of manufacturing and supplying LT and HT furnaces. These companies are;

Heilongjiang Weiye
http://heilong.china.b2b.cn/index.htm

Hunan Zhezhou Chenxin
http://www.chenxinzz.com/About.asp

While not completely verifiable Despatch understand these two companies have manufactured and supplied LT and HT furnaces to some carbon fiber producers in China. Despatch hopes that with the resources available within BIS, an in depth review of these two companies and their products will be done.

Despatch wishes to focus on the application of controls to exports of the LT and HT furnaces and other equipment used in an integrated carbon fiber production line, that remain subject to control under ECCN 1B001.d.1. In addition, Despatch hopes to convey its apparent competitive disadvantage in the global market for carbon fiber production equipment. Despatch does not currently manufacture LT or HT furnaces but has considered proposals to license designs for LT and HT furnaces from a Japanese corporation for manufacture within the United States. If implement this proposal, would enable us to produce much of the manufacturing equipment most critical to carbon fiber production ourselves, and source other components (creels, winders, drives, rolls and stands) from other vendors.

The need for policy guidance and a globally competitive approach is apparent. General policy guidance regarding the potential applicability of controls to the export of both LT and HT furnaces as stand-alone equipment, and of integrated solutions, would be of substantial benefit. Clarification of the U.S. government's policy with respect to carbon fiber production equipment, in general, is of particular importance because Despatch has observed that foreign competitors, like Ruhstrat, Eisenmann and Fleissner in Germany, appear to face significantly less stringent control of exports of such equipment to foreign markets, particularly China and elsewhere in Asia.

Trends across manufacturing sectors reveal that companies are increasingly turning to carbon fiber as a replacement for other materials, particularly as technological advances bring down carbon fiber's relative cost. Despatch believes that the increasing widespread use of standard modulus carbon fibers, as the material of choice, for industrial applications in automotive, wind turbines and civil structures represent a significant development in global demand for carbon fiber and associated production equipment. American equipment manufacturers like Despatch will be placed at a serious competitive disadvantage if the U.S. government does not take steps to reduce barriers to access foreign markets.

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Although the highest strength carbon fiber can have military applications, the capability of producing strategically significant carbon fiber is primarily a function of the quality of the ingredients used to make the carbon fiber (the "precursor") and the techniques used to process and treat it (i.e., oven and furnace temperature, time exposed in ovens and furnaces, tension during passes, etc.). To produce strategically significant carbon fiber, a manufacturer must start with the highest quality precursor and must use an HT furnace capable of running well in excess of 1500° C, and more likely around 2000° C. Even if the U.S. government feels that certain types of precursor or high-temperature furnaces should be subject to more stringent controls, it should distinguish between those types of precursor and equipment that could reasonably be used for military applications and those that could not.

Despatch would value feedback on the approach BIS would take when considering licensing applications for exports of LT and HT furnaces and integrated lines (particularly to China), the likelihood that BIS would grant such licenses, and the steps that Despatch can take to increase the chances of favorable results in the licensing process. If it appears that export licenses for this equipment are unlikely to be granted, Despatch will need to reconsider any plans to license LT and HT furnace designs, thus yielding to its foreign competitors a significant new market opportunity in this rapidly growing field.

Regards,

Randy J. Strop
General Manager Despatch Carbon Fiber

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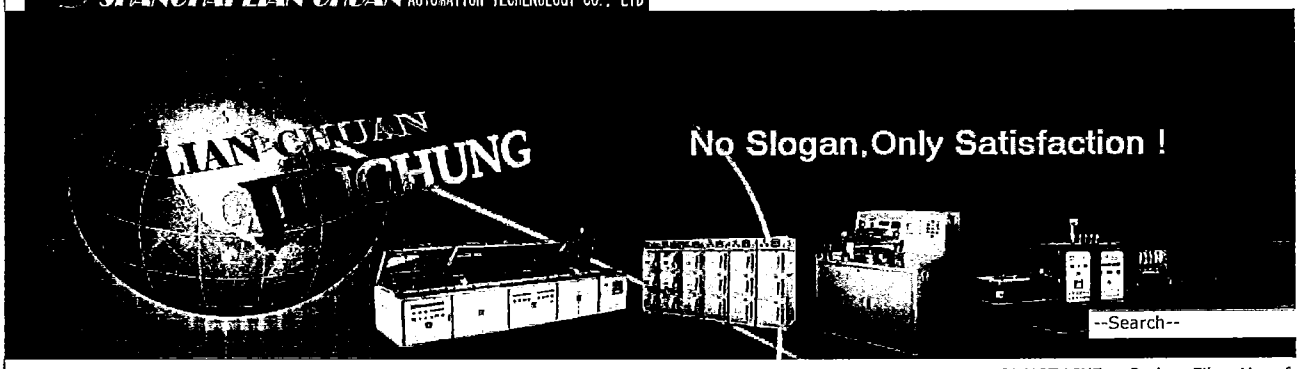


PRODUCT LINE

Carbon Fiber Manufacture

Diode Manufacture

Al Metal Manufacture

Electronics Manufacture

Electricals Manufacture

Chemical Fiber Manufacture

Automative Parts Manufacture

Metal and Others Manufacture

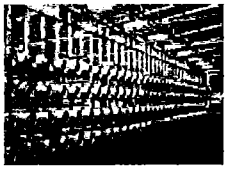
Carbon Fiber Manufacture

1-14 of 14

PAN Carbon Fiber - Carbonization Production Line

Carbonization Production Line(W type/G type), Pilot line(W type/G type)

Add to Inquiry Cart



Weaver

W-03 Weaver

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Creel (Feeder)

F-H-04/F-V-03/D-V-03 Creel (Feeder)

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Weaving Weft Oxidation Oven

WO-04 Weaving Weft Oxidation Oven

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Roll Driver

Roll Driver

Add to Inquiry Cart

Oxidization Oven

Oxidization Oven

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Low Temp. Carbonization Furnace (LT)

LT-900 Low Temp. Carbonization Furnace (LT)

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High Temp. Carbonization Furnace (HT)

CF-C-18 / CF-C-16 High Temp. Carbonization Furnace (HT)

Add to Inquiry Cart

Graphitization Furnace (Ultra-HT)

Graphitization Furnace (Ultra-HT)

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Electrolyzation and Rinsing Device

EL-03 Electrolyzation and Rinsing Device

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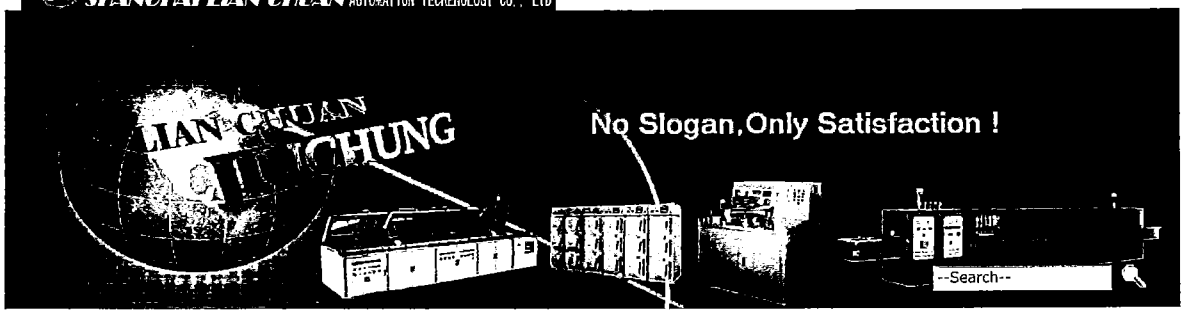
Dryer after rinsing

Dryer after sizing



PRODUCT LINE

Carbon Fiber Manufacture
Diode Manufacture
Al Metal Manufacture
Electronics Manufacture
Electricals Manufacture
Chemical Fiber Manufacture
Automative Parts Manufacture
Metal and Others Manufacture

Carbon Fiber Manufacture

Product Name : **Low Temp. Carbonization Furnace (LT)**
Item No. : **LT-900 Low Temp. Carbonization Furnace (LT)**

Description

Model type: LT-900 Low Temp. Carbonization Furnace (LT)

Add to Inquiry Cart

Specification

1. Specification:

- Size.: Band width max. 2400㎜, the largest effective length for heating is 15m, single pass.
- Protective gas: Nitrogen
- Seal type: Whole gas tight muffle
- Oxygen content in protective gas: when N2 source is 99.999%, O2 < 1.2ppm inside of muffle.
- Lowest consumption of N2: 500ton/year, <120Nm3/Hr, reduce the energy consumption of the exhaust furnace effectively.
- Pressure: 4~12(Pa)
- Retention time of process: Adopt with suitable design.
- Number of temperature control zone: Adopt with suitable design
- Muffle Material: sus310.
- Maintain and replacement of heaters: Operation outside of the furnace, no need for dismantle the furnace body.
- Height of inside muffle: Full consideration of drape increment, and harmless to fiber.
- Condensation prevention in entrance: fiber pre-heating.
- Condensation prevention in exit: temperature controls cooling device to minimize condensation.
- Condensation prevention in exhaust: explosion proof type with active heating.
- Exhaust gas leak proof: the heat-proof cushion ring with thermal locks.

Other

Please kindly link related drawings for our illustration:
[illustration-1]

Address : NO. 46-1, LANE 904,Chung-Shan Road, TAO-YUNG City,Taiwan(R.O.C.)
Telephone : 886-3-3694555 **Fax :** 886-3-3603117
E-Mail : jcl.anne@msa.hinet.net

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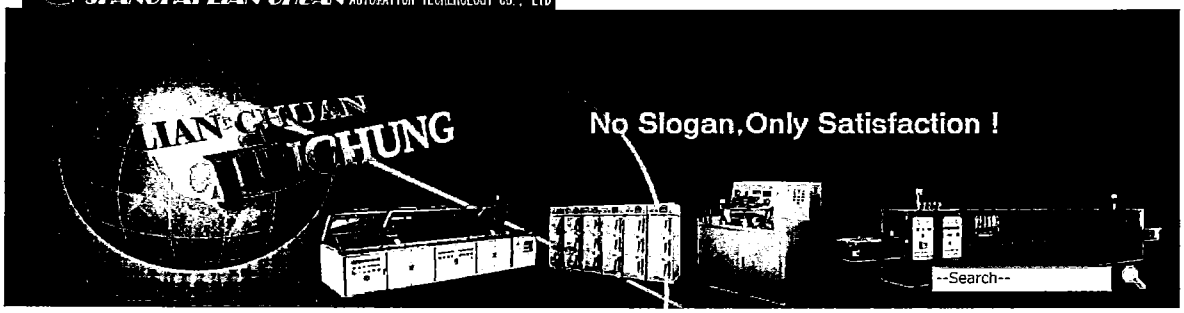

PRODUCT LINE

Carbon Fiber Manufacture
Diode Manufacture
Al Metal Manufacture
Electronics Manufacture
Electricals Manufacture
Chemical Fiber Manufacture
Automative Parts Manufacture
Metal and Others Manufacture

Carbon Fiber Manufacture

Product Name : **High Temp. Carbonization Furnace (HT)**
Item No. : **CF-C-18 / CF-C-16 High Temp. Carbonization Furnace (HT)**

Description

- CF-C-18 High Temp. Carbonization Furnace (HT)
- CF-C-16 High Temp. Carbonization Furnace (HT)

☐ Add to Inquiry Cart

Specification

1. CF-C-18 Max. Temperature 1800℃, CF-C-16 Max. Temperature 1600℃. we offer different options.
2. Size: band width Max. 2400mm, heating length Max. 15M, single pass.
3. Protected Gas : Nintrogen.
4. Seal type: Whole gas tight oven
5. Oxygen content in protective gay: when N2 source is 99.9999%, O2< 1.2ppm inside of muffle.
6. Lowest consumption of N2: 500ton/year, <120Nm3/Hr.
7. Pressure: 4~12(Pa)
8. Retention time of process: adopt with suitable design.
9. Number of temperature control zone: adopt with suitable design.
10. Muffle、heaters, and furnace parts: adopt good quality graphite and carbon material imported from (USA, Germany and Japan).
11. Heat insulator: all graphite and carbon material, or use some other materials partly, according to the actual demand.
12. Maintain and replacement of heaters: Operation outside of the furnace, no need for dismantle the furnace body.
13. Height of inside muffle: Full consideration of drape increment, and harmless to fiber.
14. Oven Wall cooling style: beside traditional water cooling method, can also choose other insulating method, which saved up to energy 30~40%, upon on request.
15. Oven precondition vacuum and preheated device (to minimize O2 concentration before operation): according to the actual need.
16. N2 circulation fast cooling device: according to the actual need

Other

Please kindly link related drawings for our illustration:
[illustration-1]

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