**Exhibit 10.29**

**CONFIDENTIAL TREATMENT**

**REQUESTED PURSUANT TO RULE 406**

**Contract No.:DJG-HT20080615**

**Technology License and Engineering Services Contract**

Between

**Chongqing DAQO New Energy Co., LTD**

Wanzhou Industrial Park

404000 Wanzhou, Chongqing P.R. China

and

**Poly Engineering S.r.l**

Via Galileo Ferraris 13

Monza / Milano Italy

June 15th, 2008

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**Catalogue**

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**Technology License and Engineering Services Contract**

Contract No.: DJG-HT20080615

Date of Signature: June 15th, 2008

**WHEREAS**

**Chongqing DAQO New Energy Co., LTD** (“**Customer**” or “**DAQO**”), a limited liability company incorporated under the laws of the People’s Republic of China with the registered address at Wanzhou Industrial Park, Wanzhou, Chongqing, intends to erect a facility in the People’s Republic of China for the production of silicon polycrystal for use in the semiconductor and solar energy industry.

**Poly Engineering S.r.l.** (“**Contractor” or “PE**”) , a company incorporated under the laws of Italy with the registered address at Via Galileo Ferraris 13 Monza, Milano, has the know-how and experience for the erection of such facility for the production of silicon polycrystal for use in the semiconductor and solar energy industry. Thus, PE is in a position to provide DAQO with the respective know-how for the erection and operation of such plant and is, furthermore, in a position to supervise the respective construction as well as the start-up of the production.

Now, THEREFORE, the Parties agree as follows:

**1. Definitions**

The following words and expressions will have the meaning specified here below:

(a) “**Applicable Law**” shall be understood to mean any and all local, regional, and national laws, regulations, ordinances, pronouncements, judicial decrees, and similar governmental declarations, which are applicable to a Party, this Contract, the subject of this Contract, or the design, construction and operation of the Plant.

(b) “**Basic Engineering Package** (“**BEP**”)” shall be understood to mean the set of documents and services specified in Annex No.2.

(c) “**Contract**” shall be understood to mean the present Contract including its annexes.

(d) “**Confidential Information**” shall be understood to have the meaning given to it in Section 7.1.

(e) “**Contractor**” shall be understood to mean Poly Engineering S.r.l.

(f) “**Contractor Services**” shall be understood to have the meaning given to it in Section 4(B) of Annex No.2.

(g) “**Customer**” shall be understood to mean DAQO.

(h) “**Effective Date**” shall be understood to mean the date this Contract is signed by both Parties.

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(i) “**Equipment**” shall be understood to mean any equipment necessary for implementation the process for the production of the Product.

(j) “**Including**,” whether or not capitalized, shall be understood to mean “including, but not limited to.”

(k) “**Intellectual Property Rights**” shall be understood to have the meaning given it in Section 6.2.

(1) “**Know-how**” shall be understood to mean all know-how, show-how, processes, designs, specifications, drawings, blue-prints, documentation, and confidential and proprietary information required to be provided, or provided, by Contractor to Customer under this Contract, including the BEP and CED, and any Intellectual Property Rights embodied in any of the foregoing.

(m) “**Parties**” shall be understood to mean the Customer and the Contractor.

(n) “**Plant**” shall be understood to mean a plant for the production of the Product using the Process and the Equipment; all as specified in more detail in Annex No. 2.

(o) “**Process**” shall be understood to mean all the technological operations necessary for the production of the Product based on the raw materials having the characteristics specified in Annex No. 1; all as specified in more detail in Annex No. 2.

(p) “**Product**” shall be understood to mean silicon polycrystal (“**SP**”) having the characteristics specified in Annex No.2.

(q) “**Project Start**” is defined as the moment, when the down payment has been paid by DAQO; all schedules and times in Section 6 of Annex No.2 are measured from Project Start.

(r) “**Services**” shall be understood to have the meaning set forth in Section 3.1 of this Contract.

**2. License**

2.1 Contractor hereby grants to Customer a perpetual, irrevocable, fully paid and royalty free license to use, reproduce, modify, prepare derivatives works of, and otherwise practice and exploit the Know-how:

|  |  |  |
| --- | --- | --- |
|  | (a) | to manufacture, produce and process silicon polycrystal in their plant described in annex No. 2, having a nominal capacity of 3,300 Tons/year silicon polycrystal, including the Product. |

|  |  |  |
| --- | --- | --- |
|  | (b) | to distribute and sell silicon polycrystal , including the Product. |

|  |  |  |
| --- | --- | --- |
|  | (c) | to develop, design, engineer construct and operate the Plant, that enable the manufacturing , production and processing of silicon polycrystal, including the Product, and to have any of the foregoing done for Customer’s account (which shall not be deemed to be a sublicense) to third parties. |

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2.2 The license granted hereabove includes the right to sublicense the rights enunciated to affiliates of Customer without Contractor’s approval. Customer may sublicense such rights to one or more unaffiliated third parties only with Contractor’s prior approval which shall be not unreasonably withheld

2.3 The license granted to the Customer according to Section 2.1 is exclusive for the territory of the People’s Republic of China including the Special Administrative Regions of Hong Kong and Macau and Taiwan (“Exclusive Territory”) until December 31, 2011 (the “Exclusivity Period”).

Contractor, Mr. Marangoni and Mr. Ragaini, will not, and will cause any affiliate of Contractor, Mr. Marangoni or Mr. Ragaini not to, directly or indirectly, through any representative or otherwise, solicit or entertain offers from, negotiate with or in any manner encourage, discuss, accept, or consider any proposal of any person or execute any contract relating to the transfer of the Know-how to the Exclusive Territory, in whole or in part (including but not limited to the installation of (in whole or in part) a production plant for polycrystal silicon in the Exclusive Territory), whether directly or indirectly, through sale, merger, consolidation, or otherwise.

Furthermore during the Exclusivity Period, for all contracts of Contractor, Mr. Marangoni or Mr. Ragaini or any affiliate of Contractor, Mr. Marangoni and/or Mr. Ragaini for the transfer of the Basic Engineering to places outside the Exclusive Territory, Contractor, Mr. Marangoni and Mr. Ragaini will apply contracts where the customer is not allowed to transfer the Basic Engineering and its plant to the Exclusive Territory; in particular, but not limited to, Contractor, Mr. Marangoni and Mr. Ragaini will insert and will cause any affiliate of Contractor, Mr. Marangoni and/or Mr. Ragaini to insert appropriate wording (i) expressly prohibiting such transfer of the Basic Engineering to the Exclusive Territory as set forth above and (ii) requiring any contractor to insert such wording in its respective contracts.

**3. Services**

3.1 The Contractor shall perform the functions and tasks specified, or referred to, in this Section 3.1 as well as any functions and tasks not specifically named but reasonably required to perform the functions and tasks specified, or referred to, in this Section 3.1 (the “**Services**”).

(a) Contractor shall transfer to the Customer the Know-how and submit to the Customer the associated technical documentation, and perform the services, specified in Annex No, 2.

(b) Contractor shall provide to the Customer the BEP, perform the Construction Services, and submit to the Customer the associated technical documentation as specified in Annex No. 2.

(c) Notwithstanding anything to the contrary herein, and without limiting Contractor’s obligations as otherwise set forth in this Contract, at Customer’s request Contractor shall, as part of the Services, provide at Customer’s site an appropriate number of suitably qualified and experienced engineers to advise Customer during construction, commissioning, start-up, and testing of the Plant, and supply training services to Customer and Customer’s designees.

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3.2 The Contractor shall perform the Services in accordance with the timeline set forth in Section 6 of Annex 2.

3.3 Customer may propose a change to be made to the Services or the BEP. In such event, Contractor shall promptly prepare a written analysis of the change including the rationale for and consequences of the change. Such consequences shall not include any changes to the Total Remuneration unless the implementation of the change requires material additional resources or efforts on the part of Contractor. If upon receipt and review of Contractor’s analysis, Customer is interested in further considering such change, Contractor shall develop for Customer to review and approve a detailed implementation plan. With Customer approval, Contractor shall implement the change in accordance with such plan.

**4. Remuneration and terms of payment**

4.1 The Customer should pay to the Contractor according to the payment schedule. The total remuneration for the Know How, the BEP , the Construction Services and the exclusive fee consists of four parts:

Part 1: payment for 2008 is **\* \* \***

Part 2: payment for 2009: **\* \* \***

Part 3: payment for 2010: **\* \* \***

Part 4: payment for 2011: **\* \* \***

4.2 Customer’s payments will be due pursuant to the following time schedule:

For Part 1:

|  |  |
| --- | --- |
| (a) | **\* \* \***: Till June 30,2008 |

|  |  |
| --- | --- |
| (b) | **\* \* \***: Till August 31,2008 |

|  |  |
| --- | --- |
| (c) | **\* \* \***: Till December 31,2008 |

|  |  |
| --- | --- |
| (d) | **\* \* \***: after delivery of a first lot of the following documentation including Process Flow diagrams and Major equipment specifications |

|  |  |
| --- | --- |
| (e) | **\* \* \***: after the completion of the delivery of PE technical documentation |

For Part 2:

100% of the payment for 2009 within the first three months of the year 2010

For Part 3:

100% of the payment for 2010 within the first three months of the year 2011

For Part 4:

100% of the payment for 2011 within the first three months of the year 2012

4.3 All taxes and duties to be paid by the Customer in the territory of the People’s Republic of China shall be borne by the Customer and all other taxes and duties shall be borne by the Contractor.

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4.4 Each Party shall be solely responsible for all expenses and the costs of all resources, including all software, hardware, personnel, and travel expenses, used in performing its obligations under this Contract unless otherwise specified herein.

**5. Procedure for acceptance of documentation**

5.1 All documentation will be delivered to Customer in English and in electronic format as specified in Annex No. 2.

5.2 Customer is not obliged to inspect the documentation upon receipt.

**6. Representation and warranties**

6.1 The Contractor represents and warrants that the Know-How and the BEP are correct, complete, adequate and without defects and will enable the Customer to erect and operate the Plant for the production of the Product in compliance with Applicable Law. The Contractor represents that it will perform the Services in a professional and workmanlike manner in accordance with widely recognized professional standards in the civil engineering industry.

6.2 The Contractor represents and warrants that it has the right to grant Customer the licenses under Section 2 of this Contract and that Customer’s exercise of such licenses in accordance with the terms of this Contract will not infringe, misappropriate or otherwise violate the patents, copyrights, trade secret rights or other intellectual property rights (collectively, “Intellectual Property Rights” of any third party.

6.3 In case of any violation of the Contractor’s representations or warranties set forth in this Section 6, the Customer will notify the Contractor in writing. The Contractor will, within a reasonable time (but no later than three weeks after receipt of Customer’s notification) remedy such violation accordingly or explain why it believes that there has not been a violation of a representation or warranty. In the event that the Contractor fails to remedy the notified violation within a reasonable time (but no later than three weeks after receipt of Customer’s notification) or if Customer determines that any delay caused by such violation is not acceptable, Customer may – in its sole discretion – engage a third party to remedy such violation; all costs and expenses of such third party will be borne by the Contractor. The Customer’s right to claim additional remedies pursuant to this Contract or the provisions of Applicable Law remains unaffected.

**7. Confidentiality**

7.1 Each Party will keep confidential all non-public information belonging to the other Party and clearly marked “CONFIDENTIAL” or “PROPRIETARY” by such Party, as well as all such information that, by reason of its nature or context, should reasonably be construed as the confidential information of the other Party (e.g., technical, business, and financial information, including business plans and customer and supplier lists). (collectively, the “**Confidential Information**”). Each Party will use, and make Confidential

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Information available to his own employees and third parties, only to the extent necessary for the performance of its obligations or exercise of its rights under this Contract. Notwithstanding anything to the contrary, nothing in this Section 7 shall restrict or prohibit Customer from exercising its licenses in accordance with Section 2 of this Contract.

7.2 Notwithstanding Section 7.1, the following shall not be considered Confidential Information:

|  |  |  |
| --- | --- | --- |
|  | - | such information as was known to a Party prior to its transmission by the furnishing Party; |

|  |  |  |
| --- | --- | --- |
|  | - | such information as was in the public domain at the time of disclosure or later is available in the public domain but not through any act or fault of the receiving Party; |

|  |  |  |
| --- | --- | --- |
|  | - | such information as is received by a Party independently from a third party and in disclosing such information the third party does not violate any confidentiality agreement executed by such third party with the furnishing Party; and |

|  |  |  |
| --- | --- | --- |
|  | - | such information as is required to be disclosed by law court order or stock exchange, provided that in such event the Party required to disclose such information shall give the furnishing Party prompt written notice of such requirement so as to permit the furnishing Party to seek a protective order or similar relief. |

7.3 Upon termination of this Agreement, a Party receiving Confidential Information from the furnishing Party shall return to the furnishing Party all written or electronic copies of the Confidential Information of the furnishing Party in the receiving Party’s possession.

**8. Indemnification**

8.1 Each Party will, at such Party’s sole cost and expense, indemnify, defend and hold harmless the other Party and the other Party’s directors, officers, partners, employees, representatives, successors, and assigns from and against any and all losses, liabilities, expenses (including reasonable attorneys fees), encumbrances, or other obligations arising from a claim, action, proceeding or suit by third party, which directly or indirectly, arises out of or is alleged to arise out of the Party’s (i) breach of any representation, warranty, or covenant in this Contract; (iii) negligent, reckless, or wilful acts or omissions in the performance of this Contract; or (iii) violation of Applicable Law.

8.2 Promptly the commencement or threatened commencement of any claim, action, proceeding or suit involving an indemnified claim, the indemnitee shall notify the indemnitor of such claim in writing. No failure to so notify the indemnitor shall relieve the indemnitor of the indemnitor’s obligations under this Contract except to the extent that it can demonstrate damages attributable to such failure. The indemnitor shall assume control of the defense or settlement of any such claim, action, proceeding or suit, except that the indemnitor shall obtain the prior written approval of the indemnitee before entering into any settlement or agreement that purports to bind the indemnitee, and the indemnitee may participate in any such defense or settlement at its sole cost and expense.

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**9. Term and termination**

9.1 The term of this Agreement shall commence on the Effective Date.

9.2 Either Party may, upon written notice, terminate this Contract for material breach of the Contract by the other Party if such material breach remains uncured for more than 90 days after the breaching Party’s receipt of notice thereof from the non-breaching Party.

9.3 If Customer is overdue with the related payments for more than 3 months Contractor has the right to terminate this contract with immediate effect.

**10. Governance**

10.1 Contractor shall provide to Customer with such periodic reports and information related to the Know-how and Services as Customer reasonably requests, but in any event Contractor shall provide Customer not less than three months written updates relating the progress of Know-how and document transfers and the provision of Services.

10.2 Contractor shall meet with Customer, whether in person or by teleconference, as often as reasonably requested by Customer to discuss such topics related to the Contract as designated by Customer.

10.3 Within 10 days of the Effective Date, the Parties shall each designate and so inform the other party, in writing of: (i) a lead contact within their respective organizations for technical matters relating to the transfer of Know-how and the provision or receipt of Services; and (ii) a lead contact within their respective organizations for accounting and contracting matters.

**11. Applicable Law**

This Contract is governed by the Italian law excluding the United Nations Convention on Contracts for the International Sale of Goods (CISG).

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**12. Dispute resolution**

12.1 In the event that any dispute or controversy should arise in connection with this Contract, the Parties shall negotiate in good faith to resolve such dispute or controversy. However, in the event that the Parties are unable to resolve such dispute within 30 days of its commencement, either Party may refer such dispute to arbitration under Section 12.2.

12.2 All disputes arising out of or in connection with this Contract shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by three arbitrators appointed in accordance with said Rules, the Chairman being appointed by the two other arbitrators or, in the event of their failure to reach an agreement, in accordance with said Rules. The seat of the arbitration will be Dubai, United Arab Emirates. The language of the arbitration will be English. Notwithstanding Section 12.1 and 12.2, either Party may at any time apply to a court of competent jurisdiction for interim or conservatory relief, and will not by doing so be held to have breached this arbitration agreement or to have infringed upon the powers of the arbitrators. The arbitral award may be enforced by any court having jurisdiction over the award, the applicable Party or its assets.

12.3 During any arbitration pursuant to this Contract, Customer and Contractor shall continue to fulfill their respective obligations under this Contract, unless the subject matter of the dispute is of such a nature that this is by no means possible until the dispute has been finally settled.

**13. Force majeure**

13.1 Neither Party shall be liable to the other for any failure to perform or delay in performance of its obligations hereunder caused by: (i) Act of God; (ii) outbreak of hostilities, riot, civil disturbance, or acts of terrorism; (iii) the act of any government or authority; (iv) fire, explosion, flood, fog or bad weather; or (v) any cause or circumstance whatsoever beyond its reasonable control.

13.2 If a Party is or will be prevented from performing any of its obligations due to force majeure as set forth in Section 13.1 above, it will give notice to the other Party of the event or circumstances constituting such force majeure. Such notice shall be given within 3 days after the Party became aware (or should have become aware) of the relevant event or circumstances constituting such force majeure. However, each Party shall at all times use its best efforts to minimize any delay in the performance of its obligations as a result of force majeure.

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**14. Miscellaneous**

14.1 The Contractor shall not assign or otherwise transfer, subcontract, or delegate any of its rights and obligations under this Contract to any third party without the prior written approval of the Customer. Customer may assign or otherwise transfer, subcontract or delegate all or part of its rights and obligations under this Contract without the Contractor’s approval to an affiliate, to a third party providing financing, or to a successor of all of substantially all of Customer’s relevant business or assets in the event of a merger or acquisition.

14.2 As indicated in Section 9.1, this Contract comes into force at the date of signing by both Parties.

14.3 This Contract, including its Annexes, sets forth the entire and sole understanding between Customer and Contractor with respect to the subject matter hereof. No change in, addition to, or waiver of the provisions of this Contract shall be binding upon Customer or Contractor unless approved in writing by authorized representatives of both Parties and with express reference to this Contract.

14.4 If any provision of this Contract should be invalid, illegal or unenforceable under any existing or future law, the validity, legality and enforceability of the remaining provisions of this Contract shall not be affected or impaired thereby, and in such event the invalid or unenforceable provision shall be replaced by a provision which best meets the purpose of the replaced provision; the same applies in the event of omissions.

14.5 Contractor is an independent contractor, and neither Contractor nor any of its employees may be considered be the employees or agents of Customer.

14.6 All remedies available to either Party for breach of this Contract are cumulative and may be exercised concurrently or separately, and the exercise of any one remedy will not be deemed an election of such remedy to the exclusion of other remedies.

14.7 The following provisions of this Contract will survive the expiration or termination thereof: 1, 4.2 (only to the extent that any remuneration remains due at upon the date of terminator or expiration of this Contract), 6, 7, 8, 11, and 14.

14.8 This Contract may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which will together constitute one and the same Contract. Each Party shall authorize a person (s) for signature of contractual documents:

For Customer, Mr. Zhu Jian (President Assistant) is authorized to sign.

For Contractor, Mario Ragaini (Managing Director) and Giovanni Marangoni (Managing Director) are authorized to sign.

14.9 All notices under this Contract must be in writing and shall be deemed to have been duly given if delivered by hand, fax or internationally recognized overnight courier addressed as set forth below or at such other address as a Party may have furnished to the other in writing. Such notices shall be effective (a) if sent by overnight courier, three days after mailing, and (b) if sent otherwise, upon receipt.

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If to Contractor:

Poly Engineering S.r.1

Via Galileo Ferraris 13

Monza / Milano Italy

If to Customer:

Chongqing DAQO New Energy Co., LTD

Wanzhou Industrial Park

404000 Wanzhou, Chonqing

People’s Republic of China

14.10 The following annexes are enclosed to this Contract and are an integral part of it:

|  |  |
| --- | --- |
| - | Annex No. 1 – TCS specifications, as raw material purchased by DAQO |

|  |  |
| --- | --- |
| - | Annex No. 2 – Technical specifications and time schedule of the contractor package (Know-how and BEP) delivered from PE to DAQO |

|  |  |
| --- | --- |
| - | Annex No. 3 – Specification of the final product (Polysilicon) |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
| **The Customer**: | | |  |  |  | **The Contractor**: |  |  |
|  | | |  | |  | | | |
| **Chongqing DAQO New Energy Co., LTD** | | |  |  |  | **Poly Engineering S.r.l** | | |
|  | | |  | |  | | | |
| Address: Wanzhou Industrial Park,  Chongqing, P.R. China | | |  |  |  | Address: Via Galileo Ferraris 13 Monza / Milano Italy | | |
|  | | |  | |  | | | |
| Post Code: 404000 | | |  |  |  | Post Code: | | |
|  | | |  | |  | | | |
| Telephone: +86 23-64866666 | | |  |  |  | Telephone: +39 0473 244242 | | |
|  | | |  | |  | | | |
| Fax: +86 23-64866688 | | |  |  |  | Fax: | | |
|  |  | |  | |  | |  | |
| Authorized Signature: |  | /s/    Zhu Jian |  |  |  | Authorized Signature: |  | /s/    Mario Ragaini |
|  |  | Mr. Zhu Jian |  |  |  |  |  | Mario Ragaini |
|  |  | |  | |  | |  | |
|  |  |  |  |  |  |  |  | /s/    Giovanni Marangoni |
|  |  |  |  |  |  |  |  | Giovanni Marangoni |
|  | | |  | |  | |  | |
| Signing Date: 2008/6/15 | | |  |  |  | Signing Date: 2008/6/15 |  |  |

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**Annex 1**

**TRICHLOROSILANE - TECHNICAL GRADE SPECIFICATION**

**(Incoming pre-purified TCS)**

**ANALYSIS OF LIQUID TCS:**

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Purity (SiHC13) |  | \* \* \* minimum by weight |
| Appearance |  | clear, colorless |
|  |  | |
| IMPURITY |  | CONTENT |
| Dichlorosilane |  | max \* \* \* w |
| Silicon Tetrachloride |  | max \* \* \* w |
|  |  | |
| C-H (as Transmittance from  3.37 to 3.42 = cel1path = 10 mm) |  | min \* \* \* |
|  |  | |
| All Methylsilanes (total) |  | max \* \* \* ppmw |
|  |  | |
| Phosphorous |  | max \* \* \* ppbw |
| Boron |  | max \* \* \* ppbw |
| Arsenic |  | max \* \* \* ppbw |
| Iron |  | max \* \* \* ppbw |
| Magnesium |  | max \* \* \* ppbw |
| Aluminium |  | max \* \* \* ppbw |
| Calcium |  | max \* \* \* ppbw |
| Copper |  | max \* \* \* ppbw |

**REMARKS**: each TCS incoming lot must be supplied with a Quality Conformity Certificate

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**Annex No. 2**

**Technical Specifications and time schedule**

**Note: Capitalized terms have the same meaning as defined in the main contract.**

**1. INTRODUCTION**

DAGQ GROUP has decided to install a plant to produce Silicon Polycrystal which can be used for semiconductor and solar energy industry as defined in Annex 4.

Poly Engineering S.r.1. will provide the Know How, complete Basic Engineering Package of the new plant to DAQO GROUP and perform certain Contractor Services.

In particular, Poly Engineering S.r.1. will provide the know-how, design, supervision of construction, and managing the start up phase in a way, that DAQO GROUP and/or a third party nominated by DAQO GROUP - including an engineering design’ company providing detailed design engineering - are enabled to perform the final design of the Plant and to operate the Plant successfully in order to produce the Product, i.e., silicon polycrystal, which can be used for semiconductor and solar energy industry as defined in Annex 4. The raw material of the Plant is the TCS specified in Annex 1; the Product is specified in Annex No. 4.

The Know How and the Basic Engineering Package provided by Poly Engineering S.r.1. will include the following parameters:

|  |  |  |
| --- | --- | --- |
| • |  | ***The Plant will be designed for a initial production capacity of 1500 T/y; however, the design of the Plant will allow all extension of the production capacity to 3.000 Ton/year;*** |

|  |  |  |
| --- | --- | --- |
| • |  | ***TET by-product will be reconverted to TCS through hydrogenation inside the plant;*** |

|  |  |  |
| --- | --- | --- |
| • |  | ***The basic design of the off-gas treatment section will be developed by a specialized company nominated and supervised by the Contractor;*** |

|  |  |  |
| --- | --- | --- |
| • |  | ***Electrical power will be supplied by a local producer;*** |

|  |  |  |
| --- | --- | --- |
| • |  | ***Detail design engineering will be provided by all experienced engineering company nominated by DAQO Group with assistance of the Contractor;*** |

|  |  |  |
| --- | --- | --- |
| • |  | ***The Plant should be designed comply with all regulations and standards applicable in the Italy.*** |

**2. PLANT UNITS**

The Plant will consist of the following technical units, which are complete to operate the technical and chemical process to produce polysilicon when TCS raw material is supplied by DAQO.

***[Note: A short description of each unit will be in the package delivered by contractor]***

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***Unit 100 -* \* \* \***

***Unit 200 -* \* \* \***

***Unit 300 -* \* \* \***

***Unit 400 -* \* \* \***

***Unit 500 -* \* \* \***

***Unit 600 -* \* \* \***

***Unit 700 -* \* \* \***

***Unit 800 -* \* \* \***

***Unit 1000 -* \* \* \***

***Unit 1100 -* \* \* \***

***Unit 1200 -* \* \* \***

***Unit 1300 -* \* \* \***

***Unit 1400 -* \* \* \***

***Unit 1500 -* \* \* \***

***Unit 1600 -* \* \* \***

***Unit 1700 -* \* \* \***

***Unit 1800 -* \* \* \***

***Unit 1900 -* \* \* \***

**3. KNOW HOW AND KNOWLEDGE TRANSFER**

The Contractor will transfer to the Customer all know how required for the erection and operation of the Plant, including the following (“Know How”):

**3.1 TCS final purification**

- TCS purification (removal of dopants, carbon, other)

**3.2 CVD chemical vapour deposition process & TET chemical hydrogenation process**

- Metal electrical connections

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- Graphite chucks or rods

- Graphite Hot-Zone

- Feeding gas nozzles

- Downloading system

- Bell-jar washing station

**3.3 TCS/TET/H2 safe handling practice**

**3.4 TCS/TET purification and impurities removal**

**3.5 Quality test**

- TCS, TET, H2, poly

**3.6 DCS & ESD Control System (conceptual specifications)**

**3.7 Nuggets crushing and packaging**

**3.8 Conceptual Operating Manual**

- Description of each plant section:

- Start-up, normal operation and shut down procedures

- Trouble shooting procedures

- Emergency Procedures

- Emergency Response Plan

- Chlorosilanes Safe Handling

The preliminary operating manual will provide all the conceptual rules to safely and effectively manage the Plant and will be the initial base for the training of the personnel. This manual will be finalized and customized, with the co-operation of the Plant management, in the final version at the end of the start-up phase.

**4. SCOPE OF THE BASIC ENGINEERING PACKAGE**

The **Basic Engineering Package** provided by the Contractor to the Customer includes all documentation and technical services which comprise the Know-how, technical data and all additional information (all in English and, to the extent applicable, in writing) required to enable DAQO Group and/or a third party nominated by DAQO GROUP - including an engineering design company providing detailed design engineering (“CED”) - to perform the final design of the Plant and to operate the Plant.

The Basic Engineering Package includes the following:

***A - Supply the Know-how to design and operate the plant:***

|  |  |  |
| --- | --- | --- |
| • |  | Polysilicon CVD reactors (to be supplied by GT Equipment Inc applying Contractor’s Know How) |

|  |  |  |
| --- | --- | --- |
| • |  | TET converters (to be supplied by GT Equipment Inc applying Contractor’s Know How) |

|  |  |  |
| --- | --- | --- |
| • |  | Other ancillaries know-how related to CVD reactor & IET converters |

|  |  |  |
| --- | --- | --- |
| • |  | CS final purification |

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|  |  |  |
| --- | --- | --- |
| • |  | TET/TCS/H2/poly handling& control practice (including quality and acceptance test) |

|  |  |  |
| --- | --- | --- |
| • |  | DCS & ESD Control System (conceptual specifications) |

|  |  |  |
| --- | --- | --- |
| • |  | Conceptual operating manual (each section operating instruction should include |

|  |  |  |  |
| --- | --- | --- | --- |
|  | • |  | Shut-down procedure |

|  |  |  |  |
| --- | --- | --- | --- |
|  | • |  | Start-up procedure |

|  |  |  |  |
| --- | --- | --- | --- |
|  | • |  | Trouble-shooting) |

|  |  |  |
| --- | --- | --- |
| • |  | Emergency response manual |

***B - Delivery of the basic engineering of the Plant and all related technical services, (“Contractor Services”)***

|  |  |  |
| --- | --- | --- |
| • |  | Complete definition the operating conditions of the production, including process control procedures and safety procedures |

|  |  |  |
| --- | --- | --- |
| • |  | Identification of any and all technical details for the production of the Product |

|  |  |  |
| --- | --- | --- |
| • |  | Attendance at the design kick-off conference with the DAQO GROUP and CED; attendance at the project meetings once a month for the first four months as scheduled by DAQO GROUP and PE in Milan |

|  |  |  |
| --- | --- | --- |
| • |  | In cooperation with CED: Preparation of an overall project development schedule |

|  |  |  |
| --- | --- | --- |
| • |  | If any question rises from the subcontractors that the CED and/or DAQO can not answer, the contractor should give the support to solve the problem |

**5. TECHNICAL INFORMATION AND DOCUMENTATION OF THE BASIC ENGINEERING PACKAGE**

The Basic Engineering Package will include - without limitation - the following information and documentation:

***A - Basic engineering***

***Al - Products, raw materials and utilities specifications***

|  |  |
| --- | --- |
| - | Raw material & product characteristics, including: |

Chemical composition

Physical characteristics

Temperature and pressure at plant B.L:

|  |  |
| --- | --- |
| - | Utilities characteristics, including: |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Electric power: |  | Voltage |
| Cooling water: |  | Chemical analysis |
|  |  | Pressure and temperature at plant B.L |
| Steam or hot oil: |  | Flow rate |
|  |  | Pressure and temperature at plant B.L. |

|  |  |
| --- | --- |
| - | Wastes characteristics, including: |

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Gaseous wastes: |  | Chemical analysis |
|  |  | Flow rate |
| Liquid wastes: |  | Chemical analysis |
|  |  | Flow rate |
| Solid wastes: |  | Chemical analysis |
|  |  | Quantity |

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***A2 - General description of the plant operation***

***A3 - Process design and data***

(1) - Basis of design

The plant shall be designed to produce 3000 (initial 1500) Tons/year of the Product using TCS as raw material.

(2) - Block diagrams

(3) - Process flow diagrams

For each process and utilities unit the process flow diagrams (PFD) will be prepared All Equipment will be shown and itemized

In each PFD the following data will be indicated for all Processes and utility lines:

- Flow rate (normal - peak or minimum when applicable)

- Chemical composition (when applicable)

- Pressure

- Temperature

(4) - Equipment specifications

(a) Specifications for the manufacturing of the Equipment

A sketch of the Equipment will include the following information:

- Design conditions: Pressure

            Temperature

- Main dimensions

- Materials of construction

- Specific details (when applicable)

(b) Heat exchangers specifications

- Process data sheet with operating requirements

- Design conditions: Pressure

              Temperature

- Materials of construction

(c) Pumps specifications

- Data sheets including: Type of pump

                    Design data

                    Materials of construction

(d) Miscellaneous equipment

- Data sheet with data for full identification of type and operating requirements

(5) - Field mounted and control valves specifications

Process specifications with indication of the type of instrument or valve recommended

(6) - Effluents data summary

For each plant effluent (liquid, gaseous or solid) the characteristics and the quantities will be indicated.

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(7) - Indication of the materials of construction of plant components not already specified in the equipment specifications:

Preparation of piping classes, based on ANSI standards, for process lines.

The piping components (piping and fittings, valves, gaskets and the like) will be specified.

***B - Layout and Plot Plans (equipment arrangement)***

***B1 - General layout***

A draft of the general layout will be prepared on the basis of the area available and the operating conditions of the plant.

In a report the adopted criteria will be specified as well as any constraint which is mandatory for a proper plant operation.

***B2 - Plot plans (plan view and elevations)***

(1) - Main production building

A final plot plan for the deposition reactors & converters area (the production area inside the building) will be prepared

(2) - Other plant sections

The plot plans prepared by the CED will be reviewed to verify their adequacy to the plant operation.

***C - Engineering flow diagrams (P&IDs)***

***C1 - Process units***

In each P&ID the following data will be supplied:

|  |  |  |
| --- | --- | --- |
|  |  |  |
| - For each line |  | Size |
|  |  | Piping class |
|  |  | Fluid (process or identified utility) |
|  |  | Thermal insulation class (when applicable) |
|  |  | |
| - Instrumentation |  | Local instruments, control and safety valves |
|  |  | Instruments loops |
|  |  | Each instrument will be tagged |
|  |  | |
| - In line accessories |  | Steam traps |
|  |  | Valves |
|  |  | Line filters |

***C2 - Utilities P&IDs***

The Contractor will review the P&IDs prepared by the CED to verify their adequacy to ensure a proper operation of the Plant.

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***D - Engineering details***

***D1 - Piping***

(1) - Piping specifications

The standard piping specifications will be prepared by the Contractor and the Contractor will in particular review the final piping specifications prepared by the CED.

(2) - Piping assembly drawings

A draft of the piping assembly drawings of the deposition reactor inside the production building will be prepared by the Contractor.

***D2 - Utilities Equipment and Machinery specifications***

The specifications prepared by the CED will be reviewed by the Contractor to will their adequacy to ensure a proper operation of the Plan.

***D3 - Electrical work***

(1) - One line diagram

A draft of the one line diagram will be prepared.

***D4 - Instrumentation***

(1)- DCS and ESD conceptual specifications

Criteria to be developed into specifications for purchase will be prepared.

(2) - Functional design specifications

A description of the operation of each plant unit, with reference to the P&ID’s, and a list of the blocks will be prepared to enable the suppliers of the DCS and ESD systems to develop the software of both systems

***D5 - Buildings, structural steel work and civil work***

An outline of the main production building will be prepared, and the following items will be specified:

|  |  |  |  |
| --- | --- | --- | --- |
|  | • |  | Location of deposition reactors & converters with loads |

|  |  |  |  |
| --- | --- | --- | --- |
|  | • |  | Overhead crane location and load |

**6. TIME SCHEDULE AND DEADLINES**

All schedules and time are related on the project start. The project start is defined as the moment, when the down payment has been done by DAQO.

***1 - Documentation of Know How and knowledge transfer***

All documentation of the Know How described in Section 3 above will be delivered by the Contractor to the Customer within 4 (four) months after project start.

Note: The supply of the documentation will take place progressively in coordination with the preparation of the documentation of the Basic Engineering Package (as set forth in Section 4 and 5 above) as the availability of several elements of the basic engineering is necessary for the preparation of the documentation of the Know How. However, this process of preparation of the documentation will in no event extend the time period set forth above.

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***2 - Basic Engineering Package and Construction Services according to Sections 4 and 5***

Note: The dates indicated below are depending on the availability of information from DAQO Group. However, the dates will be extended only if the Contractor has notified the Customer in writing about the information required by the Contractor and the time by which the Contractor requires such information; the dates will be extended only by the time by which information from the DAQO GROUP is delayed. Partial deliveries will be in accordance to the project development.

|  |  |  |
| --- | --- | --- |
|  |  |  |
| - Documentation according to Section 5 Al |  | within 1 month |
| - Documentation according to Section 5 A 3 Items (1), (2), (3) |  | within 2 months |
| - Documentation according to Section 5 A 3 Item (4)    Critical equipment (with long delivery term)    Other equipment |  | within 2 months  within 4 months |
| - Documentation according to Section 5 A 2 Items (6) and (7) |  | within 2 months |
| - Documentation according to Section 5 A 3 Item (5) |  | within 5 months |
| - Documentation according to Section 5 B 1 |  | within 2 months |
| - Documentation according to Section 5 B 2 Item (1) |  | within 3 months |
| - Documentation according to Section C Item (1)    Preliminary issue    Final issue |  | within 2 months  within 4 months after |
| - Documentation according to Section D 1 Item (2) |  | within 5 months |
| - Documentation according to Section D 3 Item (1) |  | within 2 months |
| - Documentation according to Section D 4 Item (1) |  | within 3 months |
| - Documentation according to Section D 4 Item (2) |  | within 5 months |
| - Documentation according to Section D 5 Item (1) |  | within 3 months |

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**Annex 3**

**POLY PV specification**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
| **PARAMETER/IMPURITY** |  | **SPEC limit** |  | **TEST LOCATION** |  | **INSTRUMENT** |
| RESISTIVITY - N/TYPE |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| RESISTIVITY - P/TYPE |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| ACCEPTORS TOTAL  (BORON) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| DONORS TOTAL  (PHOSPHOROUS) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| CARBON |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| IRON  (SURFACE) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| METALS TOTAL  (SURFACE) |  | \* \* \* |  | \* \* \* |  | \* \* \* |

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**POLY EG specification**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
| **PARAMETER/IMPURITY** |  | **SPEC limit** |  | **TEST LOCATION** |  | **INSTRUMENT** |
| RESISTIVITY – N/TYPE |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| RESISTIVITY – P/TYPE |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| ACCEPTORS TOTAL (BORON) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| DONORS TOTAL (PHOSFHOROUS) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| CARBON |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| IRON (SURFACE) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| ZINC (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| CUPPER (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| NICKEL (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| SODIUM (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| CROMIUM (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| ARSENIC (BULK) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| CUPPER (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| MOLIBDENUMN (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| TUNGSTENUM (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| COBALT (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| CROMIUM (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| IRON (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| NICKEL (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| ANTIMONY (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| SODIUM (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |
| ZINC (“ ”) |  | \* \* \* |  | \* \* \* |  | \* \* \* |

**Note:**

|  |  |
| --- | --- |
| **\*** | **Indicates where text has been omitted pursuant to a request for confidential treatment under Rule 406 of the Securities Act of 1933, as amended. The omitted materials have been filed separately with the Securities and Exchange Commission.** |