



**Amended & Restated Contract**

Contract No.: GEC/MSA 200701.1  
Date of Signature: October 15, 2007

The Contract is made and entered into through friendly negotiation by and between

Hoku Materials, Inc. a corporation organized and existing under the laws of Delaware (hereinafter referred to as the "Purchaser") having its principal office at 1 Hoku Way, Pocatello, Idaho, 83204 USA as one party and

MSA Apparatus Construction for Chemical Equipment Ltd., a company organized and existing under the laws of the United Kingdom, having its registered office at 88a Tooley Street, London Bridge, London, UK, in corporation with GEC Graeber Engineering Consultants GmbH Germany a corporation organized and existing under the laws of Federal Republic of Germany having its registered office at Haydnstrasse 12, 85521 Ottobrunn, Germany, (hereinafter collectively referred to as the "Supplier") as the other party, under the following terms and conditions:

**RECITALS**

Whereas, the Supplier and the Purchaser are parties to Contract No. GEC/MSA200701, dated January 21, 2007 (as amended, restated, supplemented or otherwise modified from time to time, the "Prior Agreement"), by and between the Supplier and Hoku Scientific, Inc. ("Hoku").

Whereas, on September 6, 2007, all of Hoku's rights and obligations under the Prior Agreement were assigned by Hoku to (and assumed by) the Purchaser pursuant to the terms of that certain Assignment and Assumption Agreement (the "Assignment and Assumption").

Whereas, the Supplier and the Purchaser desire to amend and restate, in its entirety, the Prior Agreement, as hereinafter set forth

**AGREEMENT**

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Purchaser and the Supplier hereby agree to the following:

**Chapter 1 Definitions**

In the Contract unless the context otherwise defines, the meanings herein assigned to them:

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- 1.1 Equipment means the group of components comprising of the group of items listed in the Technical Annexes, and if the Option Price is paid, includes the Option Deliverables. These include the following sets:
- Set Hydrogen Reduction Reactors [\*] (the “Reactor Set”), comprising of:
- [\*]
  - [\*]
  - [\*]
  - [\*]
  - [\*]
- Set Hydrogenation Reactor Set (the “Hydrogenation Set”), comprising of:
- [\*]
  - [\*]
  - [\*]
- 1.2 Contract Price means the sum payable to the Supplier under the contract for full and proper performance of its contractual obligations (including equipment and technical services) as set forth in Section 3.1.
- 1.3 Contract Currency means, the currency in which the payment is made under the contract. The currency is EURO.
- 1.4 Attendance of Erection and Commissioning refers to the attendance and guidance at the time of equipment erection including placement and to the attendance and guidance at the time of the Commissioning Test (meaning the mechanical and electrical functionality) of the equipment at the Work Site.
- 1.5 Reactor Demonstration refers to the erection and demonstration of at least one reactor set and at least one hydrogenator set producing at least 75 Kg of polysilicon from operation.
- 1.6 Performance Test Runs of the equipment refers to the test conducted at the Work Site in order to check the actual performance of the equipment meets the performance and product specifications as described in Annex 7.
- 1.7 Certificate of Commissioning refers to the certificate signed by an officer of Purchaser after the successful completion of the Commissioning Test for each piece of equipment before start-up.
- 1.8 Port of Shipment: Hamburg, Germany. Port of Unloading: USA (exact location to be determined).
- 1.9 Work Site refers to Polysilicon Plant build in Pocatello, Idaho, USA.
- 1.10 Technical Documentation refers to the documentation that includes the technical data, specifications, drawings (accord. to ASME requirements),
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inspection, erection, commissioning, performance testing, operating and maintenance of the equipment.

Scope of technical documentation is specified in Annex 5.

- 1.11 Technical Service means the technical information, provided by the Supplier to the Purchaser with respect to EPCM design input and erection, commissioning, performance test, instruction for operation and maintenance of the equipment. Scope of technical service is defined in Annexes 1, 2, 3, 4, 5 and 6.
- 1.12 Warranty Period: The warranty shall remain valid for 18 (eighteen) months from the date on which the Certificate of Commissioning for equipment had been issued by the purchaser. During warranty period, the Supplier guarantees the proper and stable quality of the Equipment and is responsible for repair or replacing any defective parts of the Equipment.
- 1.13 Inspection authorities refers to the local inspection branch of state administration for entry-exit located at/ or near the port of unloading and/or the work site.
- 1.14 Option Deliverables has the meaning set forth in Section 3.1.1 below.
- 1.15 Option Price has the meaning set forth in Section 3.1.1 below.

## Chapter 2 Scope of Contract

- 2.1 The Purchaser agrees to buy from the Supplier and the Supplier agrees to sell to the Purchaser as stipulated under Chapter 1 Equipment Technical Documentation and Technical Services including design input with the EPCM, verification of design, supervision of erection and commissioning (detailed scope of supply and detailed technical conditions as stipulated in the Technical Annexes 1 through 7 to this contract).
- 2.2 The Supplier guarantees the performance of the Equipment at the Work Site as specified in Annexes 1 and 7.
- 2.3 The Supplier agrees to take part in a Reactor Demonstration at the earliest possible time at the Work Site. The Purchaser agrees to pay the Supplier for the Equipment and Costs needed to conduct the test at that time.
- 2.4 The Supplier shall dispatch experienced and competent persons to the Work Site and other locations as needed in order to provide the purchaser with Technical Services as specified in Annexes 3-5.
- 2.5 The Technical Documentation specified in Annexes 2, 4, and 5 will be reviewed and approved by the Purchaser. If there are reasonable requests

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from the Purchaser including clarification or guidance, the Supplier will cooperate with the Purchaser in good faith.

2.6 The Purchaser agrees to conduct Performance Tests and prove that the Equipment meet and adhere to the parameters specified in Annex 7.

2.7 The Supplier agrees to pay for shipping and insurance of the equipment from Ex Works to Hamburg, Germany.

2.8 The Purchaser agrees to pay for shipping and insurance of the equipment from Hamburg Germany to the Work Site.

### Chapter 3 Price

3.1 The total contract price for the Equipment, Technical Documentation and Technical Services under the contract for 2,000 metric tons is 20,900,000 Euro.

3.1.1 At any time within six (6) months after the date first set forth above in this Contract, Purchaser may elect to increase the capacity of the Equipment from 2,000 metric tons per year up to 2,500 metric tons per year, in which case the additional contract price for the additional Equipment, Technical Documentation and Technical Services to achieve up to 2,500 metric tons per year of production capacity (collectively, the "Option Deliverables"), under the contract shall be up to 6,725,000 Euro (the "Option Price"). The Purchaser may exercise this option by paying to the Supplier the Initial Option Price pursuant to Section 4.2.4(A) below.

3.1.2 [Reserved]

3.2 The Contract Price and the Option Price, as specified in Chapter 3.1 and 3.1.1, respectively, are fixed prices and include all Equipment, Technical Documentation and Technical Services provided hereunder.

### Chapter 4 Terms of payment

4.1 All payments to be made by the Purchaser to the Supplier shall be affected through the Purchaser bank and the Supplier bank in EURO. The Purchasers bank and the Supplier bank shall be international "A" rated banks.

4.2 The Supplier acknowledges that it has received payment of 15% of the Contract Price (the "Initial Payment") to the Supplier, which started the equipment delivery process. Estimated delivery time for all the Equipment is 18 months for 2,000 metric tons from the date when such Initial Payment was received on May 29, 2007. If the Supplier fails to fulfill his contract obligations, such documentation shall be released from escrow to Purchaser. Payment of the remaining 85% of the contract price shall be paid as follows:

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4.2.1 Milestone Payments

A. Forty-five percent (45%) of the Contract Price shall be paid in equal increments of 1,567,500 EURO (Say: One Million Three Hundred Forty-three Thousand Five Hundred Seventy-one EURO) via telegraphic transfer (T/T) on the last day of each month (or if such day is not a weekend or holiday, then on the next business day) beginning with the first such payment on October 31, 2007, and the second such payment on November 30, 2007, until an aggregate of 9,405,000 EURO (Say: Nine Million Four Hundred Five Thousand EURO) has been paid to the Supplier; provided, however, that prior to any such payment being due, the Supplier shall provide the Purchaser with a written report describing the progress that is being made in the manufacture of the Equipment, and provided, further, that the Supplier shall arrange for a monthly inspection by the Purchaser to monitor and inspect such progress.

B. Twenty percent (20%) of the Contract Price shall be paid in equal increments of 1,045,000 EURO (Say: One Million Forty-five Thousand EURO) via telegraphic transfer (T/T) within two (2) weeks after each set of four (4) Reactor Sets and related Hydrogenation Sets have been shipped and the following documents have been received by the Purchaser:

- a. Three (3) originals and three (3) duplicate copies of clean on board ocean bill of lading made out to order, blank endorsed, notifying the Purchaser and marked FREIGHT PREPAID.
- b. Five (5) copies of commercial invoice indicating the amount to be paid and the itemized price.
- c. One (1) original and five (5) duplicate copies of detailed packing list, indicating the shipping weight, number and the date of the corresponding invoice.
- d. One (1) original and five (5) duplicate copies of ex-works quality certificate, issued by the manufacturer.
- e. Three (3) originals and three (3) copies of "Certificate of Conformity" according TÜV Certificate.
- f. One (1) original and five (5) duplicate copies of certificate of origin, issued by relevant authorities of the manufacturer's country.
- g. One (1) copy of fax advising the purchaser of the shipment, immediately after it is made.

4.2.2 Reactor Demonstration

Within four weeks after the successful completion of the Reactor Demonstration, the Purchaser shall effect the payment of ten percent (10%) of the contract price by Telegraphic Transfer (T/T).

4.2.3 Retention Money

Within four weeks after the earlier of (i) expiration of the warranty period; and (ii) thirty (30) months from the date of delivery as stipulated in the contract,

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the Purchaser shall effect the payment of ten percent (10%) of the Contract Price by Telegraphic Transfer (T/T).

4.2.4 Payment of Option Price.

- A. Payment of 15% of the Option Price (the "Initial Option Payment") to the Supplier will start the delivery process for the Option Deliverables. The delivery time for the Option Deliverables is 12 months from the date when the Initial Option Payment is received.
- B. Forty-five percent (45%) of the Option Price shall be paid in equal increments via telegraphic transfer (T/T) on the last day of each month (or if such day is not a weekend or holiday, then on the next business day) beginning with the first such payment on the last day of the first full month after the month in which the Initial Option Payment is made (e.g., if the Initial Option Payment is made on October 15, then the next payment shall be due on the last day of November), until an aggregate of forty-five percent (45%) of the Option Price has been paid to the Supplier; provided, however, that prior to any such payment being due, the Supplier shall provide the Purchaser with a written report describing the progress that is being made in the manufacture of the Option Deliverables, and provided, further, that the Supplier shall arrange for a monthly inspection by the Purchaser to monitor and inspect such progress.
- C. Twenty percent (20%) of the Option Price shall be paid in two equal increments of ten percent (10%) each via telegraphic transfer (T/T) within two (2) weeks after each set Reactor Set and related Hydrogenation Sets have been shipped and the following documents have been received by the Purchaser:
  - a. Three (3) originals and three (3) duplicate copies of clean on board ocean bill of lading made out to order, blank endorsed, notifying the Purchaser and marked FREIGHT PREPAID.
  - b. Five (5) copies of commercial invoice indicating the amount to be paid and the itemized price.
  - c. One (1) original and five (5) duplicate copies of detailed packing list, indicating the shipping weight, number and the date of the corresponding invoice.
  - d. One (1) original and five (5) duplicate copies of ex-works quality certificate, issued by the manufacturer.
  - e. Three (3) originals and three (3) copies of "Certificate of Conformity" according TÜV Certificate.
  - f. One (1) original and five (5) duplicate copies of certificate of origin, issued by relevant authorities of the manufacturer's country.
  - g. One (1) copy of fax advising the purchaser of the shipment, immediately after it is made.

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- D. Reactor Demonstration. Within four weeks after the successful completion of the Reactor Demonstration for the Option Deliverables, the Purchaser shall effect the payment of ten percent (10%) of the Option Price by Telegraphic Transfer (T/T).
- E. Retention Money. Within four weeks after the earlier of (i) expiration of the warranty period for the Option Deliverables; and (ii) thirty (30) months from the date of delivery as stipulated above, the Purchaser shall effect the payment of [ten percent (10%)] of the Option Price by Telegraphic Transfer (T/T).

4.5 All payments to Supplier pursuant to this Contract shall be sent via Telegraphic Transfer (T/T) to the following account:

[\*]  
Acct N. [\*]  
[\*]  
IBAN: [\*]  
BIC (SWIFT CODE): [\*]  
Account Name: [\*]

Chapter 5 Delivery

- 5.1 The Supplier shall complete the delivery of Equipment at Port of Hamburg Germany within 18 months after the date the Supplier received the Initial Payment.
- 5.1.1 If the Purchaser elects to increase the capacity of the Equipment from 2,000 metric tons per year to 2,500 metric tons per year, the Supplier shall complete the delivery of the additional Equipment for the additional 500 metric tons of capacity at Port of Hamburg, Germany within 12 months after receipt of the Initial Option Payment pursuant to Section 4.2.4 above.
- 5.2 Not fewer than 14 days before the readiness for the shipment, the Supplier shall notify the purchaser by Fax of the following information:
  - a) Contract Number
  - b) Total volume
  - c) Total gross weight of packages
  - d) Total number of packages
  - e) Port of shipment
  - f) Name, total gross weight and measurement of each piece exceeding nine (9) metric tons in weight or over 3,400 mm in width, or over 2,350 mm on both sides in height

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g) Name, weight, IMCO No. (as per International Maritime Dangerous Goods Code) of the dangerous and/or inflammable goods

5.3 In the meantime the Supplier shall airmail the following documents in six (6) copies to the Purchaser:

- a) The details list of the shipment, covering contract No., the contract equipment, specification, type, quantity, unit/total price, unit weight, unit/total volume, the overall dimensions of each package (length x width x height), total number of packages
- b) Overall packing sketch for each large piece exceeding nine (9) metric tons in weight or over 2,400 mm in width or over 2,350 mm on both sides in height
- c) Description of any dangerous and/or inflammable goods indicating names, properties, special protective measures and handling methods in case of accident
- d) Description of the special precautions for the contract Equipment that requires special storage and transportation.

5.4 Unless or otherwise agreed by the Purchaser, shipment on deck or transshipment is not acceptable.

5.5 Ten (10) calendar days before the expected departure date of the carrying vessel from the port of shipment, the Supplier shall notify the Purchaser the nationality of the carrying vessel, estimated date of shipment, estimated date of arrival at the port of destination, contract No., name of the contract equipment, contract equipment item no., quantity, weight and volume and other relevant matters.

Within two (2) days after the loading the equipment, the Supplier shall airmail one (1) duplicate copy of the Bill of Lading, signed commercial invoice, ex-work quality certificate of origin and packing list to the Purchaser.

In case the goods are not insured in time by the purchaser owing to the Supplier having failed to give timely advices, any and all consequent losses shall be born by the Supplier.

5.6 The third (3) party Ocean Bill of Lading is not acceptable.

5.7 In case the Supplier fails to make complete delivery within 15 months from the date of the Initial Payment for 1,500 metric tons per year or within the next 3 months after such delivery date for the additional 500 metric tons per year (if applicable), the Supplier shall pay the liquidated damages for late delivery at the following rates:

- a) From the first to the fourth week, the liquidated damages shall be [\*] [\*] of the value of the delivered equipment per week

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- b) From the fifth week on, the liquidated damages shall be [\*] [\*] of the value of the delivered equipment per week
- c) Less than one week shall not be counted as a complete week for calculation of the liquidated damages.
- d) The total amount of the liquidated damages shall not exceed [\*] [\*] of the price of the delivered equipment

The payment of liquidated damages shall not release the Supplier from their obligation to deliver the delayed equipment.

- 5.8 In case the equipment is lost or damaged during the ocean transportation, the Supplier shall upon the request and on payment of the Purchaser, supplementary supply of the same at the original contract price and pursuant to the same terms and conditions described herein.

Chapter 6 Packing and Marking

- 6.1 Unless otherwise specified in the contract, the equipment shall be packed by the Supplier in new wooden cases, and all packing expenses shall be for the Supplier's account. Necessary measures shall be taken to protect the equipment from damages caused by moisture, rain rust, corrosion, shock and to ensure the equipment to withstand numerous handling, loading and unloading as well as long distance ocean and inland transportation for the safe arrival of the equipment at the work-site.
- 6.2 The loose accessories in package or bundle shall be labeled by the Supplier indicating contract No., name of equipment, name of accessories and their position number, and accessory number marked on assembly drawings. Spare parts and tools shall be marked with the word "Spare parts or tools" besides the above mentioned particular.
- 6.3 The Supplier shall on four (4) adjacent sides of each package mark conspicuous the following information in English with indelible paint:
- a) Contract No.:
  - b) Shipping mark:
  - c) Destination:
  - d) Consignee:
  - e) Name of contract equipment and item No.:
  - f) Case/bale No.:
  - g) Gross/net weight
  - h) Measurement
- 6.4 Should the equipment weigh more than 2 metric tons, the weight, gravity and hoisting positions shall be marked in English with international trade transportation marks on the four adjacent sides on each case so as to facilitate unloading and handling.

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In accordance with different requirements in loading, unloading and shipping, the package shall be conspicuously marked with "Handle with care, right side up, keep dry" in English and with appropriate international trade marks.

6.5 The following documents shall be enclosed in each package of the equipment:

- a) Two (2) duplicate copies of detailed packing list
- b) Two (2) duplicate copies of quality certificate
- c) Two duplicate copies of technical documentation for relevant contract equipment

6.6 In case of container transportation, the Supplier shall examine the condition of the containers, so that only those in good condition shall be used for delivery of the equipment.

Sufficient shores or chocks shall be provided in order to prevent the equipment from moving inside the containers. The Supplier shall be liable for any damage to the equipment thus incurred due to the negligence of the Supplier.

6.7 If the equipment is damaged or lost due to improper packing or inadequate protective measure, the Supplier shall be responsible for repair, replacement or compensation in accordance with the contract. If the equipment is mis-transported due to mistake or ambiguousness in package or shipping marks, the Supplier shall bear additional expenses thus incurred.

6.8 The Supplier shall use wooden packages free from any insect infestation. Should insect infestation be found in quarantine inspection, the Supplier shall bear the cost incurred in fumigation or replacement of the packages at the port of unloading, and the liquidated damages provision of Chapter 5.7 above shall apply to any delay in shipment caused by such quarantine inspection.

#### Chapter 7 Standards and Inspections

7.1 The Supplier shall carry out design and inspection of the equipment according to the Technical Annexes.

7.2 The Supplier shall inspect the equipment and issue the ex-works quality certificate. All expenses involved shall be for the Suppliers account. The ex-works quality certificate shall be submitted to the Purchaser.

7.3 The Purchaser will send its inspectors (for one week) to the Supplier country to inspect the quality of the equipment together with the Supplier inspectors. In addition to Purchaser's inspectors, Purchaser's lenders and shareholders may also send their inspectors. The expenses of sending Purchaser's

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inspectors, or the inspectors of Purchaser's lenders and shareholders, shall be for the Purchaser's account.

- 7.4 The Supplier shall notify the Purchaser of the inspection date four (4) weeks in advance. The letter of invitation shall be submitted by the Supplier.
- 7.5 The equipment shall be examined in the presence of the Purchaser's inspectors and both parties shall sign an "inspection certificate", provided however, that if Purchaser's inspectors do not attend the inspection after notice having been duly provided pursuant to 7.4, then it shall be deemed signed by Purchaser. Purchaser's inspector may not refuse to sign the "inspection certificate" if the equipment is in conformity with the Technical Annexes, as determined by TÜV. Afterwards the equipment shall be shipped.
- 7.6 In addition to the foregoing, Purchaser, its authorized representatives and its lenders, shareholders and their respective authorized representatives, may inspect the equipment at any time prior to shipment. The expenses of any such inspection shall be for the Purchaser's account.
- 7.7 The Supplier shall take into consideration the opinions of the Purchaser's inspectors and shall take necessary measures to eliminate the defect or discrepancy, if any, for its own account.
- 7.8 The pre-delivery inspection shall not be a substitute for the inspection of the equipment at the port of unloading or the work site of the Purchaser and shall not release the Supplier from its guarantee obligations as further specified in the contract.
- 7.9 The open package inspection on the equipment shall be performed by the inspection authorities at the work site of the Purchaser.
- 7.10 In case of container transportation the opening and return of the containers shall not be regarded as open-package inspection.
- 7.11 Should the equipment be found defective before the expiration of warranty period for any reason, including but not limited to latent defect or the use of unsuitable materials the Purchaser has the right to apply to the inspection authorities for inspection and lodge claims against the Supplier on the strength of the inspection certificate.
- 7.12 The technical documentation will be carried out in English.

Chapter 8 Attendance of Erection and Commissioning and Performance Test

8.1 Erection and commissioning of the equipment shall be carried out by the Purchaser under the supervision of the Supplier. The Supplier shall provide

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technical instruction for the Purchaser as well. The scope of the technical services is specified in Technical Annexes. The price for attendance of erection shall be for the Supplier account. The price for attendance of commissioning by the Supplier's experts shall be for the Supplier account.

8.2 The Purchaser and Supplier shall carry out the Commissioning Test to check the mechanical and electrical operation of the equipment. In case all the requirements specified in the Technical Annexes have been fulfilled, a test certificate for the equipment shall be signed by the two parties on the date when the test is successfully done.

8.3 The Reactor Demonstration, Performance Test Run and Commissioning Test Certificate of the equipment shall not release the Supplier from his warranty for the equipment.

#### Chapter 9 Warranty

9.1 The Supplier guarantees that the contract equipment shall be completely brand new and complies in materials, workmanship in all respects with the quality and specifications stipulated in this contract.

9.2 The Supplier guarantees that the use of contract equipment is free of any infringement claim raised by a third party. In case the Purchaser is accused of illegal exploitation or infringement of any know-how and/or patent and/or other intellectual property rights arising from the use of contract equipment, the Purchaser shall give the Supplier a notice and the Supplier shall take up the matter with third party at its own cost in the Purchaser's name and with Purchasers assistance and indemnify the Purchaser for any cost, compensations or damages arising there from. In no event shall Supplier settle or compromise any third party claim without the prior written consent of Purchaser.

9.3 The Supplier guarantees that the technical documentation shall be complete, clear and correct so as to meet the requirements of design, inspection, erection, commissioning, performance test, operation and maintenance of the equipment.

9.4 The Supplier guarantees that qualified technical persons shall be dispatched within [\*] hours after notification from the Purchaser and confirmation from the Supplier of an equipment defect to provide professional and technical service. If the Supplier does not arrive at the Purchaser's facility within [\*] hours after confirmation from the Supplier of such a notification, then the Supplier shall pay the Purchaser [\*] per day for each day that the equipment is not operational due to the defect.

9.5 Within the Warranty Period, in case of any defects caused by the reasons of inferior quality, bad workmanship and use of inferior materials, the Supplier

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shall dispatch engineers to the Purchaser site and remove the said defection at the Suppliers expenses.

- 9.6 Should the defection be due to the fact that the goods were delivered not in accordance with the attached technical specifications the Supplier shall be liable to repair at Supplier's cost and/or devalue the defected goods.
- 9.7 The Supplier represents and warrants that the Supplier is not subject to any contract or duty that would be breached by the Supplier entering into or performing the Supplier's obligations under this contract or that is otherwise inconsistent with this contract. Supplier will not disclose to Purchaser, will not bring into Purchaser's facilities, including the Work Site, and will not induce Purchaser to use any confidential or proprietary information of any third party.

#### Chapter 10 Confidentiality

Either party shall keep confidential the trade secrets that may be obtained during the course of performing the contract. After signing the contract and defining technical specifications, the Supplier shall not disclose information out of the said. Either party shall not make use of or disclose confidential information without prior written consent of the other party. Notwithstanding the foregoing, the Purchaser may disclose the material terms of this agreement, including the aggregate contract amount, and may provide a copy of this agreement to the public, if the Purchaser's attorneys determine that it is required to do so pursuant to applicable public company disclosure laws or regulations. Notwithstanding the foregoing, the Purchaser shall use commercially reasonable efforts to redact all of the Supplier's trade secrets from any such public disclosure or filing.

#### Chapter 11 Claim

- 11.1 In case the Supplier fails to perform any of its obligations under the contract during the design, manufacture, inspection, erection, Performance Test Run, Reactor Demonstration, Commissioning Test and Warranty Period the Purchaser shall have the right to lodge claims against the Supplier for the following remedy:
- Repair the defective equipment at the Suppliers expenses. In case the Supplier fails to dispatch his personnel to the work site, the purchaser has the right to eliminate the defects by itself for the Supplier's account.
- 11.2 The claim notice shall be effective if it is issued not later than thirty (30) days from the expiration of the warranty period.
- 11.3 In case the Supplier fails to reply within fourteen (14) days upon the receipt of the Purchaser's claim, the claim shall be regarded as been accepted by the Supplier.

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11.4 Notwithstanding anything to the contrary in this contract, Supplier's maximum liability to the Purchaser shall not exceed amounts paid to Purchaser plus liquidated damages assessed pursuant to this contract.

11.5 UNDER NO CIRCUMSTANCES SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR CONSEQUENTIAL OR SPECIAL DAMAGES; INCLUDING LOST PROFITS OR LOST BUSINESS OPPORTUNITY. EACH PARTY MAY ONLY CLAIM ITS ACTUAL DAMAGES PLUS ANY LIQUIDATED DAMAGES PURSUANT TO THIS AGREEMENT.

Chapter 12 Cancellation

12.1 The Purchaser may, without prejudice to any other remedy for the Supplier's following breach of contract, by written notice send to the Supplier, cancel the contract in whole or in part if the Supplier fails to deliver the equipment within 140 days after the scheduled delivery time. Upon such cancellation, Supplier shall refund to Purchaser all amounts already paid to Supplier.

12.2 If at any time prior to shipment of the Equipment, the Purchaser has a justifiable reason to believe that the Supplier will be more than 140 days late in the delivery of the equipment, the Purchaser may immediately cancel this agreement and shall be entitled to the maximum amount of liquidated damages payable pursuant to Section 5.7 above. Upon such cancellation, and after payment in full to the Purchaser of the amounts already paid to the supplier and liquidated damages, neither party shall have any further obligation or liability to the other party.

12.3 Either party may cancel the contract at any time, by giving written notice to the other party in case the other party becomes bankrupt or insolvent. Such cancellation shall not prejudice or affect any other available remedy.

12.4 If the Purchaser fails to effect the payments according to Chapter 4 of this contract, after receipt of written notice from the Supplier, and 30 days to cure the payment default, the Supplier is entitled to cancel the contract, by giving written notice to the other Party.

12.5 [Reserved]

12.6 [Reserved]

12.7 The following Chapters of this Agreement shall survive the cancellation or expiration of this Agreement: Chapter 1 (Definitions); Chapter 9 (Warranty); Chapter 10 (Confidentiality); Chapter 11 (Claim); Chapter 15 (Arbitration); Chapter 16 (Construction of Contract); and Chapter 17 (Effectiveness and Miscellaneous).

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Chapter 13 Force Majeure

- 13.1 Should either party be prevented from performing any of its obligations under the contract due to event of Force Majeure such as war, serious fire, typhoon, earthquake, flood and any other events which could not be expected, avoided and overcome, the affected party shall notify the other party of its occurrence by fax and send by registered air mail a certificate issued by competent authorities confirming the event of the Force Majeure within fourteen (14) days following its occurrence. In Germany, the competent authority for issuing the certificate is The Ministry of Internal Affairs of Germany.
- 13.2 The affected party shall not be liable for any delay or failure in performing any or all of its obligations due to the event of Force Majeure. However, the affected party shall inform the other party by fax the termination or elimination of the event of Force Majeure as soon as possible.
- 13.3 Both parties shall proceed with their obligations immediately upon the cease of the event of Force Majeure or removal of all the effects. The term of the contract shall be extended correspondingly.

Chapter 14 Taxes and Duties

- 14.1 All taxes and duties in connection with and in the performance of the contract levied by the United States government on the Purchaser in accordance with the tax laws of the United States shall be borne by the Purchaser.
- 14.2 All taxes and duties levied by the German government on the Supplier, in connection with and in the performance of the contract, according to German tax laws and the agreement between the government of the United States and the government of Germany for the reciprocal avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income, shall be borne by the Supplier.
- 14.3 All taxes and duties arising within Germany in connection with and in performance with the contract shall be borne by the Supplier.

Chapter 15 Arbitration

- 15.1 Any dispute arising from or in connection with this contract shall be submitted to International Economic and Trade Arbitration Commission for arbitration. The location of arbitration shall be London, England. The substantive law to be applied in any such arbitration shall be English common law.

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15.2 Notwithstanding any reference to arbitration, both parties shall continue to perform their respective obligations under the contract unless otherwise agreed.

Chapter 16 Construction of Contract

16.1 The construction, validity, interpretation, performance, implementation and all matters relating to this contract and any amendment thereto shall be governed by the United Nation Convention for International Sales of goods.

Chapter 17 Effectiveness and Miscellaneous

17.1 After contract is signed by the authorized representatives, each party shall apply to its respective representatives of their companies for ratification, if required to do so.

17.2 Each party shall power a person (s) for signature of contractual documents. For MSA/GEC Manfred Schirsner and Heinz Graeber are powered and required to sign. For Hoku Scientific Dustin Shindo and Darryl Nakamoto are powered to sign.

17.3 The contract becomes effective upon signing.

17.4 After the fulfillment of the contract, the contract will remain valid beyond one (1) month after the expiry date of the warranty period. Any unsettled credit and debt under the contract shall not be affected by the expiration of the contract. The debtor shall effect its obligation of reimbursement to the creditor.

17.5 The contract is made in English. The contract is in four (4) originals, two (2) for the Purchaser and two (2) for the Supplier.

17.6 Annexes to the contract are integral parts to the contract and have the same legal force as the text of the contract itself.

17.7 All amendments, supplements and alternations to the terms and conditions of the contract shall be made in written form and signed by the authorized representatives according to paragraph 17.2. These documents shall be integral parts of the contract.

17.8 This contract may be assigned in its entirety by the Purchaser to any third party that is not a direct competitor of the Supplier upon written notice to the Supplier, and provided that any such assignee agrees to be bound to the terms hereof. No assignment of any right or obligation under the contract shall be made by the Supplier to a third party without prior written consent of the Purchaser.

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17.9 The communication between the two parties shall be conducted in written form. Faxes concerning important matters shall be confirmed in due time by express mail.

Purchaser: Hoku Materials, Inc.  
Attention: Karl M. Taft III  
Address: One Hoku Way, Pocatello, Idaho USA  
Post Code: 83204  
Telephone: +1-808-682-7800  
Fax: +1-808-682-7807  
E-mail: [\*]

Seller: Apparatus Construction for Chemical Equipment Ltd. and GEC Graeber Engineering Consultants GmbH

Attention: Heinz Graeber  
Address: Haydn-Strasse 12, 85521 Ottobrunn, Germany  
Telephone: [\*]  
Fax: [\*]  
E-mail: [\*]

17.10 The Supplier hereby acknowledges and consents to the Assignment and Assumption.

17.11. This Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all prior proposal(s) and discussions, relative to the subject matter of this Contract and neither of the Parties shall be bound by any conditions, definitions, warranties, understandings or representations with respect to such subject matter other than as expressly provided herein or in the Technical Annexes. No oral explanation or oral information by either party hereto shall alter the meaning or interpretation of this Contract.

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PURCHASER Initials \_\_\_\_/s/SP\_\_\_\_



Authorized Signature:

Buyer: Hoku Materials, Inc.  
Address: One Hoku Way  
Pocatello, Idaho 83204 USA  
Telephone: +1-808-682-7800  
Fax: +1-808-682-7807  
E-mail: [\*]

/s/ Dustin M. Shindo

Dustin M. Shindo  
Chairman & CEO

Signing Date:

Supplier: MSA Apparatus Construction  
for Chemical Equipment Ltd.

Address: Isartalstrasse 50  
Post Code: 82008 Unterhaching  
Telephone: [\*]  
Fax: [\*]  
E-mail: [\*]

/s/ Manfred Schirsner

Manfred Schirsner  
Signing Date:

SUPPLIER Initials /s/HG\_MS

/s/ Darryl Nakamoto

Darryl Nakamoto  
Chief Financial Officer

GEC  
Graeber Engineering Consultants  
GmbH

Haydn-Strasse 12  
85521 Ottobrunn, Germany  
[\*]  
[\*]  
[\*]

/s/ Heinz Graeber

Heinz Graeber

PURCHASER Initials \_\_\_\_/s/SP



**Amended & Restated Technical Annexes for Purchasing Contract**  
**between Hoku Materials, Inc. and MSA/GEC**

**Contract No. GEC/MSA 200701.1**

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**Annex 1: Technical Specifications**

**1.1 General**

- 1.1.1 This contract is used for purchasing equipments for 2,000 metric tons/year production Polysilicon. In accordance with the terms of the contract, this appendix may be updated to provide for total production capacity of 2,500 metric tons per year of Polysilicon. It defines specifications of design, structure, performance, installation and tests of the equipments etc.
- 1.1.2 Purchaser means Hoku Materials, Inc.  
Supplier means MSA/GEC.
- 1.1.3 Purchaser specializes the technical demands in the contract. Supplier shall provide a complete set of services and technology to meet the demands of Purchaser. Technical specifications of equipment provided by Supplier should be in accordance with demands in this contract.
- 1.1.4 If contradictory or inconsistency happens in carrying out the contract, both parties should execute the highest rules in the relative standards or the standards agreed by both parties
- 1.1.5 If Supplier agrees with all the terms of the contract, the equipments provided by Supplier should completely conform to the technical agreements and the standards specified in the contract.
- 1.1.6 The Equipment Specification shall be ASME, unless otherwise specified by Purchaser within two weeks after contract signing.
- 1.1.7 Both parties will continue the discussions about the unclear issues in design liaison meetings.

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1.2 Project Overall

1.2.1 Location

The factory for the production of Polysilicon is located in Pocatello, Idaho, United States.

1.2.2 Scale

The first target for the Polysilicon Project is to build a factory with the annual through -put of 2,000 metric tons per year of polysilicon with solar grade or electronic grade. The Purchaser may elect to increase the capacity to 2,500 metric tons per year in accordance with the terms of the contract. The plant annual operation is continuous except the scheduled maintenance and others unforeseen. The global efficiency is expected at [\*] of the operation hours [\*]

1.3 Application of Equipment

Purchaser will purchase equipments from Supplier for utilizing trichlorosilane (TCS) to produce polysilicon and converting silicon tetrachloride (STC) to TCS. The products will be used in solar industry and electronic industry.

1.4 Equipment Description

Equipments consist of Deposition-Reactor Set and Hydrogenation-Reactors Set and Necessary Accessories.

Deposition-Reactors Set and its accessories include:

- [\*]
- [\*]
- [\*]
- [\*]
- [\*]

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- [\*]

Hydrogenation-Reactors Set and its accessories include:

- [\*]
- [\*]
- [\*]

Necessary Accessories include:

- Spare parts
- Special tools
- Others

1.5 Descriptions and Specifications of Equipments

1.5.1 Deposition-Reactors

1.5.1.1 System Description

[\*]

For solar grade:

Capacity

Number of Filament Doubles	[*]
Lengths of Filament Doubles	[*]
Deposition rate Average (diameter)	[*]
Deposition diameter approx.	[*]
Cycle of 1 operation	[*]
Loading time	[*]
Unloading time	[*]
Deposition time	[*]
Operating time	[*]
Operating cycles	[*]
Up-time	[*]
Polysilicon per cycle (100 mm)	[*]
Polysilicon per year per Reactor min.	[*]

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Polysilicon per cycle (150 mm) [\*]

Polysilicon per year per Reactor max. [\*]

For electronic grade:

Capacity

Number of Filament Doubles [\*]

Lengths of Filament Doubles [\*]

Deposition rate Average (diameter) [\*]

Deposition diameter approx. [\*]

Cycle of 1 operation [\*]

Loading time [\*]

Unloading time [\*]

Deposition time [\*]

Operating time [\*]

Operating cycles [\*]

Up-time [\*]

Polysilicon per cycle (100 mm) [\*]

Polysilicon per year per Reactor min. [\*]

Polysilicon per cycle (150 mm) [\*]

Polysilicon per year per Reactor max. [\*]

The conditions to achieve above mentioned production capacities are:

- [\*]
- [\*]
- [\*]
- [\*]
- [\*]

Reactor Dimensions (for both Solar and Electronic Grade)

Diameter outside Reactor Cylinder [\*]

Diameter outside Cooling cabinet [\*]

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Height including top-flange	[*]
Material of Reactor-body	[*]
Material cooling case	[*]
<u>Design Data</u>	
Design interior pressure	[*]
Design interior wall temperature	[*]
Design pressure in the cooling cabinet	[*]
Design temp. in the cooling cabinet	[*]
Design, calculation and testing accord. to	[*]
Numbers of power supply connections	[*]
Numbers of Material-gas inlet jets	[*]
Numbers of show glasses	[*]
Weight approx.	[*]
Volume approx.	[*]
Volume of cooling cabinet cylinder	[*]

1.5.1.2 [\*]

[\*]

[\*]

1.5.1.3 [\*]

[\*]

1.5.1.4 [\*]

[\*]

1.5.1.5 [\*]

[\*]

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1.5.1.6 [\*]

[\*]

1.5.1.7 [\*]

[\*]

1.5.1.8 [\*]

[\*]

1.5.1.9 [\*]

[\*]

1.5.1.10 [\*]

[\*]

1.5.2 [\*]

1.5.2.1 [\*]

[\*]

[\*]

[\*]

[\*]

1.5.2.2 [\*]

[\*]

[\*]

[\*]

[\*]

[\*]

[\*]

[\*]

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1.5.3 [\*]

1.5.3.1 [\*]

[\*]

1.5.3.2 [\*]

- [\*]
- [\*]

1.5.3.3 [\*]

[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

1.5.4 [\*]

1.5.4.1 [\*]

[\*]

1.5.4.2 [\*]

1.5.5 [\*]

1.5.4.1 [\*]

[\*]  
[\*]

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1.5.5.2 [\*]

1.5.5.3 [\*]

[\*]

1.5.6 [\*]

1.5.6.1 [\*]

[\*]

[\*]

1.5.7 [\*]

1.5.7.1 [\*]

[\*]

[\*]

[\*]

1.5.8 [\*]

1.5.8.1 [\*]

[\*]

1.5.9 [\*]

1.5.9.1 [\*]

[\*]

[\*]

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[\*]

[\*]

1.6 [\*]

[\*]

1.7 [\*]

[\*]

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## Annex 2: Design Interface and Deliverables

### 2.1 Process

Supplier will provide the following documents:

- 2.1.1 Equipment specification, design capacity (including normal and max capacity) and operating period, construction material etc.
- 2.1.2 Equipment weight, operation loads, test loads and the max weight of single-parts.
- 2.1.3 Operating temperature, operating pressure, design temperature and design pressure.
- 2.1.4 Equipment power consumption, electric specification and blast section.
- 2.1.5 The nozzle specification of the equipment, the nozzle position and flow specification (including flux, composition, temperature, pressure, etc).
- 2.1.6 Chemical reaction details in the equipment.
- 2.1.7 Material balance, material balance requirements and heat balance of the equipment.
- 2.1.8 Anti-corrosive requirements and heat insulation requirements.
- 2.1.9 Equipment operating manuals (including safety manual, testing manuals, etc.).

### 2.2 Instruments

- 2.2.1 All of instruments (hardware and software) for equipments will be supplied by Supplier.

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2.2.2 Supplier will provide proposal layout of the local panel.

2.2.3 Supplier shall supply these documents and Drawings as following:

Field Instruments Specifications (including operation condition, instrument type, measuring range□explosion proof class□instrument material) I/O cards and Interface to the PCS system.

### 2.3 Electrical

2.3.1 Supplier will provide electrical parameters about radiation heating rods: voltage and current.

2.3.2 Supplier will provide the installation drawings defining insulation joining of electrodes.

2.3.3 Supplier will provide the specification of external power connections.

2.3.4 Supplier will provide specification of electrode (including voltage, current etc.)

2.3.5 Supplier is engaged to provide the necessary information to power supply systems company to perform the designing and manufacturing the power supply system suitable for the operation of reactors

2.3.6 Supplier will assist the Purchaser in negotiating with power supply systems companies for power supply systems about other necessary interface issues.

### 2.4 Piping

2.4.1 Supplier will provide Equipment Assemble Drawing, show Nozzle Orientation, dimension of Equipment Center to Flange Face, Nozzle Elevation.

2.4.2 Supplier will provide Equipment Nozzle Size, Pressure, Flange joint Form, Standard and Nozzle Name.

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2.4.3 Supplier will provide Equipment Weight, Operating Weight, Test Weight and Hoisting Machinery Weight.

2.4.5 Supplier will provide Specification for Maintenance and Setting.

2.4.6 Supplier will provide Torsion of Foundation Bolt and Permissibility Stress of Equipment Nozzle.

2.4.7 Supplier will provide Specification for Equipment Insulation and Fixing (Including Insulation Materials).

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Annex 3: Scope of Supply

3.1 General

- 3.1.1 Annex 3 has stipulated the scope of supply, the Supplier guarantees to provide brand-new, advanced, mature, and quality reliable equipments.
- 3.1.2 Supplier will provide a detailed list of equipments and accessories. The detailed list stipulates type, quantity, manufacturer etc. Supplier should provide the necessary parts for installation, testing and commissioning, even not stipulated in the contact.
- 3.1.3 The Supplier will provide a detailed list of the special tools and the consumption materials which will be used in installation.

3.2 Scope of Supply

3.2.1 Complete scope of supply for 2,000 metric tons per year consists of Deposition Reactor set, comprising:

[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

Hydrogenation Reactor set, comprising:

[*]	[*]
[*]	[*]
[*]	[*]

Complete scope of supply for 2,500 metric tons consists of Deposition Reactor set, comprising:

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[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]
[*]	[*]

Hydrogenation Reactor set, comprising:

[*]	[*]
[*]	[*]
[*]	[*]

Supplier will provide detailed information of all equipments, including manufacturer for main parts, manufacture area, material, approx. weight etc. within [\*] months after receipt of the Initial Payment. Supplier can also, at its own discretion, provide the Purchaser with this material before this date.

3.2.2 Origin of the products

The origin of all the products above is from Germany.

3.2.3 Transportation

The covers will be used for openings during transportation. These will be provided by Supplier.

3.2.4 Spare Parts

Each reactor or converter should be equipped with one complete set of the following spare parts:

·	[*]	[*]
·	[*]	[*]
·	[*]	[*]
·	[*]	[*]

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- |   |     |     |
|---|-----|-----|
| • | [*] | [*] |
| • | [*] | [*] |
| • | [*] | [*] |
| • | [*] | [*] |
| • | [*] | [*] |
| • | [*] | [*] |
| • | [*] | [*] |
| • | [*] | [*] |

The spare parts mentioned above will be provided by Supplier and are only for testing and commissioning. The Supplier will provide the detailed information about the spare parts, such as vendors, types, and estimated price in the first design meeting.

The Supplier will provide a purchasing list of the Spare Parts for 1 year of normal operation three months before delivery of the Equipment. The list should comprise spare parts and consumption parts, the vendors, types, estimated price etc.

The Supplier will also provide a purchasing list to the Purchaser of the anticipated parts after 10 years of operation and an estimated cost for these parts.

3.2 .5 Special tools  
[\*]

3.3 Test Reactor  
[\*]

3.4 Other

Other deliverables from the Supplier not mentioned in Annex 3 are still the responsibility of the Supplier as stipulated in Contract # GEC/MSA 200701.1 and the other Annex sections in this document.

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#### **Annex 4: Technical Documents**

##### **4.1 General**

- 4.1.1 The documents provided by Supplier will use metric system. The language is English. If other units are required this will be discussed at the first design meeting.
- 4.1.2 The documents provided by Supplier should be prompt, complete and meet the project progress.
- 4.1.3 For some other documents not stipulated in the contract but is actually the necessities for the project, Supplier should provide free of charge.
- 4.1.4 Supplier will provide related documents describing the requirements for the building constructions. The documents about the Crane, loading and unloading requirements will be provided by Supplier.
- 4.1.5 Supplier will provide the documents to identify the possible supplier for the production of filaments, equipment to unload the rods, reactor cleaning and polysilicon processing.
- 4.1.6 All the documents will be prepared by either Auto-CAD (\*.dxf and \*.dwg) or Acrobat (\*.pdf).
- 4.1.7 All the documents will be provided in five hard copies and two electronic versions

##### **4.2 Document lists**

Supplier will provide documents related to the deposition reactors and the hydrogenation converters and the accessories as followings:

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- 1) Technical documentation to the equipment and its operation
- 2) System description including working principle, technological process, control parameters, main equipment description, and utility supply requirements.
- 3) PFD for Equipment
- 4) Rated consumption of specifications of utilities
- 5) Equipment table
- 6) Equipment layout
- 7) Foundation load chart (device load, including net weight, operation weight, maintenance weight and civil engineering conditions drawing)
- 8) Anchor bolt chart
- 9) Material supply data sheet or curve at different period of time, as reference values
- 10) Installation, operation, and maintenance manuals
- 11) Special tools list for Equipment
- 12) Pipe naming table for Equipment
- 13) Pipe layout plan
- 14) Pipe materials grade table for Reactor
- 15) Heat insulation table of equipment and pipe
- 16) Layout plan of connecting points
- 17) General drawing of equipment
- 18) Final as-built manufacturing drawing of the whole equipment set
- 19) Assembly drawing of equipment
- 20) Equipment accessories drawing
- 21) Orientation diagram of equipment orifices (the Supplier shall provide requirement of orientation diagram of equipment orifices; the Purchaser will propose revision advices. Final orientation diagram of equipment orifices shall be provided by the Supplier after confirmation by both parties)
- 22) Drawing and list of weary parts (replacement cycle)
- 23) Equipment materials quality certificates

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- 24) Product quality certificate
- 25) Safety and Quality certificate of pressure vessels
- 26) Lifetime of equipment (indicating main equipment separately)
- 28) Drawings for the special spare parts.
- 29) List for the standard spare parts.
- 30) Packing list
- 31) All the documents mentioned in this document, including the ones mentioned in Annex 3

#### 4.3 Document Delivery Schedule

[\*]

#### Annex 5: Technical Service and Design Meeting

##### 5.1 General

The supplier will provide the necessary documents for equipment installation, commissioning, performance test, operation and maintenance etc. Supplier will assist the Purchaser to solve problems during testing and commissioning by the Purchaser's requests.

##### 5.1 Factory Acceptance test (FAT)

A month before delivery of each deposition and hydrogenation reactor set, Supplier should inform Purchaser to do factory acceptance test. Several FAT checks will be available by Purchaser's requests but not exceed more than four.

Acceptance test cost will be paid by Supplier. Purchaser pays for their own cost of traveling, boarding and lodging, and Supplier provides convenience. Supplier should inform Purchaser in written form 4 weeks before test. If Purchaser does not attend, Supplier may complete the acceptance test without Purchaser. Supplier has the right to do acceptance tests and arrange the equipment delivery according to the delivery schedule. The FAT results will not be exempt from the Supplier's responsibilities.

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**5.2 Site opening package inspection**

Supplier will send staffs to the site to attend site open package inspection to check the number, appearance, damages etc. together with Supplier's inspectors. Purchaser should inform Supplier 2 weeks before package opening inspection. Supplier's inspectors pay for their own cost and Purchaser provides convenience.

**5.3 Installation supervision**

Purchaser should inform Supplier 2 weeks before installations. Then Supplier will send experts to the site for installation supervision. Supplier pays for their own cost, and Purchaser provides convenience.

**5.4 Testing and Commissioning**

Purchaser should inform Supplier 2 weeks before commissioning. Supplier will send experts to the site for guidance. Supplier pays for their own cost, and Purchaser provides convenience. The complete supervision on site provided by Supplier starts from the first received products and ends by last products commissioning. The duration will last approximately 6 months, provided that Supplier is not expected to be on-site for a continuous 6 months period.

**5.5 Start-up and Reactor Demonstration**

Purchaser should inform Supplier 2 weeks before start-up and two weeks before Reactor Demonstration. Supplier will send experts to the site to guide start-up and Reactor Demonstration. Supplier pays for their own cost and Purchaser provides convenience. This service is included in 6 months period, provided that Supplier is not expected to be on-site for a continuous 6 months period.

**5.6 Performance Test**

After testing, commissioning and reactor demonstration are finished, Supplier will send relative experts to the site to do performance test. Supplier experts shall carry on performance test until it is completely successful and accepted by

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Purchaser. Supplier pays for their own cost and Purchaser provides convenience. The performance tests will be done twice and in accordance with Annex 7.

#### 5.7 Training

Supplier shall carry training on Purchaser's staffs in technology, operation and maintenance etc. The draft training plan is prepared as following:

At the Purchaser's site. Supplier will train Purchaser staffs about installation, maintenance, operation, start-up, testing and commissioning etc. The training duration will be approximate 2 weeks. The actual training schedule will be agreed during the first design meeting.

Supplier pays for their own cost, and Purchaser provides convenience.

#### 5.8 Changing Damaged parts

Within the guarantee period, in case of any defects caused by the reason of inferior quality, or due to the Supplier's faults, the Supplier shall dispatch engineers to Purchaser site to solve the defects at the Supplier's expenses. Supplier pays for their own cost, and Purchaser provides convenience.

#### 5.9 Technical Service requirements

5.9.1 The Supplier representatives at the Work Site must:

- Obey the law, rules and regulations at the Work Site
- Have the higher responsibilities and the dedication to work. Arrives on time
- Be familiar with its structure of its Equipment, and have the similar work experience, and can carry on on-site supervisions correctly;
- Be strong enough to adapt to site work conditions.

5.9.2 Supplier's responsibility

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The responsibilities of Supplier at the Work Site are package opening and examination, dealing with quality problems, installation and supervision, commissioning supervision, reactor demonstration and performance test.

Before installation and testing and commissioning, experts from both parties shall discuss the relative procedures. Both parties shall confirm the important issues.

If issues arise that are the Supplier's responsibilities, the Supplier representatives shall deal with them in a timely manner as defined by the Purchaser. If Supplier authorizes Purchaser to solve the problems due to Supplier's mistakes, Supplier will provide the guarantee letter and undertake all the expenses. Supplier is responsible for all actions carried by its representatives. Purchaser should be informed and confirmed if the Supplier representatives wish to leave the Work Site.

5.9.3 Purchaser Responsibility

Purchaser will provide convenience for Supplier's Representatives at the Work Site.

**5.10 Design meeting**

5.10.1 Description

The purpose of the design meetings is to make sure the successful design of the contract equipment and plant; to solve the technical problems; to coordinate the Supplier and Purchaser. Such meetings shall be held several times by Purchaser's requests. The first meeting could be held in USA, at a location to be specified, the second will be decided later. Meeting costs of each party will be taken by themselves, and the company located in the meeting place shall provide convenience for transportation, accommodation, etc.

5.10.2 Topics for engineering design meetings

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- To discuss the general design of the preliminary solution provided by Supplier (including general arrangement and system), technical document and standard coordination.
- Detailed engineering specifics including those as stipulated in Technical Annexes 1-5.
- To coordinate the arrangement and connections of the Equipment and flows of utilities and materials.
- The Purchaser review and confirm the auxiliary equipment company provided by Supplier.
- To discuss the solution for construction and delivery.
- To discuss the check and acceptance of the equipment.
- To deal with and overcome other unclear issues.

The frequency and amount of design meetings will be determined on an as needed basis but both parties agree to pay their own expenses for these meetings. Location of the design meetings will be held in the United States.

#### **Annex 6: Quality control**

Because Supplier has some subcontractors and the detailed quality control procedure will be provided by Supplier during the first design meeting.

If Supplier finds any defects of design or manufacturing after the goods have been delivered, Supplier should inform Purchaser immediately and repair them or provide new products free of charge.

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Annex 7: Performance data and guarantee value

7.1 Capability

Supplier guarantees the performance of the delivered equipment. Considering of the term in clause 1.5 of Annex 1, Supplier guarantees the capability of the reactor shall in the range of:

—[\*]

—[\*]

[\*]

The Supplier is not responsible for any interruption or delay, caused by Force Majeure as defined in Contract. The Supplier is also not responsible for any non-performance interruption or delay, caused by the followings:

- (1) Sufficient supply and qualified mixed-gas for the deposition process at the Work Site; and
- (2) Sufficient and qualified utilities at the Work Site, such as power-supply, thyristor power, process control, cooling-water, process exhaust-gas discharge.
- (3) Well trained and experienced staff (engineers and operators)

Additional costs and expenses born by the Supplier by aforesaid will be reimbursed by the Purchaser.

7.2 Product warranty

[\*]

Purchaser expects that the purity of the trichlorosilane shall meet the following specifications:

Type	Bulk elements	Value	Unit
Acceptors	[*]	[*]	[*]
Donors	[*]	[*]	[*]

SUPPLIER Initials /s/HG\_MS

PURCHASER Initials /s/SP

[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]
[*]	[*]	[*]	[*]

SUPPLIER Initials /s/HG\_MS

PURCHASER Initials \_\_\_\_/s/SP\_\_\_\_



Purchaser: Hoku Materials, Inc.  
Address: One Hoku Way, Pocatello, Idaho USA  
Post Code: 83204  
Telephone: +1-808-682-7800  
Fax: +1-808-682-7807  
E-mail: [\*]

**Authorized Signature:**

/s/ Dustin M. Shindo

**Dustin M. Shindo**  
**Chairman & CEO**  
**Signing Date:**

/s/ Darryl Nakamoto

**Darryl Nakamoto**  
**Chief Financial Officer**

Supplier: MSA Apparatus Construction  
for Chemical Equipment Ltd.

Address: Isartalstrasse 50  
Post Code: 82008 Unterhaching  
Telephone: [\*]  
Fax: [\*]  
E-mail: [\*]

GEC  
Graeber Engineering Consultants

Haydn-Strasse 12  
85521 Ottobrunn, Germany  
[\*]  
[\*]  
[\*]

**Authorized Signature:**

/s/ Manfred Schirsner

**Manfred Schirsner**

**Signing Date:**  
SUPPLIER Initials /s/HG\_MS

/s/ Heinz Graeber

**Heinz Graeber**

PURCHASER Initials /s/SP