



Trinity Metals

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Payment Terms: 30% upon placement of order
60% upon provision of shipping documents
10% upon commissioning
Delivery Terms: CIP Kigali Airport
Delivery Time: 3 months
Warranty: 12 months

Woodmead, May 28, 2024

Subject: Bruker S2 Puma ED-X-ray Fluorescence Spectrometer

Dear Sir,

Referring to our conversation please see below the quotation for a Bruker S2 Puma ED-XRF.

Should you have any queries please feel free to contact me.

Sincerely

Lynsey Singh
AXS Business Manager
+27 82 561 8394

S2 PUMA



S2 PUMA – Energy-Dispersive X-ray Fluorescence (EDXRF) Spectrometer

The S2 PUMA is a benchtop energy-dispersive X-ray fluorescence spectrometer enabling multi-element analysis from Carbon (C) to Americium (Am) depending on configuration. With Silicon Drift Detectors (SDD) technology of the latest generation providing best energy resolution at highest count rates, an excellent element separation and low detection limits down to ppm level are guaranteed.

The S2 PUMA is available with external PC, or as all-in-one standalone system with integrated PC and touchscreen monitor. All that is required is a standard power outlet and, if necessary, helium or nitrogen gas for liquid samples. This means no extra devices, no extra costs, no extra time and effort, and no extra risk!

Ease-of-use, high performance and low cost of ownership are the key features of the S2 PUMA. The S2 PUMA – the price/performance leader for benchtop energy-dispersive X-ray fluorescence spectrometers in laboratories and applicable for applications such as cement, industrial minerals, geology, chemistry, pharmaceuticals, food, research and academia, as well as for educational purposes.

The S2 PUMA in its Automation configuration is the unique benchtop EDXRF for integration into fully automated laboratory environment. With a professional interface for belt or robot connection and the AXSCOM communication software the S2 PUMA becomes an affordable and powerful elemental analyzer for high-throughput applications.

Short description of quotation

Item	Qty.	Catalogue-ID	
1			Basic system
1.1	1	A35_A01_3	S2 PUMA Series 2 Basic unit for compact chamber
1.2	1	A35_A02_A	Sample chamber Direct Excitation
1.3	1	A35_A03_3	XY Autochanger, with 20 positions, automatic
1.4	1	A35_A04_D	X-ray tube with Ag anode and Be window, max. 50 W
1.5	1	A35_A05_1	Generator 50 kV
1.6	1	A35_A06_F	HighSense XP Premium Silicon Drift Detector with detector profiling
1.7	1	A35_A07_3	Air / Vacuum operation for Single position / XY Autochanger
1.8	1	A35_A08_B	Sample chamber Direct Excitation with sample rotation
1.9	1	A35_A09_1	Without CMOS video camera
1.10	1	A35_A10_A	SPECTRA.ELEMENTS Standard, quoted with instrument (3x licenses)
1.11	1	A35_A11_1	Mains cable for Germany
1.12	20	A35_P10	Sample ring 34 mm steel
1.13	1	A35_M01	SMART-QUANT FP Base license (3x), standardless evaluation for S2 PUMA (not for N2 atmosphere)
1.14	1	A35_K05	PC System with monitor, International Package
1.15	1	A35_D02	Introduction to XRF, English
1.16	1	A35_D05	S2 PUMA User Manual, English
1.17	1		As part of our ISO procedure each system undergoes a comprehensive test procedure to check the functionality and performance of the system.
1.18	1		After the instrument has passed the internal system test, the same parameters will be confirmed onsite for final acceptance.
1.19	1		As you are aware, a number of manufacturers, including Bruker, are experiencing a variety of supply chain issues due to Covid and related factors.
1.20	1		Accordingly, any order resulting from this quotation shall not be subject to penalties for late deliveries or any claims for direct or indirect damages in the event there is a delay in delivery due to any such issues.

PRICE: 86,243.50 EUR

including CIP delivery and installation

2			Optional package 1	
2.1	1	A35_H12	Powervar Uninterruptible Power Supply (UPS) with soft shutdown functionality, 230 VAC, 1440 VA, 1-phase	2,107.00 EUR
3			Optional package 2	
3.1	1	7KP18018VA	Application support for Benchtop	4,228.00 EUR

XRF.

Calibration set up/ Method
development.

**Including flights and
accommodation.**

Long Description of Quotation

Item Qty. Catalogue-ID
1 Basic system

1.1 1 A35_A01_3

S2 PUMA SERIES 2 BASIC UNIT - FOR SINGLE POSITION OR XY AUTOCHANGER

The S2 PUMA Series 2 is an energy-dispersive spectrometer for X-ray fluorescence (XRF) analysis of elements in concentration ranges from 100 % down to ppm level of powders, solids and liquids with samples prepared as pressed pellets, fused beads, or liquids and powders in sample cups.

The benchtop spectrometer ensures quick and easy installation with minimum space requirements. The S2 PUMA can be used standalone as well as integrated in a TCP/IP network.

The S2 PUMA HighSense™ technology with shortest beam path ensures high count rates with excellent detection limits and shorter measurement times.

Technical specifications:

- Maximum generator and tube power: 50 W
- High voltage and current: maximum 50 kV
- Primary beam filter changer: 10 positions. For wide range elemental analysis 7 pre-installed filters: 20 µm Al, 100 µm Al, 500 µm Al, 25 µm Ti, 100 µm Ti, 100 µm Cu, and 250 µm Cu
- Operation without liquid nitrogen
- Built-in Ethernet port RJ45 for remote connection and service
- Automatic network based data exchange to LIMS systems possible
- 3x USB ports, allow connection of mouse, keyboard and printer
- Power requirements: 100 - 240 V, 50/60 Hz, max. power consumption 600 VA

Developed and manufactured according to DIN EN ISO 9001:2015 and DIN EN ISO 14001:2015; CE-certified Machinery directive 2006/42/EC; Electromagnetic Compatibility 2014/30/EC. Fully radiation-protected system; radiation <1 µSv/h (H*); German type approval (BfS) for X-ray safety; Conform to ICRP, IAEA, EURATOM.

Pre-installed application includes:

S2 PUMA SERIES 2 SPECTRA.ELEMENTS SOFTWARE PACKAGE

The XRF analytical software for qualitative and quantitative applications includes:

S2 PUMA - WIZARD

For setup of customized applications with innovative and operator-friendly user interface

- Definition of calibration standards and concentrations
- Description of sample preparation
- Measurement of standard samples
- Calibration with first or second order least squares fitting
- Perform matrix correction and iterative interference correction
- Definition of user-specific applications

S2 PUMA - EVALUATION PLUG-IN

Interactive quantitative and qualitative analysis and extended graphical display:

- For interactive post-analysis re-evaluation
- For identification of emission lines for qualitative analysis
- For evaluation of samples using a quantitative calibration

S2 PUMA - RESULTS MANAGER

For results reporting and data extraction:

- For display, evaluation and printing of X-ray spectra
- Definition of user-specific formats for display and external printing
- Report results on any PC within the network and export data to LIMS systems
- Print results on any printer within the network

The software package requires an external PC which is connected via network to the S2 PUMA. The PC is not part of this offer. Minimum requirements for the PC: Intel i5 processor, 8 GB RAM, 256 GB SSD, minimum graphic card resolution 1600 x 900 dots, Windows 10.

Instrument installation and basic induction within a day. Trainings on-site and at training center can be ordered separately.

1.2 1 **A35_A02_A**

SAMPLE CHAMBER DIRECT EXCITATION

The sample chamber with its well-defined and exact sample positioning guarantees highest precision and excellent analytical performance.

1.3 1 **A35_A03_3**
SAMPLE HANDLING XY AUTOCHANGER, WITH 20 POSITIONS, AUTOMATIC

20-position EasyLoad™ XY sample loader for S2 PUMA Series 2 XY Autochanger.

Samples can be added to measurement job at any time, mixed batches of solid and liquid samples can be analyzed under the optimum condition. The XY sample tray is removable, the sample grabber with automatic sample detection.

Sample sizes up to 40 mm (1.56") diameter and 38 mm (1.49") height in sample holders, max. weight 200 g or 51.5 mm (2.03") diameter as sample ring.

Dimensions S2 PUMA EasyLoad XY Autochanger:

67 cm (26.4") x 71 cm (28") x 61 cm (24"); 108 kg (238 lbs),
(width x depth x height; weight)

1.4 1 **A35_A04_D**
**END-WINDOW X-RAY TUBE 50 W WITH AG ANODE FOR THE ENHANCED
EXCITATION OF LIGHT ELEMENTS**

Optimized end-window X-ray tube with silver anode optimized for the excitation of light elements for EDXRF applications with long operating lifetime and optimal excitation over the full element range:

- Optimized beam path for highest intensity
- Close optical coupling between tube target
- Ultra-thin Beryllium window (75 µm) for superior light element analysis

1.5 1 **A35_A05_1**
GENERATOR 50 kV

Generator of its newest generation with high voltage of max. 50 kV, for extraordinary direct excitation conditions.

1.6 1 **A35_A06_F**
**HIGHSENSE XP - HIGH PERFORMANCE SILICON DRIFT DETECTOR WITH
GRAPHENE WINDOW**

HighSense™ XP Silicon Drift Detector (SDD) technology in its newest generation. The HighSense XP detector provides best in class sensitivity for elements from carbon to americium (C - Am), which is enabled by state-of-the-art chip technology, enhanced cooling performance and a robust 0.9 µm graphene window. Unique detector modes can be selected in the software to optimize the analytical conditions for each application. The best energy resolution at Mn K-alpha is <132 eV. The maximum achievable input count

rate is 2.400.000 cps.

The HighSense XP detector is electrically cooled with a Peltier element and therefore liquid nitrogen free (LNF) and comes with an integrated 8K multi-channel analyzer (MCA). The graphene window combines high transmission with robustness, for long lifetime, even in dusty environments. At Cu K-alpha the detector resolution is 157 eV max.

1.7 1 **A35_A07_3**

MEASUREMENT MODE - AIR / VACUUM OPERATION FOR SINGLE POSITION OR XY AUTOCHANGER

This measurement mode allows sample measurements under air, or vacuum conditions. By removing all gases from the measurement chamber vacuum conditions provide the highest count rate for solids, pressed pellets or fused beads. The required vacuum pump for evacuation of the single position or XY Autochanger sample chamber is provided in a pump stand and is placed either behind the instrument or underneath the table. The vacuum pump stand requires a net power supply while the pump itself is controlled by the instrument.

1.8 1 **A35_A08_B**

WITH SAMPLE ROTATION

Sample chamber with direct excitation with sample rotation (sample spinner) device. For best analytical results of inhomogeneous or uneven samples.

1.10 1 **A35_A10_A**

SPECTRA.ELEMENTS STANDARD, BASE LICENSE (3X), QUOTED WITH INSTRUMENT

The XRF software for full instrument control and qualitative and quantitative applications:

- Wizard to easily set-up of customized applications
- Results Manager for results reporting and data extraction
- Evaluation Plug-In: Interactive post-analysis data re-evaluation

The software package requires an external PC which is connected via network to the S2 PUMA. The PC is not part of this offer.

Either Windows 10 or 11 (32 Bit or 64 Bit, respectively) are required for operation.

1.11 1 **A35_A11_1**

MAIN CABLE FOR GERMANY

Country specific main cable for Germany, required for power connection. An additional main cable is required for the optional vacuum pump.

1.12 20 **A35_P10**
EASYLOAD SAMPLE RING 34 MM STEEL MASK

EasyLoad™ sample ring made of steel. For 40 mm diameter samples, with mask of 34 mm diameter.

1.13 1 **A35_M01**
SMART-QUANT FP, STANDARDLESS EVALUATION FOR S2 PUMA SERIES 2, BASE LICENSE (3X)

SMART-QUANT FP is used for standardless measurements and evaluation of unknown samples.

The standardless software is seam-lessly integrated into the instrument software. It allows fast material identification and overview analysis without calibration work. Results are semi-quantitative and depended on sample type.

The standardless software uses the fundamental parameter (FP) method based on peak fitting for direct correlation of measured spectra and calculated element concentrations. The software can be used in full-FP mode or with an empirical background.

The software is easy to use for the routine user, but also offers many advanced evaluation options for the power user. Element ID and the global drift correction and among many other features others make the software fast and user-friendly.

Included with standardless software are predefined methods for the measurement of solids and liquids as well as a stable sample for the drift correction and test of the methods.

System performance can be monitored by quality check application for air, vacuum and helium operation to achieve GLP compliance. The software is not suited for measurements under nitrogen atmosphere.

1.14 1 **A35_K05**
PC-SYSTEM WITH MONITOR, INTERNATIONAL PACKAGE

Premium PC-System:

Intel Core™ i5

16 GB DDR4 RAM

1.0 TB SATA hard drive

23.8" PREMIUM monitor

US/INT keyboard

Mouse
DVD +/- RW
Operating System: Windows 10 64 Bit
3 year on-site service by Dell

Technical changes are possible; features may be upgraded at time of delivery.

1.15 1 **A35_D02**
INTRODUCTION TO XRF, ENGLISH

Handbook for XRF basics, English edition

1.16 1 **A35_D05**
S2 PUMA OPERATORS MANUAL, ENGLISH

Operator's manual with detailed instructions for the proper operation and maintenance of the S2 PUMA.

1.17 1
As part of our ISO procedure each system undergoes a comprehensive test procedure to check the functionality and performance of the system.

1.18 1
After the instrument has passed the internal system test, the same parameters will be confirmed onsite for final acceptance. Acceptance parameters can be downloaded from <http://www.brukersupport.com/BrukerDownloads/1>.

1.19 1
As you are aware, a number of manufacturers, including Bruker, are experiencing a variety of supply chain issues due to Covid and related factors.

1.20 1
Accordingly, any order resulting from this quotation shall not be subject to penalties for late deliveries or any claims for direct or indirect damages in the event there is a delay in delivery due to any such issues.

2 Optional package 1

2.1 1 A35_H12

POWERVER UNINTERRUPTIBLE POWER SUPPLY (UPS) 230 V

Uninterruptible power supply from Powervar for the S2 PUMA with soft shutdown functionality: In case of a power outage the sample is being retrieved from the sample chamber (with an XY Autochanger) and the system is being shut down safely subsequently. 230 VAC, 1440 VA, 1 phase.

3 Optional package 2

3.1 1 7KP18018VA

APPLICATION SUPPORT FOR BENCHTOP XRF

Specific application support is available from our application scientists. This support can be done in our application labs in Karlsruhe or at the customer site. Travel expenses are not included.

Commercial Remarks

PRICING and DELIVERY

The price and delivery is CIP Kigali International Airport according to INCOTERMS® 2020, including standard packaging, commissioning and short instruction. Excluded and additionally invoiced will be the applicable VAT (if any).

TERMS OF PAYMENT

Payment is requested as follows:

30% of order value after placement of the order / effectiveness of contract payable immediately after receipt of advance payment request.

60% of order value after notification of readiness for dispatch payable immediately after receipt of invoice

10% after acceptance, payable within 30 days after receipt of the invoice net.

Payment is requested within 30 days after date of invoice net

CREDIT COLLECTION

Account Receivables management on our behalf is operated by the Bruker Business Support Center:
Bruker Business Support Center Sp. z o.o.
Emilii Plater 53
00-113 Warsaw, Poland

Credit_Collection.EMEA@bruker.com

ACCEPTANCE

The acceptance test is considered successful if the system confirms the acceptance parameters in accordance with the comprehensive test procedure within the framework of our ISO procedure for testing the functionality and performance of the system. (The acceptance parameters can be downloaded from <http://www.brukersupport.com/BrukerDownloads/1>)

The customer confirms the successful acceptance with his signature on the final acceptance form.

EXPORT CONTROL - DENIAL OF LIABILITY

The Buyer understands that export and re-export of Bruker products and any related software, technical data, service, or technical assistance (individually, an "Item" and, collectively, the "Items") are subject to U.S., the EU and other foreign trade controls, customs and economic sanctions laws, regulations, rules and orders (collectively, "Export Control Laws"). In addition to any other remedy it may have, Bruker, at its sole discretion, may suspend and/or cancel the export, delivery, installation, and/or any maintenance or repair service of any Item if

- (a) Bruker has not received all export-related documentation requested by Bruker, including end-user certificates,
 - (b) Bruker has not received the governmental approvals that Bruker deems to be required, or
 - (c) Bruker believes that such activity may violate any Export Control Laws or Bruker's own compliance policies.
- The Buyer shall only use the Items for non-military, peaceful purposes."

Bruker complies with the provisions of the EU embargo in accordance with Council Regulation (EU) 833/2014. Therefore, Article 12g applies as follows:

- (1) The [Importer/Buyer] shall not sell, export or re-export, directly or indirectly, to the Russian Federation or for

use in the Russian Federation any goods supplied under or in connection with this Agreement that fall under the scope of Art. 12g of Council Regulation (EU)No 833/2014.

(2) The [Importer/Buyer] shall undertake its best efforts to ensure that the purpose of paragraph (1) is not frustrated by any third parties further down the commercial chain, including by possible resellers.

(3) The [Importer/Buyer] shall set up and maintain an adequate monitoring mechanism to detect conduct by any third parties further down the commercial chain, including by possible resellers, that would frustrate the purpose of paragraph (1).

(4) Any violation of paragraphs (1), (2) or (3) shall constitute a material breach of an essential element of this Agreement, and the [Exporter/Seller] shall be entitled to seek appropriate remedies, including, but not limited to:

(i) termination of this Agreement; and

(ii) a penalty of 50% of the total value of this Agreement or price of the goods exported, whichever is higher.

(5) The [Importer/Buyer] shall immediately inform the [Exporter/Seller] about any problems in applying paragraphs (1), (2) or (3), including any relevant activities by third parties that could frustrate the purpose of paragraph (1). The [Importer/Buyer] shall make available to the [Exporter/Seller] information concerning compliance with the obligations under paragraph (1), (2) and (3) within two weeks of the simple request of such information.

TRAINING (if applicable)

Customers' claim for participation in the above-mentioned training is time barred within 12 months upon acceptance or 18 months after delivery of the item, whatever comes first.

MAKE-AND-HOLD-ORDERS (if applicable)

Customers' claim for make-and-hold-order is time barred within 24 months upon acceptance or 30 months after delivery, whatever comes first.

VALIDITY DATE OF QUOTATION

The offer is valid for 90 days from date of issue.

DELIVERY Time

The delivery time is 4 months.

GENERAL

In all other respects not specifically mentioned herein, the Bruker AXS GmbH and Subsidiaries General Terms and Conditions of Sale hereto apply.

We hope that our offer will meet your requirements and would be glad to receive your order.

In case of any questions please do not hesitate to contact us again.

Yours faithfully

BRUKER AXS GmbH

Bruker AXS GmbH and Subsidiaries Terms and Conditions of Sale (Germany)

Version #4882-3159-4284.1

1. GENERAL.

Orders are accepted by Bruker AXS GmbH and Subsidiaries ("Seller") subject to these terms and conditions.

These terms and conditions apply to the exclusion of all other terms. In case of a conflict, inconsistency or addition not expressly accepted in writing by Seller, the terms and conditions of sale provided herein shall be considered as superseding the conflicting, inconsistent or additional terms stated in Buyer's purchase order, order form, contract or otherwise.

The acceptance of an order will supersede all prior communications and constitute a complete and binding contract between the party purchasing equipment hereunder ("Buyer") and Seller, which contract cannot be modified or canceled without the written agreement of both parties.

2. OFFER / CONCLUSION OF CONTRACT.

Seller's quotations shall be non-binding and subject to change unless expressly indicated otherwise.

Buyer's order constitutes a legally binding offer to enter into a contract.

The acceptance of an order shall be by way of a written contract confirmation by Seller (including by email). If no written confirmation is issued, a contract (subject to these terms and conditions) shall take effect by placing at disposal the goods. In this case, Buyer shall waive the receipt of a written confirmation.

3. SHIPMENT.

Seller shall attempt to comply with, but will not guarantee, shipping date and loading and routing instructions. Seller reserves the right to allow or prorate shipments against all orders whenever, in its judgment, an oversold condition exists as to any particular product manufactured or sold by it. In the event of a default by Buyer, Seller may decline to make further shipments without waiving any of its rights under such order. If, despite such default, Seller elects to continue to make shipment, its action shall not constitute a waiver regarding, or otherwise diminish, Seller's legal remedies with respect to such default or any future default.

Any claims of Buyer for compensation due to the inability to deliver goods, or due to delays in delivery, shall be limited as set forth in Section 15 of these terms and conditions.

4. TITLE AND DELIVERY.

All sales are made EXW factory, Incoterms 2020 and Buyer shall pay all freight, duties, cartage and handling. Title and risk of loss or damage shall pass from Seller to Buyer upon Seller's putting the material purchased hereunder in good condition into the possession of a common carrier, such carrier acting as Buyer's agent.

5. PRICES.

Irrespective of any prices quoted by Seller or listed on Buyer's order, an order is accepted only at the prices shown on Seller's written quotation (the "Quotation"). Installation of utilities required for equipment is not included in the specified price.

6. PAYMENT TERMS.

(a) Unless agreed otherwise, payment terms shall be as set forth in Seller's quotations.

(b) Buyer shall be automatically deemed in default upon expiration of the applicable period for payment under the preceding paragraph (a) without the need for a default notice to be issued. During any period of default, the price shall bear interest at the applicable statutory rate for default interest. Seller reserves the right to claim additional damages for default.

(c) All orders are subject to credit approval by Seller. The amount of any credit extended by Seller to Buyer may be changed, and such credit may be withdrawn by Seller. With respect to an order on which credit is not extended by Seller or, if extended, is subsequently withdrawn, shipment or delivery shall be made, at Seller's election, cash with order (in whole or in part), C.O.D., letter of credit or Sight Draft attached to Bill of Lading or other shipping documents, with all costs of collection for the account of Buyer. If, in the judgment of Seller, the financial condition of Buyer does not justify continuation of production or shipment on the terms of payment originally specified, Seller may require full or partial payment in advance. In the event any proceeding is brought by or against Buyer under any bankruptcy or insolvency laws, Seller shall be entitled, in addition to any other remedies at law or in equity, to (i) stop or divert any shipment in transit, (ii) cancel any order then outstanding and/or (iii) receive reimbursement for its cancellation charges.

(d) Seller shall be entitled to partial performances to the extent

that (i) the partial performance can be used by Buyer in the context of the contractually intended purpose, (ii) the performance of the remaining parts is ensured and (iii) Buyer does not incur any additional costs as a result. Each shipment shall be considered a separate independent transaction, and payment therefor shall be made accordingly.

(e) If for any reason the delivery is delayed at Buyer's request, Seller may store the goods at Buyer's expense and risk in the name of Buyer.

7. TAXES.

Quoted prices do not include federal, state or local excise, sales, use or similar taxes. Accordingly, in addition to the prices specified on the Quotation, the amount of any applicable excise, sales, use and/or similar taxes will appear as separate items on the invoice and will be paid by Buyer unless prior to shipment Seller receives an appropriate tax exemption certificate from Buyer.

8. ACCEPTANCE / CUSTOMER SPECIFIC ACCEPTANCE ("CSA").

8.1 Where it has been expressly agreed that Buyer's acceptance (in the meaning of § 640 German Civil Code) is required, then Buyer will accept the purchased equipment in accordance with the agreed CSA provisions. The parties will give priority to achieving CSA and the purchased equipment shall not be used by Buyer for material production, for development of new processes or for any purposes other than achieving CSA, prior to successful completion or waiver of the CSA provisions. It is the responsibility of the Buyer to ensure that all the required facilities are ready and site preparation is completed for successful commencement of CSA on delivery of the equipment.

8.2 In the event of a delay in acceptance despite readiness for acceptance, the goods shall be deemed accepted if a) CSA has not been commenced within 30 days after delivery and completed within 60 days after delivery (through no fault of Seller) or b) (if an additional installation has been agreed) CSA has not been commenced within 15 days after any agreed installation and completed within 45 days after any agreed installation (through no fault of Seller), if not agreed otherwise or c) Buyer has started using the goods and 15 days have elapsed since delivery or (if applicable) any agreed installation.

9. FORCE MAJEURE.

Seller shall not be liable for failure to perform occasioned by strikes, lockouts, labor difficulties, riots, inability or difficulty in obtaining or procuring supplies, labor or transportation, fires, storms, floods, earthquakes, explosions, accidents, acts of God, interference by civil or military authorities, whether legal or de facto, acts of the public enemy, war, rebellion, insurrection, sabotage, embargoes, orders given priority by any public authority or any other cause beyond the reasonable control of Seller if such event was not foreseeable at the time when the contract was entered into.

10. PATENTS.

If a third party claims that the purchased equipment infringes that party's patent or copyright or other intellectual property right, Seller will defend Buyer against that claim and will pay all costs, damages and attorneys' fees that a court finally awards, provided that Buyer: (a) promptly notifies Seller in writing of the claim, and (b) allows Seller to control, and cooperates with Seller in, the defense and any related settlement negotiations.

If such a claim is made or appears likely, Seller, at its option, may obtain a license to enable Buyer to continue to use the product, may modify the product or may replace it with one that is functionally equivalent. If Seller is unable to do either of these things within a reasonable time, the Buyer may rescind the contract or claim a reasonable reduction of the purchase price.

Seller shall not be liable for any claim based on (i) anything Buyer provides which is incorporated into a product, (ii) Buyer's modification of a product or use thereof other than in its specified operating environment, or (iii) the combination, operation or use of a product with products provided by other manufacturers or other products not provided by Seller as a system.

Any claims of Buyer for compensation shall be limited as set forth in Section 15 of these terms and conditions.

Sale of products or parts thereof does not confer on Buyer any license relating to (a) the structure of any devices to which the products or parts may be applied or (b) a process or machine in connection with which they may be used.

11. RESCHEDULING.

If Buyer has been granted by Seller any rescheduling rights, such rights shall be as set forth in Exhibit A.

12. CANCELLATION.

If Buyer has been granted by Seller any additional contractual cancellation rights, such rights shall be as set forth in Exhibit A.

13. ASSIGNMENT.

Buyer shall not assign this order or any portion thereof without the prior written consent of Seller.

14. WARRANTY ("Gewährleistung" in terms of German Civil Code).

(a) Unless these terms and conditions (including Sections 10 and 15) provide otherwise or specify additional terms, the relevant statutory provisions shall govern Buyer's rights in the case of material or legal defects ("*Sach- und Rechtsmängel*").

(b) No warranty shall be provided for standard wear and tear for this type of contract (particularly for filters, lamps, pilot lights, filaments, fuses, mechanical pump belts, probes, V-belts, wafer transport belts, pump fluids, O-rings and seals),

(c) No warranty shall be provided for all used equipment, including demo equipment.

(d) No warranty shall be provided for equipment and system failures resulting from (i) abuse, misuse, modification or mishandling; (ii) damage due to forces external to the machine including, but not limited to, acts of God, flooding, power surges, power failures, defective electrical work, transportation, foreign equipment/attachments or Buyer-supplied replacement parts or utilities or services such as gas; (iii) improper operation or maintenance; or (iv) failure to perform preventive maintenance in accordance with Seller's recommendations (including keeping an accurate log of preventive maintenance). In addition, this warranty does not apply if any equipment or part has been modified without the written permission of Seller or if any Seller serial number has been removed or defaced.

(e) Specifically excluded from this warranty is all standalone computer and data storage equipment not manufactured by Seller (such as computers, monitors, printers and printer buffers). Such equipment will carry only the original manufacturer warranty.

(f) Unless acceptance (in the meaning of § 640 German Civil Code) has been expressly agreed, Buyer has a duty to inspect delivered goods promptly after they are delivered to Buyer or any third party nominated by it, and promptly report any defects. §§ 377 and 381 German Commercial Code and the terms of this subsection shall apply to goods inspections and defect notifications. The requirement of prompt notification shall be deemed satisfied if a notice of defects is sent, at the latest, within five (5) working days of delivery or, if the defect was not evident at the time of the goods inspection, at the latest within three (3) working days after the defect is identified. Seller assumes no warranty and accepts no other liability for defects if Buyer has failed to properly inspect the goods and/or report defects.

(g) Buyer must give Seller an opportunity to review the complaint, particularly by making available respective goods and their packaging to Seller for inspection. At Seller's request, the goods subject to complaint must be sent back to Seller. Buyer must contact Seller in advance for authorization to return equipment and must follow Seller's shipping instructions. Freight charges and shipments to Seller are Buyer's responsibility. In the event of a justified defect complaint, Seller shall reimburse the costs of the least expensive shipping method; this shall not apply if the shipping costs are increased because the goods are located somewhere other than the place of contractually agreed use.

(h) If the goods are in fact defective, Seller will cover the necessary expenses for the purpose of examining the goods and effecting supplementary performance, particularly including transport, infrastructure, labor and material costs. Supplementary performance shall not include either dismantling and removing the defective item

or re-installing a non-defective item if Seller had no installation obligation originally. However, if Buyer's request to remedy a defect proves to be unjustified, Seller may require Buyer to reimburse Seller's costs.

(i) If the delivered goods are defective, Seller shall be entitled to its choice of supplementary performance ("Nacherfüllung"), either by rectifying the defect (repair) or by providing a new, non-defective item (replacement).

(j) If it is not possible to effect supplementary performance or if the attempt to supplementary performance is unsuccessful, or if the reasonable period for effecting supplementary performance has expired without result or can be dispensed with according to statute, Buyer may, at its election, rescind the contract or reduce the purchase price. However, there is no right of rescission in the case of minor defects.

(k) Any claims of Buyer for compensation shall be limited as set forth in Section 15 of these terms and conditions

15. LIMITATION OF LIABILITY.

15.1 Further claims by Buyer, particularly for damage compensation in place of performance and compensation for other direct or indirect loss – including accompanying or consequential loss, regardless of legal grounds – are hereby excluded. This shall not apply if:

(a) Seller has fraudulently concealed a legal or material defect or has provided a guarantee for its absence, or for a characteristic of the goods;

(b) The damage is due to intent or gross negligence on the part of Seller, one of its legal representatives or assistants, or is due to a negligent violation of material contractual obligations on the part of Seller or these persons. Material contractual obligations are obligations whose fulfillment is material to due and proper implementation of the contract and which the contractual partner regularly expects and can trust to be fulfilled. However, in the event of simple negligence, Seller's liability for damages other than personal injury or damage to health shall be limited to the foreseeable loss typical for this type of contract;

(c) A culpable breach of obligations on the part of Seller or its legal representatives or vicarious agents has led to personal injury or damages to health; or

(d) Seller is liable under the German Product Liability Act ("Produkthaftungsgesetz").

For the avoidance of any doubt, the foregoing provision in Section 15.1 does not imply a change in the burden of proof to the detriment of Buyer.

15.2 The provisions of Section 15.1 shall apply correspondingly to any direct claims by the Buyer against

Seller's legal representatives and vicarious agents.

15.3 Contractual penalties (penalties for non-performance, flat-rate damages, etc.) to which Buyer is subject by a third party can only be claimed as damage compensation from Seller – regardless of the other requirements – if this has been expressly agreed in advance between Buyer and Seller or if Seller has been expressly informed in writing of a potential contractual penalty agreed between Buyer and a third party before the conclusion of the contract with Seller.

15.4 In every case, the statutory provisions for final delivery to a consumer who is a private individual shall remain unaffected (supplier's recourse as per §§ 478, 479 German Civil Code).

16. LIMITATION PERIOD.

16.1 In deviation from § 438 (1) no. 3 German Civil Code, the limitation period for claims based on material or legal defects (including those not based on the contract) shall be 12 months from the date of delivery; however, the foregoing shall not apply in the cases described in Section 15.1 (a) to (d) of these terms and conditions. The applicable statutory limitations period shall apply in those cases. If an acceptance in the meaning of § 640 German Civil Code has been agreed, the periods shall begin upon acceptance.

16.2 The limitation period in the event of supplier's recourse as per §§ 478, 479 German Civil Code and the limitation periods set forth in § 438 (1) no.1 and no. 2 and 438 (3) German Civil Code shall remain unaffected.

17. NONSOLICITATION.

Buyer will not solicit the employment of any employee of Seller who has come into contact with Buyer in connection with the products or services provided to Buyer hereunder.

18. COMPLIANCE WITH LAWS.

(a) The performance of each party hereunder is subject to compliance with all applicable laws.

(b) Buyer understands that exports and re-exports of Seller's products and any related software, service, technical assistance, training and related technical data, and any media in which any of the foregoing is contained (the "Items") may be subject to German, European, U.S. and foreign trade controls, customs, anti-boycott and economic sanctions laws, regulations, rules and orders (the "Export Laws"). In addition to any other remedy it may have, Seller may suspend or cancel the export, delivery, installation, or any maintenance or repair service of any Item if (a) Seller has not received all export-related documentation requested by Seller, including end-user certificates, (b) Seller has not received the governmental approvals that Seller deems to be required, or (c) Seller believes that such activity may violate any Export Laws or Seller's own compliance policies.

Buyer shall only use the Items for non-military, peaceful purposes. Buyer shall not export, re-export or otherwise transfer or provide any Item in contravention of any applicable Export Law or any end-user certificate provided by Buyer, including to an embargoed or otherwise sanctioned country, to anyone listed on any applicable prohibited persons list published by the U.S., the UN, the EU or the OSCE, or for a prohibited end-use (such as research on or development of chemical, biological, or nuclear weapons, unmanned air vehicles or missiles, or nuclear explosive or fuel cycle activities). Buyer must notify Seller before providing any technical data to Seller that is controlled under any applicable Export Law. Seller will not be liable to Buyer for any loss or expense if Buyer fails to comply with any Export Law.

(c) Buyer will comply with all applicable import laws or other restrictions or conditions respecting the import of Items that are now in effect or are hereafter imposed by any government or other applicable jurisdiction. Buyer shall be responsible for obtaining any necessary import permit, license or authorization at its sole cost and expense. Buyer shall immediately notify Seller if an import permit, license or other authorization is required in connection with any such import.

19. APPLICABLE LAW / PLACE OF JURISDICTION.

The contract created hereby shall be interpreted and construed under the laws of Germany, without regard to the choice of law provisions thereof and not including the U.N. Convention on Contracts for the International Sale of Goods. The place of exclusive (and international) jurisdiction for any and all disputes arising out of or in connection with the Seller's business relations with the Buyer shall be the place of Seller's registered office. However, Seller may also sue Buyer in the place of its domicile.

20. SEVERABILITY CLAUSE.

If individual provisions of these terms and conditions should be void or invalid in whole or in part, this shall not affect the validity of the remaining provisions. In place of any provisions which are invalid or not incorporated into the contract primarily the statutory provisions shall apply. In all other cases, the Parties shall agree a valid provision to replace the invalid or unenforceable provision which reflects as closely as possible the original economic purpose, provided a supplementary interpretation of the contract does not have precedence or is not possible.

EXHIBIT A

ADDITIONAL PROVISIONS

1. Rescheduling:

Buyer is entitled to request a one-time rescheduling of the delivery against payment of a "Rescheduling Charge". The charges shall be determined as follows and shall be due and payable within ten (10) days of the rescheduling:

Number of Weeks of Rescheduling Requested	Rescheduling Charge
Up to 4 Weeks	No Charge
5 to 12 Weeks	15% of Purchase Price
13 to 26 Weeks	35% of Purchase Price
27+ Weeks	Order Considered Canceled

More than one rescheduling of an order will be considered a cancellation of the order. Sixty-six percent (66%) of the rescheduling charge shall be applied against the purchase price if the order is subsequently shipped or against the cancellation charges if the order is subsequently canceled. On any order that is rescheduled and subsequently canceled, cancellation charges will be based upon the time between the originally scheduled delivery date and the date of notice of cancellation.

2. Cancellation: If Buyer is to have any cancellation rights, a clause such as the following should be used:

Buyer is granted a contractual right to cancel any order against payment of a "Cancellation Charge". In the event of attempted cancellation by Buyer of any order, Buyer shall pay Seller a cancellation and re-stocking charge based upon the timing of the attempted cancellation notice as follows:

for General Purpose Equipment

Days Attempted Cancellation Notice Given Before Confirmed Shipment Date of Order	Cancellation Fee Equals the Following Percentage of Purchase Price
More than 150 Days	35% of Purchase Price
61 to 150 Days	50% of Purchase Price
31 to 60 Days	75% of Purchase Price
0 to 30 Days	100% of Purchase Price

for Specialized Equipment (D8 Instrument including Metaljet source, D8 DISCOVER plus, Engineering specials*)

Days Attempted Cancellation Notice Given Before Confirmed Shipment Date of Order	Cancellation Fee Equals the Following Percentage of Purchase Price
More than 180 Days	35% of Purchase Price
91 to 180 Days	50% of Purchase Price
31 to 90 Days	75% of Purchase Price
0 to 30 Days	100% of Purchase Price

*customized or modified equipment.