Finishing - KBA

Queries raised by M/s KBA NotaSys SA, Switzerland during pre-bid meeting held on 26th September 2016 at BRBNMPL, CO, Bangalore in response to our Global Tender No. GT/OFF&FNG/CO/05/2016-17 dated 2nd September 2016 for 2 Offset Machines and 4 Finishing Machines

1. Synopsis

This document compiles all pre-bid questions of KBA-NotaSys SA, Lausanne for the abovementioned tender for both schedules.

The questions are numbered in sequence Q1, Q2, Qi, ...Qn.

The questions are referenced to the above tender document with page number (pi), paragraph (§i) and where applicable line (li)

2. Questions

2.1 General

Q1 Delivery schedule (p66):

We are perfectly aware that a key factor for the success of the projects within BRBNMPL lies in the stringent execution of the installation, commissioning, acceptance, training, and hand over procedures. To have optimal conditions for all teams involved, we propose to apply a schedule which takes these factors into account as well as furnishing machines as quickly as possible. The schedule also needs to be formulated to eliminate any influence not under the control of the supplier (e.g. transport)

For the good running and guarantee of a successful project, we therefore propose the following schedule framework:

Schedule 2 – Finishing Machine

- Delivery of first machine ex-works within 12 months after Letter of Intent.
- Delivery of remaining machines: one machine (ex-works) every two months after delivery of first machine: Dispatch (ex-works) of the last machine to be completed within 18 months from the date of the Letter of Intent.
- Final Acceptance Certificate: to be issued after each machine has been installed, tested and commissioned and final acceptance test carried out within 90 working days from the date of receipt of item at respective site

Please confirm the revised optimized delivery schedule.

BRBNMPL Response: Agreed

Q2 FAT conditions (p86, p87, §1): The working week has 6 working days. Bank holidays and weekends are not counted. During FAT there will be one shift of 9 hours with no break time.

Please confirm that our understanding is correct.

BRBNMPL Response: Yes your understanding is correct.

2.3 Section VII: Schedule 2 - Finishing Machine

2.3.1 Normalisation Methodology for Finishing Machines

Q18 Output (p39, §1): The sustained output is essential for the operation of a finishing department. Evaluation criteria should reflect the output over the different sheet layouts and

volumes produced over the observation period. We suggest completing the normalization methodology per sheet layout and projected volumes in percent for each layout.

Please confirm your agreement to this proposal.

BRBNMPL Response: All productivity checking will be for 50 ups (10 rows X 5 Columns) and hence all productivity figures given in the technical bid should pertain to this configuration.

2.3.2 Section VII: Technical Specifications

Q19 Brief Description (p79, §2): The output of a finishing machine being dependent on the sheet layout. When calculating the projected productivity, it is essential to take into account not only the currently applied sheet layouts but also the future intended layouts. We therefore understand that the stipulation for the throughput of at least 85 Packets/minute corresponds to the weighted average over all sheet layouts and the respective projected volumes to guarantee an optimum productivity.

Please confirm that our understanding is correct.

BRBNMPL Response: All productivity checking will be for 50 ups (10 rows X 5 Columns) and hence all productivity figures given in the technical bid should pertain to this configuration. The specified 85 Packets/minute should be achievable for this configuration.

Q20 Brief Description (p79, §2): It is our understanding that the future Indian sheet layout will be 40 ups and above.

Please confirm that our understanding is correct and that the performance evaluation is based on the future production layouts including and in excess of 40 ups.

BRBNMPL Response: All productivity checking will be for 50 ups (10 rows X 5 Columns) and hence all productivity figures given in the technical bid should pertain to this configuration.

Q21 Packet Banding Unit (p81, C, 2nd bullet): The specification states a band width of 20 / 30 / 40 mm.
Our understanding is that currently in India banknote production 20 mm bands are not used.

Please explain the reasons motivating this specification.

BRBNMPL Response: No. We do use 20 mm plastic banding for packets.

Q22 Bundle Banding Unit (p82, E, 2nd bullet): The specification stated a band width of 20 / 30 / 40 mm.
Our understanding is that currently in India banknote production 20 mm bands are not used.

Please explain the reasons motivating this specification.

BRBNMPL Response: Ok. Our requirement will be for 30 and 40 mm.

Q23 Packing (Shrink wrapping) unit (p82, G, 1st bullet): The specification states a number of bundles in a shrink wrap should be variable for eg. 10, 20 etc. Given the material specification in 2nd bullet of 30-50 microns, the number of bundles to form a stable packaging would be limited by the tensile strength of the packaging material.

Please confirm if our proposal should include a packaging machine capable of packaging high volume packs with thick film capable of packaging up to 50 bundles.

BRBNMPL Response: We have erroneously specified "Bundles" in lieu of "Packets" and the requirement will be for 10 packets. Trust it is clear.

Q24 Online Inspection System (Optional) (p83, K, 3rd and 4th bullet): The specification states that if it is determined that a packet is outside the allowable tolerance it is rejected for manual inspection.

Please confirm if it is necessary to stop the process to re-insert the package in the right sequence.

BRBNMPL Response: Yes. Your understanding is correct.

STEPHEN BROOD
Reg. Dir,
KBA-NotaSys

Johannes Schaede
CTO KBA-NOTASYS

(S. SRIKANTH)
Manager

TUMIO SASAKI
General Manager
UNO SEISAKUSHO Co., Ltd

(C. ADURAN)
AGM

Finishing - UNO

Queries raised by M/s Uno Seisakusho, Japan during pre-bid meeting held on 26th September 2016 at BRBNMPL, CO, Bangalore in response to our Global Tender No. GT/OFF&FNG/CO/05/2016-17 dated 2nd September 2016 for 2 Offset Machines and 4 Finishing Machines

COMMERCIAL AREA:

1) Page at 31 for clause # 54.3 'Submission of Offer', 54.3.6, saying that 'All arrangement for lifting and transportation of scrap material, including manpower, crane, transport vehicle and trolley etc., if required shall be made by the Purchaser, concerned only and the BRBNMPL shall not provide or help in providing any such arrangements and the rate quoted by the Purchaser must include such and all incidental charges':

This is describing Purchaser BRBNMPL shall arrange lifting and transport ,though, on the contrary BRBNMPL shall not provide or help such to arrange. Will it be possible to explain how to understand this meaning, BRBNMPL could arrange it, or couldn't arrange it?

BRBNMPL Response: These clauses pertain to tender for "Disposal of Scrap". Hence not applicable to present tender. Please see SIT Sl.No.26.

2) Page at 61 for clause # 36. 36.2.3, saying 'If the Purchaser fails to deposit sale value for a sold lot within the allowed period as per relevant clause, BRBNMPL may forfeit the security deposit':

Is the above description 'the Purchaser' wrongly described? We understand this should be the Supplier, i.e., Tenderer.

BRBNMPL Response: These clauses pertain to tender for "Disposal of Scrap". Hence not applicable to present tender. Please see SCC Sl.No.17.

3) Page at 65 'SCC' for the clause # 18 'Repeat Order', saying 'Repeat Order up to 50% of the contracted quantity may be placed at the discretion of the Purchaser at the same rate, terms and conditions provided the same is accepted by the Supplier':

What does it mean by the description 'Repeat Order up to 50% of the contracted quantity'?

BRBNMPL Response: It means two more finishing machines can be ordered as repeat order on same terms and conditions.

4) Page at 84 for 'MAINTENANCE, c), saying 'Indian equivalents for all mechanical, electrical and electronic items such as spare components, lubrications, Sensors, PLC, Pneumatics and Hydraulics shall be provided':

May we understand this clause is okayed, if we should describe the address of Indian subsidiaries of the Japanese sub-contractors that we are buying ,so that it might be available to locally procure the equivalents?

BRBNMPL Response: You are welcome to provide such information.

5) Page at 85 for clause 'Common for Schedule 1 & Schedule 2', '1) Training and 2) Pre-shipment Inspection Authority':

Will the Pre-shipment Inspection' be implemented at Uno factory by BRBNMPL's inspectors, prior to the two-weeks training for 4 x operators and 2 x maintenance personnel? If YES, how many days to be considered?
Also, will it be different personnel Inspectors and 2 x maintenance personnel?

Mikai

What we wish to know is, how many days to be needed for both 'Pre-shipment Inspection' and 'two-weeks training.

BRBNMPL Response: Pre-shipment inspection is for 4 working days for 2 persons for each machine and training is for 10 working days for 6 persons for each machine.

TECHNICAL AREA.

1) Page at 81 for A. Sheet feeding and counting unit [page 80], saying 'If the machine determine that the number of sheet in a stack is different from set value, then machine shall stop and call for operator's attention by means of an optical and/or acoustic alarm :

Uno system doesn't stop the machine run, but continue the machine run, while lighting lamp with acoustic alarm, whenever making wrong counting, in which you press the counting 'Start' button for counting once again. Is this O.K.?

BRBNMPL Response: Acceptable.

2) Page at 81 for C. Packet Banding unit, saying 'The system should have banding fault detectors and provision for auto stop in case of fault detection':

Uno system performs exactly as per this clause. But, when making the remake of Packet Banding, how are you going to make it? We recommend you to have one (1) unit of Stand-alone type Packet [100 notes] & Bundle [1000 notes] unit' for making such 'remake' Packet & Bundle. How do you think of this unit ?

BRBNMPL Response: Standalone bundle banding (1000 notes) unit will be a compulsory requirement while packet banding (100 notes) standalone unit will be optional.

3) Page at 82 for D. Collector unit [page 81], saying 'The unit should be able collect 10 packets of banknotes to form a bundle in sequential number as per SPANS/CRN numbering system':

It is just a rare case, though, in case that the collected packets quantity is less than 10 packets, the sensor detecting such fault being provided, stopping machine run, which is our standard specifications. Is this O.K. ?

BRBNMPL Response: Such feature is welcome though not mandatory.

4) Page at 82, E. Bundle banding unit, saying 'An over-printing/labelling system' should be provided for marking/labelling the bundle band for easy identification and tracking':

Will you provide us with the following specifications?

(1) Label size, pre-printed format, or design

(2) As for 'over-printing data', is it 'Variable Data' showing date, time? Or, the fixed data?

(3) At the time of testing for PSI [Pre-shipment Inspection] and FAT, will you supply the Labels?

Also, may we understand the mounting position of Bundle banding should be first and then, next labelling unit? In case of faulty Bundle banding to be detected, how does the next labelling unit act?

BRBNMPL Response: We will specify only IJP including CCD camera before shrink wrap.

5) Page at 82. G. Packing (Shrink wrapping) unit, saying 'Bundles having the correct quantity of 1000 notes shall be shrink-wrapped in a shrink wrapper. The number of bundles in a shrink wrap should be variable for e.g. 10, 20,

Uno systems with 'Mini-Pack' has the below standard specifications. Will it be OK?

(1) Orientation of the bundles in packing one (1) kind, Lay down' only.

(2) High denomination : 5 bundles x 2 rows — for one layer = 10 bundles,
(3) Low denomination : 5 bundles x 2 rows — for two layers = 20 bundles,
or, 5 bundles x 2 rows — for one layer = 10 bundles.
[Note: For Low denomination, you can choose either one 10 or 20 bundles.]

BRBNMPL Response: We have erroneously specified "Bundles" in lieu of "Packets" and the requirement will be for 10 packets. Trust it is clear.

6) Page at 83. H. Master Control Panel, saying 'Denomination/format changeover can be achieved from the Control Panel':
Our wording to this clause is; 'Denomination/format change-over can be mainly achieved from the Control Panel, hence there would be necessary manual work additionally.

BRBNMPL Response: Your understating is correct.

7) Page at 83. I. System for monitoring Production data, saying 'For further analysis the system shall provide an interface to external Management Information Systems and also any source code required for MIS development':
Uno system has a possibility of linkage by Ethernet to your external computer in which we have ever done **'CSV File'** [Comma-separated values] at our customers as the data communication method to the external computer. We are ready to discuss with you, which File is going to apply.

BRBNMPL Response: Acceptable.

8) Page at 83. K. Online Inspection System (Optional), saying 'The system shall allow on the fly adjustment of target values and tolerance settings':
What does it mean by 'the fly adjustment'?

BRBNMPL Response: "on the fly adjustment" means online adjustment during machine operation.

9) Page at 84. 5. ELECTRIC AND ELECTRONIC CONTROL, saying 'The machine should be provided with one UPS to provide power backup in case of power failure. It shall back up in case of power failure till it completes storing the data:
Uno system is provided with the UPS functioning as follows.
(1) covering only electrical area,
(2) Storing all data for a certain time, enabling to smoothly recover the situation before power failure, in order to secure quick restart,
(3) during such power failure down-time, machine run is suspended,

BRBNMPL Response: Acceptable.

10) Page at 39. Schedule 2: Normalization Methodology for Finishing Machine:
As regards the Label change-over time to include in the Mandatory Activity Time (MAT) is described by the Sl No., 1 thru 5, will it be O.K. to put this factor into Sl No. 1 : 'Make-ready in the beginning of the shift' ?

BRBNMPL Response: As we are proposing to specify only IJP, this question may not arise.

STEPHEN BROOD
Reg. Dir.
KBA-MetaSys

Johannes Schreede
CTO KBA NOTA SYS SA

FUMIO NASAKI
General Manager
UNO Nisaka USA Co, Ltd

OFFSET KBA

Queries raised by M/s KBA NotaSys SA, Switzerland during pre-bid meeting held on 26th September 2016 at BRBNMPL, CO, Bangalore in response to our Global Tender No. GT/OFF&FNG/CO/05/2016-17 dated 2nd September 2016 for 2 Offset Machines and 4 Finishing Machines

1. Synopsis

This document compiles all pre-bid questions of KBA-NotaSys SA, Lausanne for the abovementioned tender for both schedules.

The questions are numbered in sequence Q1, Q2, Qi, …Qn.

The questions are referenced to the above tender document with page number (pi), paragraph (§i) and where applicable line (li)

2. Questions

2.1 General

Q1 Delivery schedule (p66):

We are perfectly aware that a key factor for the success of the projects within BRBNMPL lies in the stringent execution of the installation, commissioning, acceptance, training, and hand over procedures. To have optimal conditions for all teams involved, we propose to apply a schedule which takes these factors into account as well as furnishing machines as quickly as possible. The schedule also needs to be formulated to eliminate any influence not under the control of the supplier (e.g. transport)

For the good running and guarantee of a successful project, we therefore propose the following schedule framework:

Schedule 1 – Offset Printing Machine

- Delivery of first machine ex-works within 12 months after Letter of Intent.
- Delivery of second machine ex-works within 14 months after Letter of Intent.
- Final Acceptance Certificate: to be issued after each machine has been installed, tested and commissioned and final acceptance test carried out within 90 working days from the date of receipt of item at respective site

Please confirm the revised optimized delivery schedule.

BRBNMPL Response: Agreed for Delivery of first machine ex-works within 12 months after Letter of Intent. Delivery of second machine ex-works within 14 months after Letter of Intent.

Q2 FAT conditions (p86, p87, §1): The working week has 6 working days. Bank holidays and weekends are not counted. During FAT there will be one shift of 9 hours with no break time.

Please confirm that our understanding is correct.

BRBNMPL Response: Yes your understanding is correct.

Q3 Experience & Past Performance (p88, §1): The past performance relates to the banknote printing processes incorporated into the Offset machine. Due to the importance of the future proof Offset process, the complete inspection (p76, §C) is essential to meet all requirements including the waste rates (p86, §a).

Please confirm that the experience and past performance for the machine extends to the inspection also.

BRBNMPL Response: No. Experience and past performance is only for supply of basic category of machine having been supplied for Banknote printing.

2.2 Section VII: Schedule 1 - Offset Machine

Q4 UV disposed for UV curing (p67, §1.7.): UV curing of banknote printing becomes more and more important for

- the suppression of set off,
- trapping between inks (re-transfer of inks between serial print units),
- the logistic sequence and
- the reduction of work in capital.

Thus the pre-disposition of the machine for UV is a decisive factor for the usability of the press.

Please clarify that the UV drying - even if retrofitted – shall serve all the purposes described.

BRBNMPL Response: It is an optional requirement. These are intrinsic requirements and need not be specified in detail.

Q5 UV disposed for UV curing (p67, §1.7.): The UV curing may influence the form of the different substrates.

Please confirm that the UV drying - even if retrofitted – shall not influence the register accuracy or the dimension consistency for the subsequent processes for all substrates (see also Q11, Q12)

BRBNMPL Response: It is an intrinsic requirement and need not be specified. It should be clearly understood that any optional/auxiliary requirements specified like UV curing etc., creates no dysfunctionality with respect to the product/further process.

Q6 dampening unit (p67, §1.8.): The use of dampening units for wet offset is mandatory for Offset related Banknote features/elements features (see also Q9, Q10) depending on the design choice of the BRBNMPL the position of the dampening unit needs to be free. (recto and verso)

Please confirm that the press needs to be predisposed to be equipped with the dampening unit in all print units at choice

BRBNMPL Response: While we have asked only one dampening unit (one each in recto and verso) in the scope of supply, your understanding regarding predisposing of all units for dampening is correct.

Q7 dampening unit (p67, §1.8.): The use of dampening units for wet offset is mandatory for Offset related Banknote features/elements features (see also Q9, Q10). As these features are multi-color, to avoid easy counterfeit with commercial equipment, this then have to extend to the use of more than one dampening unit per side (recto and verso)

Please confirm that the press needs to be predisposed to be equipped with a dampening unit in all print units.

BRBNMPL Response: While we have asked only one dampening unit (one each in recto and verso) in the scope of supply, your understanding regarding predisposing of all units for dampening is correct.

Q8 dampening unit (p67, § 1.8.): The use of dampening units for wet offset is mandatory for Offset related Banknote features/elements features (see also Q9, Q10) As these features are multi-color, to avoid easy counterfeit with commercial equipment, this then have to extend to the use of more than one dampening unit per side (recto and verso).

Please confirm that the dampening unit in all print units - even if retrofitted and chosen at the discretion of the BRBNMPL – shall not influence the register accuracy or the dimension consistency for the subsequent processes for all substrates (see also Q11, Q12)

BRBNMPL Response: It is an intrinsic requirement and need not be specified. It should be clearly understood that any optional/auxiliary requirements specified like Dampening unit etc., creates no dysfunctionality with respect to the product/further process.

Q9 Offset Security Features (p67, §1.9.; p71 C. 2nd§): The latest generation of Offset related Banknote features/elements are based on multi-color (minimum 2 colors, but in certain cases extended to 4) high registration features to exclude the reproduction on commercial or semi-commercial Offset presses. The specification to obtain these features is as follows:

Registration for all notes and on the entire sheet

- color to color recto (units 1-4) : $\sigma_3 < 25\mu m$
- color to color verso (units 5-8) : $\sigma_3 < 25\mu m$
- color to color look through (units 1-4 to units 5-8) : $\sigma_3 < 35\mu m$

Please confirm that the Banknote Offset Printing Machine has to comply with these registration specifications mandatory for the required latest generation of Offset related Banknote features/elements

BRBNMPL Response: Already tender calls for visits to verify the claims of the bidders as a part of technical bid evaluation for verifying the requirements mentioned in the tender including printing of latest generation offset features such as Moire pattern, Hidden image, Scrambled images etc.,; this list is only illustrative but not exhaustive. .

Q10 Offset related Banknote features/elements features (p67, §1.9.; p71 C. 2nd§)

Please confirm that the Banknote Offset Printing Machine has to comply with the registration specification (Q8) independent from the used substrates (see also Q11)

BRBNMPL Response: as explained in the previous answer

Q11 Bank Note Substrate (p68, §2.a): The list of substrates contains all currently used substrates. As these substrates will be important for the future of the Indian currency all specifications need to refer to them.

Please confirm that the specifications within the Banknote Offset Printing Machine has to comply with these substrates

BRBNMPL Response: Already mentioned in "Essential General Specification".

Q12 Bank Note Substrate (p68, §2.a): Due to the importance of the compliance with the substrates and the stringent bank note security specification, it is necessary to prove this compliance beyond a statement. It is impossible to revert an installation and to use a production system if it shows weaknesses after installation.

Will the BRBNMPL consider a stringent **test print** of the state-of-the-art security features (Q9, Q10) prior to qualification of an offering as being suitable?

BRBNMPL Response: Already tender calls for visits to verify the claims of the bidders as a part of technical bid evaluation for verifying the requirements mentioned in the tender.

Q13 Print Unit components (p71, 5th §); Impression Cylinder (p71, 7th §): A Bank Note Offset Printing Machine (see also Q9, Q10) needs to control the parameters mentioned in the specification and have the characteristics described. This is especially true for the blanket cylinders of such a machine.

Please confirm that the specification in the 7th § refers to the blanket cylinder collecting the print and not to the impression cylinder.

BRBNMPL Response: That's why the term applicable is given. If not applicable for the offered machine, bidder shall mention in their response.

Q14 Print Unit components (p71, 5th §); Impression Cylinder (p71, 7th §): A Bank Note Offset Printing Machine (see also Q9, Q10) needs to control the parameters mentioned in the specification and have the characteristics described. This is especially true for the blanket cylinders of such a machine.

Please confirm that the change of pressure (set, control and monitor impression forces) should not adversely influence the print and register quality on any print.

BRBNMPL Response: It is an intrinsic requirement and should be understood as such.

Q15 Delivery Piles (p72, §E 2nd bullet): a delivery pile for a banknote machine shall cope with the regular size of production batches of 10'000 sheets

Please confirm that the capacity for all piles needs to be 10'000 sheets

BRBNMPL Response: Our Minimum requirement is 7000 Sheets in a delivery pile. Bidder can offer anything more than that.

Q16 Security feature Inspection System (p76, §C): Some features listed can only be assessed in transparency (e.g. watermark, micro-text on threads)

Please confirm that the inspection includes an inspection in transparency.

BRBNMPL Response: We have specified our requirement. Bidder can choose the suitable mechanisms/light sources.

Q17 Security feature Inspection System (p76, §C): Some features listed can only be assessed under UV fluorescence illumination.

Please confirm that the inspection includes an inspection using UV fluorescence illumination.

BRBNMPL Response: We have specified our requirement. Bidder can choose the suitable mechanisms/light sources.

Johannes Schaede
CTO KBA-NOTASYS SA.

B.S.NAG
KBA NOTASYS

ATSUSHI TANAKA
KOMORI CORP.

(S.SRIKANTH)
Manager, BRBNMPL

(C.ANNADORAI)
AGM

OFFSET - Komori

Queries raised by M/s Komori Corporation, Japan during pre-bid meeting held on 26th September 2016 at BRBNMPL, CO, Bangalore in response to our Global Tender No. GT/OFF&FNG/CO/05/2016-17 dated 2nd September 2016 for 2 Offset Machines and 4 Finishing Machines

Section I: Notice Inviting Tender

Information related to this tender

Page 5

- Closing date and time for receipt of tenders : 16.00 Hrs on 19th October 2016
- Time and date of opening of Technical tender (Part l) : 16.30 Hrs on 19th October 2016

Question: As wrote in below, we have some questions and unclear matters about the required Technical Specifications to be clearly clarified by the Bharatiya Reserve Bank Note Mudran (P) Limited, (BRBNMRL).
Then, we have to consider the technical matters again after receipt of your clarifications.
Therefore, please kindly extend the submission date of the Tender by 2 weeks (1st week of November 2016).

BRBNMPL Response: It has been discussed and agreed upon to postpone the date of opening by another two weeks i.e., till 2nd November 2016

Section VII: Technical Specifications

Schedule 1: Offset Printing Machine

Page 67

1. BRIEF DESCRIPTION

#4 Offset machines should be compatible with the existing infrastructure/utilities presently available with BRBNMPL presses.
Question: Please confirm that the existing infrastructure/utilities can produce the plates used on our offering press. The drawings of the photopolymer and PS plate attached on the letter.

BRBNMPL Response: Basically it is solely the bidder's responsibility to satisfy one selves regarding the suitability of the bidders offered machine to the infrastructure available at the BRBNMPL's two presses.

#9 Offset machines shall be suitable for reproducing the latest generation of Offset related Banknote features/elements including Moire based features.

Question: Please explain about " Moiré based features" in detail.

BRBNMPL Response: "Moire" based feature is a type of feature wherein phase and frequency of dots/lines are modulated in such a way that the feature is invisible to the

bare eye and can be seen only through a specific gadget or decoder. Though such designs are made in the design studio during generation of designs, the offered machine should be capable of printing those designs.

2. ESSENTIAL GENERAL SPECIFICATIONS

d) Shall be suitable for maximum sheet size of 700 mm X 820 mm and minimum sheet size of 475 mm x 570 mm.
Question: Please accept minimum sheet size of 475 mm x 600 mm.

BRBNMPL Response: Discussed and agreed upon minimum size of 475 mm x 600 mm

k) Life of major spares like bearings of Plate and Impression cylinders etc., shall be provided along with the vibration spectrum chart and thermal images of new unused machines during pre-shipment at manufacturer's works.
Question: This specification seems for Intaglio Printing Machine. Do you also require the vibration spectrum chart and thermal images on your new offset press?

BRBNMPL Response: Yes it is required.

m) Remote control facility shall be provided for adjustment of important parameters such as plate cylinder nip pressure settings, plate register adjustments and ink flow control.
Question: Remote control of plate cylinder nip pressure settings seems for Intaglio Printing Machine. Besides, it is not necessary for offset press to adjust plate cylinder nip pressure settings frequently.

BRBNMPL Response: Discussed and agreed upon to amend the requirement of "remote adjustment of plate cylinder nip pressure" to "remote adjustment of Printing pressure".

Page 69

A. FEEDER & REGISTER UNIT

h) iv Pre-front lay device
Question: Komori press does not have this device. Please delete this requirement.

BRBNMPL Response: We may not delete. We will add "or suitable device to ensure proper circumferential registration".

h) vi Transfer control mechanisms
Question: Please explain about "Transfer control mechanism" in detail.

BRBNMPL Response: Means "a Mechanism for proper transfer of sheets ensuring perfect registration".

h) viii Crash sheet control mechanisms to avoid overloads
Question: Please explain about "Crash sheet control mechanisms to avoid overloads" in detail.

BRBNMPL Response: Means "machine should be able to sense and stop when multiple sheets have been fed to avoid cylinder damage".

ix) Notch position detector
Question: Please let us know size and position of Notch.

BRBNMPL Response: Notch is a semi-circular cut made in the side of a sheet with 15 mm dia. Position of notch may vary with denomination.

Page 69-70
B. INKING UNIT
b) The inking units shall employ suitable methodology for the application of ink onto the printing plates by means of transfer rollers and shall be capable of successfully printing with the specified offset inks.
Question: Can we understand that "transfer rollers" means "ink form rollers"?

BRBNMPL Response: Transfer rollers mean a set of multiple rollers that are used for transferring inks in the ink train on to the printing plate. Therefore any roller in the ink train is a transfer roller. However, bidder is free to give his layout and nomenclature for such rollers.

e) **Independent drive of inking unit**: Each inking unit shall have independent drive mechanism to enable the operator to do ink make-ready or cleaning work of the selected unit.
Question: The inking unit of our press does not have independent drive mechanism. Please delete this requirement. However, the inking unit of our press can do ink make-ready and cleaning work efficiently.

BRBNMPL Response: This feature is required: however, if independent drive unit is not there, then the offered machine should ensure safe and efficient make ready and cleaning operation of the inker unit. This aspect will be particularly checked and verified during pre-evaluation tour under taken by BRBNMPL.

f) **Ink duct roller throw-on/off device**: The ink duct roller shall go on or off against the inking rollers automatically when signalled.
Question: Can we understand that "ink duct roller" means "ink form roller"?

BRBNMPL Response: Ink duct roller means roller that transfers ink from the ink duct to roller train. However the requirement of On/Off is given to ensure that no unnecessary supply of ink is made when the machine is in idle run. If this provision of On/Off is in other roller/s to meet this functional requirement, it will be accepted.

g) The inking unit shall be capable of performing the following functions: -
- Provisions shall be made to ensure that upon engaging an ink duct, the inking-in roller shall contact the plate with the last pre-set nip pressure.

Question: This function seems for Intaglio Printing Machine.
Also, can we understand that "inking-in roller" means "ink form roller"?

BRBNMPL Response: Yes your understanding is correct.

- Each duct shall be equipped with suitable ink agitators to distribute and maintain the homogeneity of the ink in the duct and prevent it from backing up in the duct. The ink agitator shall agitate the ink over the full width of the inker. The drive shall be robust.

Question: This function seems for Intaglio Printing Machine.
Regarding Offset Printing Machine, not of all agitators, but some of them shall be attached to ink duct.
So please let us know the number of required ink duct for agitators.

BRBNMPL Response: Agreed on 4 ink agitators with 2 on each side

Inking unit shall consist of the following: -

4. 16 Ink agitators

Question: 16 ink agitators is too much for one Offset Printing Machine. So please change number of ink agitators as minimum requirement.

BRBNMPL Response: Agreed on 4 ink agitators with 2 on each side

5. 20 Ink Divider sets

Question: 20 Ink Divider sets may not be enough for one Offset Printing Machine. Please kindly indicate the revised number of your requirement.

BRBNMPL Response: Agreed on 50 Ink Divider sets

6. Ink level sensors for all ink ducts

Question: This specification seems for Intaglio Printing Machine. Please delete the requirement.

BRBNMPL Response: Not required

Page 71

C. PRINTING UNIT

Offset printing unit shall be capable of printing new generation offset print elements such as Moire based features, Scrambled images, Hidden images etc. and enable high precision colour to colour register and sharp line structures.

Question: Please explain about "Moire based features, Scrambled images and Hidden images" in detail.

BRBNMPL Response: Explained in Pre-bid meeting

4. Centralized Lubrication system

Question: This Centralized Lubrication system is also described as D. CENTRALIZED LUBRICATION SYSTEM on Page 72
So please delete this requirement.

BRBNMPL Response: Accepted

Plate Cylinder

- Shall be equipped with devices to maintain proper positioning of the printing plates.

- Shall have provisions to enable accurate handling of the printing plates to ensure printing in registration.

Question: Can we understand that "devices" means "register pin system"?
Meanwhile, please let us know the difference between the above two requirements clearly.
Also, please explain the meaning of the above two requirements in detail.

BRBNMPL Response: What we mean is "any Device(s) that ensure/s accurate individual plate positioning and plate to plate registration.

- Offered machine shall be suitable for the existing Printing plate specifications, current plate layout and punching system.

Question: Plate specifications of our offering machine is different from that of your existing Printing press, however, it does not make major effect on BRBNMPL's operation.
Besides, please confirm that our offering plate described in the attached drawing can be produced by your existing facilities without problem.

BRBNMPL Response: Basically it is solely the bidder's responsibility to satisfy one selves regarding the suitability of the bidders offered machine to the infrastructure available at the BRBNMPL's two presses

Impression Cylinder

- Shall have easy access for blanket mounting, cleaning and inspection.

Question: Please delete "blanket mounting" from above requirement.

- Shall accept adequate packing boards/sheets underneath the blanket.

Question: Please delete this requirement.

- Shall be equipped with Automatic blanket cleaning device, if applicable.

Question: Please delete "blanket" from the above requirement.

- Shall have provisions to reliably set, control and monitor Impression forces.

Question: Monitor Impression forces seem for Intaglio Printing Machine. Please delete the requirement as the impression cylinder of our press does not have the blankets.

- Shall be equipped with devices to stretch the blanket flat by aligning and clamping on the cylinder.

Question: Please delete this requirement.

BRBNMPL Response: If the sub requirements are not applicable, the bidder may mention that in their response.

Page 72

E. DELIVERY

Delivery unit shall be equipped with all facilities such as proper delivery chain mechanism, mechanism for opening of delivery gripper to ensure delivery of sheets in the appropriate piles, suction and blowers to ensure proper alignment and jogging of sheets, mechanism for over shoot/jamming of sheets, rear and lateral sheet stops, sheet guiding drums, suitable sensors for counting, selection of pile.

Question: Please confirm that the sentence of "mechanism for avoiding over shoot/jamming of sheets, rear and lateral sheet stops, sheet guiding drums, suitable sensors for counting, selection of pile" is correct.

BRBNMPL Response: Accepted

- The pile delivery system shall permit continuous piling by changing the pile from one to the other automatically according to the number of sheets required on each pile, which has been pre-set on the counter. Defective sheets shall be delivered onto the sampling/reject pile when a signal of rejection is received from inspection system or the sampling pushbutton is pressed by the operator. Sampling can be selected from any one specific plate or all the three plates.

Question: Our press needs not to select specific plate. So please delete "Sampling can be selected from any one specific plate or all the three plates" from above requirement.

BRBNMPL Response: We have erroneously mentioned "plate" in lieu of "blanket". Komori to revert back on how they ensure blanket specific quality defects are identified.

- Shall have provision of on-line drawing of test sheet for quality checks.

Question: Can we understand that "on-line drawing" means "sampling"? Also, please explain about" on-line drawing "in detail.

BRBNMPL Response: Yes your understanding is correct.

H. REMOTE ELECTRONIC CONSOLE

The machine should allow remote and independent adjustment of plate register and plate cylinder nip pressure when necessary from the Remote Electronic Console.

Question: Please change "plate cylinder nip pressure" to "printing pressure". Please also confirm that one electronic console is sufficient for both sides printing adjustment.

BRBNMPL Response: Discussed and agreed upon to amend the requirement of "remote adjustment of plate cylinder nip pressure" to "remote adjustment of Printing pressure". One remote electronic console is sufficient for both sides.

Page 73

I. SYSTEM FOR MONITORING PRODUCTION DATA

- For further analysis the system shall provide an interface to external Management Information Systems and also any source code required for MIS development.

Question: Komori cannot disclose source codes as these are confidential developmental technology.

Please confirm that the interface which Komori proposed for intaglio press is acceptable.

BRBNMPL Response: Any source code involved for MIS development by customer to be provided.

- Shall be compatible for interfacing with track & trace facilities.

Question: Please explain about "interfacing with track & trace facilities" in detail.

BRBNMPL Response: Explained during pre-bid meeting.

. Shall be suitable to monitor and collect the relevant printing information from the banknote printing press and display it in forms to assist the operators for more efficient production.

Question: Please explain about "relevant printing information" in detail.

BRBNMPL Response: Already provided under "Production Management System" in Page 73.

Hardware

c) Extended communication PCB/COMPUTER (for communication with PLC)

Question: Please explain about the above hardware in detail.

BRBNMPL Response: Communication can be only with PLC.

Software

It shall monitor and display the state/location of the items such as:

. Abnormal state of oil (lubrication oil, hydraulic oil)

Question: Komori press does not have Hydraulic filter/oil. So please delete "Hydraulic filter/oil" from above requirement.

BRBNMPL Response: If the offered press does not require these items, the bidder may mention as not required or not applicable. However, bidder shall ensure proper functionality.

. Abnormal state of oil (lubrication oil, hydraulic oil)

Question: Komori press does not have Hydraulic oil. So please delete "Hydraulic oil" from above requirement.

BRBNMPL Response: If the offered press does not require these items, the bidder may mention as not required or not applicable. However, bidder shall ensure proper functionality.

Page 74

. Stoppage time (can be categorized manually into the following items) - Temperature indicators for various places of printing unit.

Question: Please explain what is the purpose of the requirement.

BRBNMPL Response: In case some waiting time is involved for achieving set temperature then such time will have to categorised under this head.

K. ONLINE PRINT QUALITY INSPECTION SYSTEM (FRONT & BACK) with SECURITY FEATURE DETECTION SYSTEM

B. Specification for front & back print quality examination and security feature inspection system

The Online Print Quality Inspection System should be capable of inspecting and detecting printing defects on both Front and Back sides of the offset printed sheets along with the capability to detect security features such as Watermark, Security Thread, Security Fibres. It should be pre-disposed for retro-fitment of systems for detection of taggant, Foil Patch etc.

Question: Electrical & software interface for the retro-fitment of systems for detection of taggants, foil patch etc. can be provided. However, we cannot mechanically accommodate these 3rd party systems. This scope should lie with the respective manufacturer. Is this acceptable?

BRBNMPL Response: Accepted.

iv. System should be able to detect the following print defects (on both FRONT and REAR side of the sheet).
a. Paper defect: holes, tears, folded corners and crease.
Question: What are the IR properties of the ink used for Offset printing?
As long as the Ink used should not absorb IR, such inspection can be performed.

BRBNMPL Response: The above limitation is acceptable. However, inspection using visual light also should be explored.

e. Mis-registration and other printing related defects.
Question: In offset inspection, what is the reference layer/feature to measure mis-registration? In intaglio machine, intaglio print is normally measured with respect to offset.

BRBNMPL Response: Sheet edge shall be taken as reference.

Page 76

C. Specification for security feature inspection system

System should be capable of inspecting security threads in minimum 4 columns and maximum 6 columns in a sheet for the following:
i.b. Continuity of Security thread from Top to Bottom of Sheet in all Columns

Question: What is the minimum break in continuity of the thread within a sheet? Breakage greater than 2 mm can be detected.

BRBNMPL Response: There is no lower limit to the size of such breaks. Therefore, any break of whatever size will have to be checked.

i.c. Thread flipping in security thread.
Question: Will the thread be flipped multiple times within a single sheet? Thread flipping can be detected if the thread is flipped throughout the sheet

BRBNMPL Response: Though rare, theoretically, there can be multiple flips in a single thread within a sheet. However, detection of this feature is applicable only for threads which have different coatings on each side.

Ii. Presence/Absence of Watermarks on all UP's of the sheet
Question: What are the watermarks to be inspected?
Inspection can be performed only for watermarks in the plain background i.e overt watermarks. It is not possible to inspect covert watermarks.

BRBNMPL Response: Our requirement is to inspect all Watermarks.

4. MAINTENANCE:

a) Detailed engineering drawings for all components in both soft and hard copies.

Question: Komori cannot disclose Detailed engineering drawings for all components as these are confidential developmental technology.

BRBNMPL Response: Assembly drawing with exploded views wherever necessary to facilitate dismantling and assembly during maintenance should be provided by the successful bidder. Declaration this effect to be given by the bidder along with the technical bid.

Page 77

5. ELECTRIC AND ELECTRONIC CONTROL

Timing control: The following basic timings shall be detected and controlled electrically by an encoder.

• Front lay suspension

Question: Please explain about "Front lay suspension" in detail.

BRBNMPL Response: It means Front lay Timing.

Page 78

Printing sheet quantity counter
Sheet quantity counter shall be provided in the operation panel of the delivery unit.
The following counting operations shall be featured in a central display: -

a) Counting of sheets fed into the press by swing-arm grippers
b) Counting of sheets fed into first delivery pile
c) Counting of sheets fed into the second delivery pile.
d) Counting of test/reject sheets fed into the sampling pile.
e) Counting of "on-impression" passes of the impression/blanket cylinder.

Question: The above counting operations (a to e) are featured in the central display of our operation stand, not in the operation panel of the delivery unit.
Please accept the aforesaid display.
Also, please let us know the purpose of e) in detail.

BRBNMPL Response: Aforesaid display design is accepted. "On impressions" means number of impressions.

UPS for signal lines

It shall provide back up for hydraulic valve control signals which throw off the impression cylinder in case of power failure. (It shall back up in case of power failure till it completes storing the data.)

Question: Komori press does not employ hydraulic system. Then, the backup for hydraulic valve control is not required. However, all data stored in KMS will be maintained in case of power failure.

BRBNMPL Response: If the offered press does not require these items, the bidder may mention as not required or not applicable. However, bidder shall ensure proper functionality.

6. SAFETY:

Safety Guards: Mechanisms on both the drive and operation sides of the press shall be fully covered and suitable lubrication at the register unit shall be employed to ensure safety, reduce wear, maintain accuracy, and improve durability of the machine.

Question: Please let us know the relationship between "SAFETY" and "suitable lubrication at the register unit".

BRBNMPL Response: The term "register unit" has appeared erroneously. Will be deleted.

7. ACCESSORIES/SPARES PER MACHINE

c) Forks for continuous feeding

Question: Please let us know the required number of Forks for continuous feeding.

BRBNMPL Response: This being essential accessory, bidder should mention.

e) Ink agitators — 16 Nos.

f) Ink Dividers — 20 sets

Question: Quantity of the above two items are not suitable for one Offset Printing Machine. So please let us know the suitable quantity of them.

BRBNMPL Response: To be amended as, **Ink Agitators – 4 Nos.**
Ink Dividers – 50 sets

g) Duct blades — 16 Nos. Nil

h) Ink Side seals — 16 sets

Question: The above two items seem not to be required for offset press. So please delete from the requirement as spare parts.

In addition to above, please let us know the numbers of vibration roller required.

BRBNMPL Response: Requirement of Duct Blades to be removed but requirement of Ink Side seals remain.

In addition, 1 complete set of rubber rollers along with 4 extra sets of Vibrator rollers for each ink train to be provided as spare.

Johannes Schroede
CFO, KBA-NOTASYS SA

ATSUSHI TANAKA
KOMORI CORP.