

GLOBAL EXPRESSION OF INTEREST

**Expression of Interest for procurement of state-of-the-art Pre-printing,
Printing, Binding and Mechanical Instruments/ Machineries for
Government of India Press**

**Directorate of Printing
Ministry of Housing and Urban Affairs
'B', Wing, Nirman Bhawan
Maulana Azad Road, New Delhi-110011**

Directorate of Printing
Ministry of Housing and Urban Affairs
'B', Wing, Nirman Bhawan
Maulana Azad Road, New Delhi-110011

Tel.: 011-23061570, 23061413
Email: dir-pr@nic.in

Fax: 011-2306-3394
Website: www.dop.gov.in
Date of issue: 24.10.2018

NOTICE FOR GLOBAL EXPRESSION OF INTEREST (EOI)

1. Name of the organization : Directorate of Printing (an attached Office of Ministry of Housing and Urban Affairs, Government of India)
2. Type of Organization : Central Government
3. EOI Reference No. : 14/1/2018-T&P
4. EOI Title : Expression of Interest for procurement of state-of-the-art pre-printing, printing, binding and mechanical instruments/machineries as per Annexure-I to Annexure-IV respectively.
5. Category : Non-Security
6. Sub-category : Capital Item
7. Date of announcement : 24.10.2018
8. Last date of submission : 1430 Hrs (IST) on 7.12.2018
9. The Director (Printing), Directorate of Printing, Nirman Bhawan, New Delhi invites Expression of Interest from experienced and reputed manufacturers for procurement of state-of-the-art pre-printing, printing, binding and mechanical instruments/machineries as per Annexure-I to Annexure-IV respectively.
10. The brief description:

Directorate of Printing (DoP) is an attached office of Ministry of Housing and Urban Affairs, responsible for printing works of Government of India.

DoP intends to procure the state-of-the-art pre-printing, printing, binding and mechanical instruments/machineries. The basic parameters, salient features and other requirements of the machines are placed at Annexure-I to Annexure-IV.
11. Important instruction to bidders:
 - (a) The intending bidder(s) shall submit all technical details, capabilities, and experience for supply, installation, commissioning of state-of-the-art pre-printing/printing/binding and mechanical instruments/machinery.
 - (b) The bidders should give a declaration that they have not been blacklisted or debarred by Government of India or any Government/PSU/Reputed organisation in the past.

.....2/-

- (c) The documents in support of Expression of Interest needs to be submitted duly signed by authorized representative of the company.
 - (d) The interested bidders should also submit a list of customers to whom they have supplied and installed similar types of machineries with details and performance report from their clients.
 - (e) The interested bidders shall also submit copies of Audited financial statement for the last five years.
12. The bidder(s) should also confirm specifically that:
- (a) The bidder is competent and legally authorized to submit and enable to enter into a legally binding contract.
 - (b) The details of Supply and Installation of similar type of machineries by them during last five years.
 - (c) The bidders should confirm their annual installed capacity for supply and installation of similar type of machinery.
 - (d) The bidders will absolve the purchaser against any infringement of patent rights and other contract provisions.
13. The duly filled details along with supporting documents should be submitted in a sealed envelope superscripting “Expression of Interest for state-of-the-art machinery” in person or through registered post/speed post so as to reach the following address on or before the prescribed date and time as under:
- The Director (Printing)
Directorate of Printing,
'B'-Wing, Nirman Bhawan,
Maulana Azad Road,
New Delhi-110011
Phone No. : 011-23061413
Fax No. : 011-2306-3394
Email: dir-pr@nic.in
- Last date and time for receipt of Expression of Interest: 07.12.2018
at 1430 Hrs. (IST)
14. Delay due to postal or any other reasons will not be entertained. Offer received after the due date and time will be summarily rejected.
15. All the eligible firms will be intimated in due course for their presentation at Directorate of Printing, 'B'-Wing, Nirman Bhawan, Maulana Azad Road, New Delhi-110011.

Dy Director (B&F)
for Directorate of Printing

Annexure-I

(Pre-Printing Machineries & Equipments)

CTP – Fully Automatic

Imaging

- Imaging Technology : Infrared Thermal, External Drum
- Light Source : Infrared Laser Diode
- Output resolution : 2,400 / 2,540 dpi
- Min spot size : 10 micron

Input

- Media – Thermal CTP plates, ablative & non ablative, Processless thermal plates
- Media size : Min – 330 mm X 305 mm
: Max – 950 mm X 1160 mm
- Media thickness : 0.14 – 0.40 mm

Automation

- Plate loading – Multi Cassette Autoloader, min 2 cassettes, automatic slip sheet removal
- Plate unloading – In-line conveyor to plate processor
- Punch – In-line punch compatible with printing machineries

Software

- RIP : Direct connectivity with dedicated RIP
- 3rd party connectivity : Ability to accept 1 bit Tiff files from 3rd party workflow

Output

- Image Area : Min – 318 mm X 305 mm
: Max – 938 mm X 1160 mm
- Screening : AM / FM hybrid screening technology

Processor

- Duty cycle : 30,000 – 50,000 sqm / year
- Standard Accessories : Drip trays, conductivity probe, built-in chiller, Dual developer brush, single wash brush
- Input : In-line with CTP through conveyor
- Output : In-line plate stacker

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.

6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.
8. Supplier should provide suitable air compressor, server, computer systems etc. for smooth operation of CtP.

Desk Top Publishing System

- **Processor** : Intel I7
- **CPU:** Cooler
- **Motherboard** : Intel
- **Memory** : 8 GB
- **Graphics Card** : Sapphire R7 250X 1 GB DDR5
- **Power Supply** : Antec VP5000
- **Cabinet** : Corsair Spec-1
- **Internal Storage** : 1 TB - 7200 RPM HDD
- **SSD** : Samsung 850 Pro 120 GB SSD
- **Optical Drive** : DRW 24B3ST DVD R/W
- **Monitor** : TFT 21”
- **Keyboard** : TVS Gold
- **Mouse** : Optical
- **USB** : 4.0
- **Software** : Indesign, Page Maker, Coreldraw
Photoshop, MS-Office, Hindi
Software
Anti-virus with multiple user license.

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.
 4. The computers should have high-end screen to give the result similar to colour on offset machine printed paper.

HEAVY-DUT PRINTER – A3 Size

Printing Technology	Laser Black
Print Speed	More than 40 ppm
Print Resolution	1200 x 1200 dpi
Paper	A 3 Size
Duplex Printing	Required
Media	Paper – 45 gsm to 100 gsm
Process Speed	1.2 GHz
Automatic paper sensor	Yes
Paper Trays	Minimum 2 Nos.
Connectivity, standard	1 Hi-Speed USB 2.0 Device; 2 Hi-Speed USB 2.0 Host; 1 Gigabit Ethernet 10/100/1000T network
Memory Standard	More than 1 GB
Energy efficiency	ENERGY STAR® qualified
Operating temperature range	15 to 27°C
Operating humidity range	10 to 90% RH
Warranty	One-year onsite warranty.

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

HEAVY-DUT PRINTER – A4 Size

Printing Technology	Laser Black
Print Speed	More than 70 ppm
Print Resolution	1200 x 1200 dpi
Paper	A 4 Size
Duplex Print Options	Automatic (standard)
Media	Paper – 45 gsm to 100 gsm
Process Speed	1.2 GHz
Automatic paper sensor	Yes
Paper Trays	2 Nos.
Connectivity, standard	1 Hi-Speed USB 2.0 Device; 2 Hi-Speed USB 2.0 Host; 1 Gigabit Ethernet 10/100/1000T network
Memory Standard	More than 1 GB
Energy efficiency	ENERGY STAR® qualified
Operating temperature range	15 to 27°C
Operating humidity range	10 to 90% RH
Warranty	One-year onsite warranty.

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Annexure-II

(Printing Machineries & Equipments)

**Computerized 5 Colour Sheet Fed Offset Press with
UV Coater & IR Drying System
(4 Basic Colour + 1 Special Colour + UV Coater & IR Drying System)**

Sheet Size		
Maximum (mm/inch)	:	530 x 750mm / 20.9 x 29.5 inch
Minimum (mm/inch)	:	210 x 280mm / 8.3 x 11.0 inch
Image area Maximum (mm/inch)	:	510 x 740mm / 20.0 x 29.1inch
Maximum Coating area (mm/inch)	:	515 x 745mm / 20.3 x 29.3 inch
Stock thickness (mm/inch)	:	0.04 to 0.6mm / 0.0016 to 0.024 inch
Substance		45 to 300 gsm
Maximum Speed	:	12,000 IPH or more
Pile height including pallet, feeder	:	1050 mm / 41.3 inch
Pile height including pallet, delivery	:	1100 mm / 43.3 inch

Apart from the above technical specifications the machine should have the following features:

- (a) All operation of machine *via* touch screen panel and with electronic switches/buttons on printing unit *i.e.* CPC.
- (b) Diagnostic information through touch screen.
- (c) Machines supplier to supply suitable UPS for the machine.
- (d) **Paper Setting:**
 - (i) Dual system feeder head with alpha numeric text display
 - (ii) Fine height adjustment of paper pile against feeder head
 - (iii) Vacuum Conveyor belts on feeding and delivery bed
 - (iv) Double sheet feed detector and sheet missing device (Mechanical, Photoelectrical)
 - (v) Anti-static air blast & delivery anti-static bar
 - (vi) Pneumatic Side Lays
 - (vii) Sets of front lays, left & right, can be adjustable separately (range to be specified).
 - (viii) Auto-impression Pressure Setting, Gripper Pressure Setting as per sheet thickness.
 - (ix) Misaligned sheet feed correction system at feeder head to check misaligned sheets on running machine.
 - (x) Thin paper attachment for smooth running of uneven or wavy paper.

- (e) **Registration System:** Auto Registration System *via* touch screen system/Control Panel.
 - (i) Lateral*
 - (ii) Circumferential *
 - (iii) Diagonal *
 - (*range to be specified)
- (f) **Inking System:** Auto ink cleaning system with wash up trays. Auto ink pre-set via compatible software with CtP for each job separately i.e. machine should be CIP3/CIP4 plug and play ready.
- (g) **Dampening System:** Alcohol Dampening system with chiller unit showing temperature and pH value on screen, Auto cleaning system and Automatic removal of foreign objects (hickeys) from the plate. Can be activated or deactivated from the touch screen panel during the printing process.
- (h) **Plate Cylinder & Plate Clamping System:** The plate cylinder surface should be absolute resistance to chemicals for long service life. Automatic Plate changing system and auto Plate Clamping system (Tool less).
- (i) **Blanket Cylinder:** Bearer to bearer contact with plate cylinder and remote setting of print pressure. Automatic Blanket Cleaning System. Anti-rust treatment for blanket cylinder for long service life.
- (j) **Impression Cylinder:** Monitoring of sheet presence on impression cylinder. Automatic Impression Cylinder Cleaning System.
- (k) **Transfer Cylinder:** Transfer Cylinder cocking through touch screen control panel. System to pass printed sheet without damaging the image. Anti-rust treatment for transfer cylinder for long service life.
- (l) **Powder Spray System:** Anti set-off powder spray system/unit. Powder spraying to be set automatically.
- (m) **Lubrication System:** Centralized automatic lubrication system.
- (n) **UV Coater:** UV proof oil seals, bearings for inker/dampener rollers, warmish temperature control, warmish level censor, automatic cleaner, Consol-controlled register setting, Automatic coating forme change.
- (o) **IR Drier System** must be factory fitted.
- (p) **Electrical System:** Electrically Complete with 415 Volts 3 Phase 50 Hz. Having reverse phasing protection.
- (q) **Safety System:** CE safety regulations & GS safety certification and other certification.

Safety device Safety arrangements to conform to the Factory Act and Electricity Act and of all international requirements.

Driving/regulating/Control Complete to operate on electrical power AC 400/440-V 3 phase, 50 cycles, having Reverse phasing protection.

- Accessories**
1. Rubber rollers, motors for inking system,
 2. Operating and special tools

3. Two sets of documents consisting of: Instruction manual for the press and control console, safety instructions, cleaning and maintenance instructions, spare parts catalogue in hard copy and soft copy.
4. All the mechanical and electrical wear and tear consumable parts for 2 years to be supplied with the machine.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Computerized Four Colour Sheet Fed Offset Press

Sheet Size		
Maximum (mm/inch)	:	650 x 940mm / 25.6 x 37.0 inch
Minimum (mm/inch)	:	340 x 480mm / 13.4 x 18.9 inch
Image area Maximum (mm/inch)	:	620 x 920mm / 24.4 x 36.2 inch
Stock thickness (mm/inch)/	:	.04 to 0.6mm/0.0016 to 0.024 inch
Substance		45 to 300 gsm
Maximum Speed	:	12,000 IPH or more
Pile height including pallet, feeder	:	1100 mm / 43.3 inch
Pile height including pallet, delivery	:	1100 mm / 43.3 inch

Apart from the above technical specifications the machine should have the following features:

- (a) All operation of machine *via* touch screen panel and with electronic switches/buttons on printing unit *i.e.* CPC.
- (b) Diagnostic information through touch screen.
- (c) Machines supplier to supply suitable UPS for the machine.
- (d) **Paper Setting:**
 - (i) Dual system feeder head with alpha numeric text display
 - (ii) Fine height adjustment of paper pile against feeder head
 - (iii) Vacuum Conveyor belts on feeding and delivery bed
 - (iv) Double sheet feed detector and sheet missing device (Mechanical, Photoelectrical)
 - (v) Anti-static air blast & delivery anti-static bar
 - (vi) Pneumatic Side Lays
 - (vii) Sets of front lays, left & right, can be adjustable separately (range to be specified).
 - (viii) Auto-impression Pressure Setting, Gripper Pressure Setting as per sheet thickness.
 - (ix) Misaligned sheet feed correction system at feeder head to check misaligned sheets on running machine.
 - (x) Thin paper attachment for smooth running of uneven or wavy paper.

- (e) **Registration System:** Auto Registration System *via* touch screen system/Control Panel.
 - (i) Lateral *
 - (ii) Circumferential *
 - (iii) Diagonal *
 (*range to be specified)
- (f) **Inking System:** Auto ink cleaning system with wash up trays. Auto ink pre-set via compatible software with CtP for each job separately i.e. machine should be CIP3/CIP4 plug and play ready.
- (g) **Dampening System:** Alcohol Dampening system with chiller unit showing temperature and pH value on screen, Auto cleaning system and Automatic removal of foreign objects (hickeys) from the plate. Can be activated or deactivated from the touch screen panel during the printing process.
- (h) **Plate Cylinder & Plate Clamping System:** The plate cylinder surface should be absolute resistance to chemicals for long service life. Automatic Plate changing system and auto Plate Clamping system (Tool less).
- (i) **Blanket Cylinder:** Bearer to bearer contact with plate cylinder and remote setting of print pressure. Automatic Blanket Cleaning System. Anti-rust treatment for blanket cylinder for long service life.
- (j) **Impression Cylinder:** Monitoring of sheet presence on impression cylinder. Automatic Impression Cylinder Cleaning System.
- (k) **Transfer Cylinder:** Transfer Cylinder cocking through touch screen control panel. System to pass printed sheet without damaging the image. Anti-rust treatment for transfer cylinder for long service life.
- (l) **Powder Spray System:** Anti set-off powder spray system/unit. Powder spraying to be set automatically.
- (m) **Delivery System:** Pile delivery with self contained gripping system. Paper size adjustment system with proper stopper, side jogger, sheet decurler and fans in delivery with auto lowering of delivery pile and all necessary system to deliver the printed sheets without damaging their image.
- (n) **Lubrication System:** Centralized automatic lubrication system.
- (o) **Electrical System:** Electrically Complete with 415 Volts 3 Phase 50 Hz., having Reverse phasing protection
- (p) **Safety System:** CE safety regulations & GS safety certification and other certification.

Safety device Safety arrangements to conform to the Factory Act and Electricity Act and of all international requirements.

Driving/regulating/Control Complete to operate on electrical power AC 400/440-V 3 phase, 50 cycles, having Reverse phasing protection.

Accessories

1. Rubber rollers, motors for inking system,
2. Operating and special tools
3. Two sets of documents consisting of: Instruction manual for the press and control console, safety instructions, cleaning and maintenance instructions, spare parts catalogue in hard copy and soft copy.
4. All the mechanical and electrical wear and tear consumable parts for 2 years to be supplied with the machine.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

**Computerized 4 Colour (2x2) Convertible Perfecting
Sheet Fed Offset Machine**

Sheet Size		
Maximum (mm/inch)	:	650 x 940 mm / 25.6 x 37.0 inch
Minimum (mm/inch)	:	340 x 480 mm / 13.4 x 18.9 inch
Image area Maximum (mm/inch)	:	620 x 920 mm / 24.4 x 36.2 inch
Stock thickness (mm/inch)/	:	.04 to 0.6 mm/0.0016 to 0.024 inch
Substance		45 to 300 gsm
Maximum Speed	:	12,000 IPH or more
Pile height including pallet, feeder	:	800 to 1100 mm / 31.5 to 43.3 inch
Pile height including pallet, delivery	:	600 to 1000 mm / 23.6 to 39.3 inch

Apart from the above technical specifications the machine should have the following features:

- (a) All operation of machine *via* touch screen panel and with electronic switches/buttons on printing unit *i.e.* CPC.
- (b) Diagnostic information through touch screen.
- (c) Machines supplier to supply suitable UPS for the machine.
- (d) **Paper Setting:**
 - (i) Dual system feeder head with alpha numeric text display
 - (ii) Fine height adjustment of paper pile against feeder head
 - (iii) Vacuum Conveyor belts on feeding and delivery bed
 - (iv) Double sheet feed detector and sheet missing device (Mechanical, Photoelectrical)
 - (v) Anti-static air blast & delivery anti-static bar
 - (vi) Pneumatic Side Lays
 - (vii) Sets of front lays, left & right, can be adjustable separately (range to be specified).
 - (viii) Auto-impression Pressure Setting, Gripper Pressure Setting as per sheet thickness.
 - (ix) Misaligned sheet feed correction system at feeder head to check misaligned sheets on running machine.
 - (x) Thin paper attachment for smooth running of uneven or wavy paper.

- (e) **Registration System:** Auto Registration System *via* touch screen system/Control Panel.
 - (iv) Lateral *
 - (v) Circumferential *
 - (vi) Diagonal *
 (*range to be specified)
- (f) **Inking System:** Auto ink cleaning system with wash up trays. Auto ink pre-set via compatible software with CtP for each job separately i.e. machine should be CIP3/CIP4 plug and play ready.
- (g) **Dampening System:** Alcohol Dampening system with chiller unit showing temperature and pH value on screen, Auto cleaning system and Automatic removal of foreign objects (hickeys) from the plate. Can be activated or deactivated from the touch screen panel during the printing process.
- (h) **Plate Cylinder & Plate Clamping System:** The plate cylinder surface should be absolute resistance to chemicals for long service life. Automatic Plate changing system and auto Plate Clamping system (Tool less).
- (i) **Blanket Cylinder:** Bearer to bearer contact with plate cylinder and remote setting of print pressure. Automatic Blanket Cleaning System. Anti-rust treatment for blanket cylinder for long service life.
- (j) **Impression Cylinder:** Monitoring of sheet presence on impression cylinder. Automatic Impression Cylinder Cleaning System.
- (k) **Transfer Cylinder:** Transfer Cylinder cocking through touch screen control panel. System to pass printed sheet without damaging the image. Anti-rust treatment for transfer cylinder for long service life.
- (l) **Powder Spray System:** Anti set-off powder spray system/unit. Powder spraying to be set automatically.
- (m) **Delivery System:** Pile delivery with self contained gripping system. Paper size adjustment system with proper stopper, side jogger, sheet decurler and fans in delivery with auto lowering of delivery pile and all necessary system to deliver the printed sheets without damaging their image.
- (n) **Lubrication System:** Centralized automatic lubrication system.
- (o) **Electrical System:** Electrically Complete with 415 Volts 3 Phase 50 Hz., having Reverse phasing protection
- (p) **Safety System:** CE safety regulations & GS safety certification and other certification.

Safety device Safety arrangements to conform to the Factory Act and Electricity Act and of all international requirements.

Driving/regulating/Control Complete to operate on electrical power AC 400/440-V 3 phase, 50 cycles, having Reverse phasing protection.

Accessories

1. Rubber rollers, motors for inking system,
2. Operating and special tools
3. Two sets of documents consisting of: Instruction manual for the press and control console, safety instructions, cleaning and maintenance instructions, spare parts catalogue in hard copy and soft copy.
4. All the mechanical and electrical wear and tear consumable parts for 2 years to be supplied with the machine.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Computerized 2 Colour Convertible Perfecting Sheet Fed Offset Machine

Sheet Size		
Maximum (mm/inch)	:	650 x 940 mm / 25.6 x 37.0 inch
Minimum (mm/inch)	:	340 x 480 mm / 13.4 x 18.9 inch
Image area Maximum (mm/inch)	:	620 x 920 mm / 24.4 x 36.2 inch
Stock thickness (mm/inch)/ inch	:	.04 to 0.6 mm/ 0.0016 to 0.024
Substance		45 to 300 gsm
Maximum Speed	:	12,000 IPH or more
Pile height including pallet, feeder	:	1100 mm / 43.3 inch
Pile height including pallet, delivery	:	1100 mm / 43.3 inch

Apart from the above technical specifications the machine should have the following features:

- (a) All operation of machine *via* touch screen panel and with electronic switches/buttons on printing unit *i.e.* CPC.
- (b) Diagnostic information through touch screen.
- (c) Machines supplier to supply suitable UPS for the machine.
- (d) **Paper Setting:**
 - (i) Dual system feeder head with alpha numeric text display
 - (ii) Fine height adjustment of paper pile against feeder head
 - (iii) Vacuum Conveyor belts on feeding and delivery bed
 - (iv) Double sheet feed detector and sheet missing device (Mechanical, Photoelectrical)
 - (v) Anti-static air blast & delivery anti-static bar
 - (vi) Pneumatic Side Lays
 - (vii) Sets of front lays, left & right, can be adjustable separately (range to be specified).
 - (viii) Auto-impression Pressure Setting, Gripper Pressure Setting as per sheet thickness.
 - (ix) Misaligned sheet feed correction system at feeder head to check misaligned sheets on running machine.
 - (x) Thin paper attachment for smooth running of uneven or wavy paper.

- (e) **Registration System:** Auto Registration System *via* touch screen system/Control Panel.
 - (vii) Lateral *
 - (viii) Circumferential *
 - (ix) Diagonal *
 (*range to be specified)
- (f) **Inking System:** Auto ink cleaning system with wash up trays. Auto ink pre-set via compatible software with CtP for each job separately i.e. machine should be CIP3/CIP4 plug and play ready.
- (g) **Dampening System:** Alcohol Dampening system with chiller unit showing temperature and pH value on screen, Auto cleaning system and Automatic removal of foreign objects (hickeys) from the plate. Can be activated or deactivated from the touch screen panel during the printing process.
- (h) **Plate Cylinder & Plate Clamping System:** The plate cylinder surface should be absolute resistance to chemicals for long service life. Automatic Plate changing system and auto Plate Clamping system (Tool less).
- (i) **Blanket Cylinder:** Bearer to bearer contact with plate cylinder and remote setting of print pressure. Automatic Blanket Cleaning System. Anti-rust treatment for blanket cylinder for long service life.
- (j) **Impression Cylinder:** Monitoring of sheet presence on impression cylinder. Automatic Impression Cylinder Cleaning System.
- (k) **Transfer Cylinder:** Transfer Cylinder cocking through touch screen control panel. System to pass printed sheet without damaging the image. Anti-rust treatment for transfer cylinder for long service life.
- (l) **Powder Spray System:** Anti set-off powder spray system/unit. Powder spraying to be set automatically.
- (m) **Delivery System:** Pile delivery with self contained gripping system. Paper size adjustment system with proper stopper, side jogger, sheet decurler and fans in delivery with auto lowering of delivery pile and all necessary system to deliver the printed sheets without damaging their image.
- (n) **Lubrication System:** Centralized automatic lubrication system.
- (o) **Electrical System:** Electrically Complete with 415 Volts 3 Phase 50 Hz., having Reverse phasing protection
- (p) **Safety System:** CE safety regulations & GS safety certification and other certification.

Safety device Safety arrangements to conform to the Factory Act and Electricity Act and of all international requirements.

Driving/regulating/Control Complete to operate on electrical power AC 400/440-V 3 phase, 50 cycles, having Reverse phasing protection.

Accessories

1. Rubber rollers, motors for inking system,
2. Operating and special tools
3. Two sets of documents consisting of: Instruction manual for the press and control console, safety instructions, cleaning and maintenance instructions, spare parts catalogue in hard copy and soft copy.
4. All the mechanical and electrical wear and tear consumable parts for 2 years to be supplied with the machine.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Computerized 2 Colour Convertible Perfecting Sheet Fed Offset Machine

Sheet Size		
Maximum (mm/inch)	:	530 x 750 mm/20.9 x 29.5 inch
Minimum (mm/inch)	:	210 x 280 mm/8.3 x 11.0 inch
Image area Maximum (mm/inch)	:	510 x 740 mm/20.0 x 29.1 inch
Stock thickness (mm/inch)/	:	.04 to 0.6 mm/0.0016 to 0.024 inch
Substance		45 to 300 gsm
Maximum Speed	:	12,000 IPH or more
Pile height including pallet, feeder	:	More than 800 mm / 31.5'
Pile height including pallet, delivery	:	More than 600 mm / 23.6'

Apart from the above technical specifications the machine should have the following features:

- (a) All operation of machine *via* touch screen panel and with electronic switches/buttons on printing unit *i.e.* CPC.
- (b) Diagnostic information through touch screen.
- (c) Machines supplier to supply suitable UPS for the machine.
- (d) **Paper Setting:**
 - (i) Dual system feeder head with alpha numeric text display
 - (ii) Fine height adjustment of paper pile against feeder head
 - (iii) Vacuum Conveyor belts on feeding and delivery bed
 - (iv) Double sheet feed detector and sheet missing device (Mechanical, Photoelectrical)
 - (v) Anti-static air blast & delivery anti-static bar
 - (vi) Pneumatic Side Lays
 - (vii) Sets of front lays, left & right, can be adjustable separately (range to be specified).
 - (viii) Auto-impression Pressure Setting, Gripper Pressure Setting as per sheet thickness.
 - (ix) Misaligned sheet feed correction system at feeder head to check misaligned sheets on running machine.
 - (x) Thin paper attachment for smooth running of uneven or wavy paper.

- (e) **Registration System:** Auto Registration System *via* touch screen system/Control Panel.
 - (x) Lateral *
 - (xi) Circumferential *
 - (xii) Diagonal *
 (*range to be specified)
- (f) **Inking System:** Auto ink cleaning system with wash up trays. Auto ink pre-set via compatible software with CtP for each job separately i.e. machine should be CIP3/CIP4 plug and play ready.
- (g) **Dampening System:** Alcohol Dampening system with chiller unit showing temperature and pH value on screen, Auto cleaning system and Automatic removal of foreign objects (hickeys) from the plate. Can be activated or deactivated from the touch screen panel during the printing process.
- (h) **Plate Cylinder & Plate Clamping System:** The plate cylinder surface should be absolute resistance to chemicals for long service life. Automatic Plate changing system and auto Plate Clamping system (Tool less).
- (i) **Blanket Cylinder:** Bearer to bearer contact with plate cylinder and remote setting of print pressure. Automatic Blanket Cleaning System. Anti-rust treatment for blanket cylinder for long service life.
- (j) **Impression Cylinder:** Monitoring of sheet presence on impression cylinder. Automatic Impression Cylinder Cleaning System.
- (k) **Transfer Cylinder:** Transfer Cylinder cocking through touch screen control panel. System to pass printed sheet without damaging the image. Anti-rust treatment for transfer cylinder for long service life.
- (l) **Powder Spray System:** Anti set-off powder spray system/unit. Powder spraying to be set automatically.
- (m) **Delivery System:** Pile delivery with self contained gripping system. Paper size adjustment system with proper stopper, side jogger, sheet decurler and fans in delivery with auto lowering of delivery pile and all necessary system to deliver the printed sheets without damaging their image.
- (n) **Lubrication System:** Centralized automatic lubrication system.
- (o) **Electrical System:** Electrically Complete with 415 Volts 3 Phase 50 Hz., having Reverse phasing protection
- (p) **Safety System:** CE safety regulations & GS safety certification and other certification.

Safety device Safety arrangements to conform to the Factory Act and Electricity Act and of all international requirements.

Driving/regulating/Control Complete to operate on electrical power AC 400/440-V 3 phase, 50 cycles, having Reverse phasing protection.

Accessories

1. Rubber rollers, motors for inking system,
2. Operating and special tools
3. Two sets of documents consisting of: Instruction manual for the press and control console, safety instructions, cleaning and maintenance instructions, spare parts catalogue in hard copy and soft copy.
4. All the mechanical and electrical wear and tear consumable parts for 2 years to be supplied with the machine.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

DIGITAL COLOUR PRESS

Parameters	Specifications
Technology	Laser
Duplex Printing	Instant Duplex Printing in Single Pass for perfect Front Back & Sheet to Sheet Registration
Print Resolution	1200 x 1200 dpi for Quality Printing
Line Screen	144 to 180 lpi
Print Speed	100 - A4 size impressions per minute
Media Handling	Coated, Uncoated, Texture & Tabs
Paper GSM	55 - 350 GSM
Paper Size	13' x 19' (320 x 487.6 mm)
Image Area	12.5' x 18.2' (318 x 460 mm)
Paper Feeding Mechanism	Vacuum Suction Feeding from all Trays for Smooth paper Feeding
Paper Registration System	Active Registration Technology for Perfect Registration
Paper Feeding Capacity	Mini. 4600 A4 Sheets & Max. 13800 Sheets from 12 Trays (with 2 Additional Paper Feeders)
Separate Paper Path for Pre-printed stationary	Cold Path for pre-printed stationary
Paper Stacking Capacity	Ready to Cut Stacking of 4000 Sheets
Print Controller	Controller Support for Files Spooling & Ripping
PDL Support	PS(3), PDF, PCL 6, IPDS(optional), PCL5e/PJL(optional)
Media Mapping	Media Mapping Support to run different media from different jobs
Finishing Devices	Equipment should be able integrate Finishing Solutions at later Stage

Salient Features

- Equipment of 330 x 482 mm (13 x 19 inches) sheet size should be enable for printing of 2 fold and 3 fold Brochures/Catalogues/Book Covers of wider in length.
- Equipment should be able to remove moisture on the paper with patented IR Dryer technology enabling printing on textured and challenging media.
- 8 laser per color (minimum)
- Print on paper.
- Laser safe toner with no silicone oil.
- Pneumatic Loader. Registration +/- 0.2mm.
- Feeder table with fully motorized and automatic side lay guide.
- Infrared lamp system for instant heating of substrate.
- Auto duplex up to 300 GSM.
- Fiery RIP, Fiery Command workstation. Personalization & Variable Data Printer.
- Open architecture MAC/ PC.
- Electric power: 230V, 12 KW max 50A.

- Note:**
1. The Manufacturer should have Service Network in Delhi/NCR for prompt after sales service support with their own service engineers.
 2. Machine must be supplied along with 2 years spare parts (mechanical, electrical and electronics) which are commonly worn out. The firm should be in position to guarantee supply of spare parts for at least 7 years on demand.
 3. **Warranty and AMC:** Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).
 4. Safety arrangements to conform to the Factory Act and Electricity Act.
 5. Supplier shall impart at least one weeks training to both operative crew and maintenance staff (electrical & mechanical) in batches at their works and minimum one weeks training at site of the installation.
 6. A dedicated computer system to be provided by the supplier with all the necessary software including imposition.
 7. Machine should inspect the print quality of output as per the design atleast after 10th sheet and inform about quantity of ink level.
 8. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

DIGITAL MONOCHROME PRINTER

Parameters	Specifications
Technology	Laser
Duplex Printing	Instant Duplex Printing in Single Pass for perfect Front Back & Sheet to Sheet Registration
Print Resolution	1200 x 1200 dpi for Quality Printing
Line Screen	144 to 180 lpi
Print Speed	100 - A4 size impressions per minute
Media Handling	Coated, Uncoated, Texture & Tabs
Paper GSM	55 - 350 GSM
Paper Size	13' x 19' (320 x 487.6 mm)
Image Area	12.5' x 18.2' (318 x 460 mm)
Paper Feeding Mechanism	Vacuum Suction Feeding from all Trays for Smooth paper Feeding
Paper Registration System	Active Registration Technology for Perfect Registration
Paper Feeding Capacity	Mini. 4600 A4 Sheets & Max. 13800 Sheets from 12 Trays (with 2 Additional Paper Feeders)
Separate Paper Path for Pre-printed stationary	Cold Path for pre-printed stationary
Paper Stacking Capacity	Ready to Cut Stacking of 4000 Sheets
Print Controller	Controller Support for Files Spooling & Ripping
PDL Support	PS(3), PDF, PCL 6, IPDS(optional), PCL5e/PJL(optional)
Media Mapping	Media Mapping Support to run different media from different jobs
Finishing Devices	Equipment should be able integrate Finishing Solutions at later Stage

Salient Features

- Equipment of 330 x 482 mm (13 x 19 inches) sheet size should be enable for printing of 2 fold and 3 fold Brochures/Catalogues/Book Covers of wider in length.
- Equipment should be able to remove moisture on the paper with patented IR Dryer technology enabling printing on textured and challenging media.
- 8 laser (minimum).
- Print on paper.
- Laser safe toner with no silicone oil.
- Pneumatic Loader. Registration +/- 0.2mm.
- Feeder table with fully motorized and automatic side lay guide.
- Infrared lamp system for instant heating of substrate.
- Auto duplex up to 300 GSM.
- Fiery RIP, Fiery Command workstation. Personalization & Variable Data Printer.
- Open architecture MAC/ PC.
- Electric power: 230V, 12 KW max 50A.

- Note:**
1. The Manufacturer should have Service Network in Delhi/NCR for prompt after sales service support with their own service engineers.
 2. Machine must be supplied along with 2 years spare parts (mechanical, electrical and electronics) which are commonly worn out. The firm should be in position to guarantee supply of spare parts for at least 7 years on demand.
 3. **Warranty and AMC:** Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).
 4. Safety arrangements to conform to the Factory Act and Electricity Act.
 5. Supplier shall impart at least one weeks training to both operative crew and maintenance staff (electrical & mechanical) in batches at their works and minimum one weeks training at site of the installation.
 6. A dedicated computer system to be provided by the supplier with all the necessary software including imposition.
 7. Machine should inspect the print quality of output as per the design atleast after 10th sheet and inform about quantity of ink level.
 8. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Fully Automatic Exposure Unit for Screen Printing

The other technical specifications are as under:—

- Fully automatic with the function of auto vacuum and exposure unit.
- High precision Exposure for PCBs and other Silk Screen printing frames
- Adjustable Screen Exposure timings
- High vacuum for better grip of film over Screen

- Exposure Box Size : 50” x 60”
- Exposing Area : 28” x 40”
- Exposing Time : As required
- UV Lamp Power : 3 KW
- Electrical Power Load : 3 Kw
- Power Required : 220 AC / 415 AC

- Vacuum Blanket for precision

Note:

1. Safety arrangements to conform to the Factory Act and Electricity Act.
2. Supplier shall impart at least one weeks training to both two operative crew and two maintenance staff (electrical, mechanical and electronics) at site of the installation.
3. The Manufacturer should have Service Network in Delhi/NCR for prompt after sales service support with their own service engineers.
4. **Warranty and AMC:** Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

Fully Automatic Screen Printing Machine (28x40 inches)

The fully automatic screen printing machine should be suitable for quality and quick screen printing on flat surfaces like Laminated cloth, Rexine, Plastic sheets, Invitation cards, Visiting Cards, Office stationery in single colour and multi colour.

The other technical specifications are as under:-

1. Maximum Printing area : 710 mm x 1015 mm
2. Minimum Printing area : 25 mm x 40 mm
3. Printing Speed : 700 - 1200 per hour
4. Maximum Frame size : 750 mm x 1100 mm
5. Vacuum pump capacity : 650 mm / hg
6. Maximum thickness of Printing Stock : up to 50 mm
7. Vacuum Bed Movement for registration : (+/-) 7 mm
8. Maximum Substrate thickness : 5 – 7 mm
9. Screen Frame Thickness : 25 – 50 mm
10. Squeegee Holders : Min.: 400 mm
Max.: 600 mm
11. Power supply : Single phase or 3 phase AC supply

Note:

1. Safety arrangements to conform to the Factory Act and Electricity Act.
2. The machine should have adjustable screen frame.
3. Machine should have Digital Stroke Counter.
4. Peel off mechanism (to achieve fine reproduction of halftone dots and avoid smudging, bleeding and smearing).
5. Supplier shall impart at least one weeks training to both the operative crew and maintenance staff (electrical, mechanical and electronics) at site of the installation.
6. The Manufacturer should have Service Network in Delhi/NCR for prompt after sales service support with their own service engineers.
7. **Warranty and AMC:** Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

FULLY AUTOMATIC UV COATING MACHINE

(28' x 40')

I. COATER UNIT

TECHNICAL SPECIFICATIONS

PAPER SIZE:

- (i) Maximum : 710 mm x 1015 mm
- (ii) Minimum : 250 x 300 mm

COATING AREA:

- Maximum : 700 mm x 1000 mm

PAPER THICKNESS: :

- (i) Maximum : 450 GSM
- (ii) Minimum : 60 GSM

COATING SPEED:

- (i) Maximum : 5000 sheets/hour
- (ii) Minimum : 2000 sheets/hour

BLANKET SIZE FOR FLOOD COATING:

- (i) Length : 1100 mm
- (ii) Width : 750 mm
- (iii) Thickness : 1.65 mm

POLYMER PLATE THICKNESS FOR SPOT : 1.65 mm

GRIPPER MARGIN : 10 mm

GRIPPER BITE : 5 mm

IMAGE ADJUSTMENT : 30 mm (Circumferential)

FEEDING SYSTEM	:	Stream feeder
SIDE-LAY REGISTRATION	:	Pull Type
SIDE-LAY ADJUSTMENT	:	+/- 1.5 mm
DELIVERY SYSTEM	:	Chain Delivery
COATING UNIT	:	Anilox roller coating system
COATING THICKNESS		
(i) Maximum	:	3 micron
(ii) Minimum	:	5 micron
LUBRICATION SYSTEM	:	Centralized
POWER SUPPLY	:	Three Phase 415 V, 50 Hz
POWER CONSUMPTION		
For Coater	:	6 KW

TECHNICAL FEATURES

- PLC Touch Screen Panel
- Separate geared motor for the coating unit
- Peristaltic Varnish Pump and duct
- Pneumatic Operation
- Stream Feeder
- Pile Up/Down Motorized Mechanism with level sensor
- Additional Feeder trays for pre-piling
- Pull type side lay for registration
- Electro mechanical Double Sheet Detector
- No Sheet Detector
- Anilox Roller Coating System
- Plate Cylinder for Flood and spot coating

II. UV/IR DRYER UNIT

TECHNICAL SPECIFICATIONS

- CONVEYOR BELT : 365 cm Vacuum Hold-down,
Teflon Coated fiber belt
- IR MODULE : One
2 lamps (2 x 3 KW = 6 KW)
- UV MODULE : One
1 UV Lamp of 300 watts per inch power
- REQUIREMENT OF TOTAL POWER
: Dryer Unit = 18 KW
- DELIVERY STACKER : Automatic

MACHINE SHOULD BE ABLE TO

HANDLE THE COATING SOLUTIONS:

: UV and Aqueous Coating

MACHINE SHOULD BE SUITABLE FOR :

- FOR FLOOD COATING: Blanket to be used
- SPOT COATING : Photo-Polymer Plate to be used

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Annexure-III

(Binding Machineries & Equipments)

Cutting Machine with Lift Jogger and automatic Piling

[Size : 115 cms]

A. 115 cms Size cutting machine (programmable) with following features and specifications

- Fully automatic cutting machine with 19" high quality touch control (16:10) without any additional buttons
- Facility to store more than 10000 programs
- Operating system to be Windows CE
- USB interface for CIP3 , CIP4 file transfers
- Minimum CIP 3 compatible
- Programmable clamping pressure and automatic pressure adjusting according to the used cutting width standard.
- Graphic interface for programs
- Different levels of programming : Manual mode for everyone, Semi mode for experienced users and Auto mode with graphic Centralized hydraulic system – the hydraulic cylinder for the clamp should be centralized (in the middle, below the cutting table) even clamping pressure right and left High precision side gauges aluminium – rust free
- Electronic hand wheel for fine adjusting of the cut position
- Closed machine table – there should not be any slot in the middle, thereby eliminating the air cushion erosion and also avoiding trapped or folded sheets.
- Machine frame should be closed in one piece (no feet, no front plate)
- Clamp pressure adjusting programmable (no hand wheel)
- Small minimum cut of 20 mm without false clamp plate should be possible
- Small minimum cut of 77 mm with false clamp plate in
- Automatic Waste disposal
- Retractable side gauge should be provided
- CE and GS certifications.
- Energy saving options must be mentioned

Technical Data

Cutting width	-	115 cm
Cutting length	-
Cutting height	-	16.5 cm
Clamping press (min / max)	-	350 - 4500 daN
Back gauge speed	-	30 cm/sec

B. Pile Hoist for paper to be fed to the joggers

- Pile Hoist with platform
- Piles are to be lifted and lowered hydraulically.
- A double chain should be provided to give highest possible security.
- The platform should have a bevelled front-edge so that even large formats can easily be loaded onto the platform by means of a pallet truck.
- An adjustable photocell should verify that the top of the pile remains always on working-height.
- The pile hoist should be moveable but is not to be used for the transport of materials.
- Max. format: 1100 x 805 mm
- Max. pile weight: 650 kg
- Max. height: 1000 mm

C. Automatic Sheet Jogger

- The automatic joggers for sheets (to be jogged before being sent to a cutting machine), with pneumatic air expulsion rollers and clamping device.
- The table should stainless steel air table
- The table should be smooth and micro perforated
- Side flap should be with pneumatic tilt
- Table should be tiltable left and right
- Jogging intensity should be variable
- Additional aeration, if needed during jogging
- Should have rimless air expulsion - no marking on sheets
- The speed of the air expulsion rollers should be variable (to handle different substrates)

Technical Data

- Format - 92 X 130 cm
- Max ream height - 16 cm

D. Unloader

- Unloader for the automatic high precision re-stacking of single and multiple cuts onto pallets.
- Should be possible to install the unloader either lengthwise or crosswise next to the cutter.
- Table-top of stainless-steel (4301), 3 mm, with air-nozzles
- Frequency controlled drives
- Hydraulic up and down movements with returning chain
- Highly precise alignment-stops in light-weight construction, with wear free sliding rails underneath
- Automatic limit stop
- Cylinders as per DIN ISO
- Should have automatic and manual mode
- Diagnostic mode and operator guiding via text indication
- Possibility of processing very low pallets
- Safety light-barrier at the front side of the table

- The program should control all parameters including distance between the bottom of the table and the top of the pile , variable table speed, adjustment of table air , number of layers per pile

Technical Data

Max. Sheet format	:	800 x 1200 mm
Min. measure between the stops	:	270mm
Max. layer height	:	160 mm
Max. layer weight	:	150 kg
Max. Measure of pallet	:	800 x 1200 mm
Min. Pallet height	:	130 mm
Max. Pile height incl. pallet	:	1400 mm (1800mm)

Training Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Programmable Cutting Machine (Size : 45 inches)

1.	Maximum Cutting width	115 cm
2.	Maximum Cutting (feeding) depth	115 cm
3.	Maximum loading height (without false clamp plate)	16.5 cm
4.	Safety Clamp Pressure	30 daN
5.	Clamping pressure min./max.	180 – 4500 daN
6.	Back gauge speed maximum	15 cm/second
7.	Smallest cut without/ With false clamp plate	2.0/9.5 cm
8.	Cutting Speed (cycles/minute)	50
9.	Knife Thickness	Between 12 – 15 mm
10.	Back Gauge Position accuracy	0.05 mm
11.	Operation	Fully Hydraulic Drive (both knife & clamp)
12.	Front & rear Bed	Rust proof with nickel plating stainless steel cladding on the bed with air cushion with two row infrared curtain overload safety stud to avoid serious damage to machine construction.
13.	Memory	Expandable programme/storage to enable standardization and Work Flow Management should have minimum 99 programmes.
14.	Safety	The cut release is actuated by a two-hand cut start. The down-stroke of the knife is immediately stopped when one of the buttons is released. There should be self-monitoring light barrier operates fully electronically. All machine functions will be monitored and in case of malfunction the error should be shown on the display screen clearly.
15.	Power Supply	415 Volts, 3 Phase, 50 Hz. Built in/Outside stabilizer.

Apart from the above technical specifications the machine should have the following features:

- (i) Modern control panel with minimum 15" colour touch screen for full access for visualizing all functions.
- (ii) Error message display on monitor or self diagnosis with an error detection routine.
- (iii) All measurements to be displayed
- (iv) Non-corroding Iron Bed (table), Right side and Left side table with blower
- (v) Simultaneous two-hand cut control device.
- (vi) The complete Hydraulic, Centre Drive System to enable precise control of cutting speed and clamping pressure for least maintenance.
- (vii) Variable cutting speed with mechanical and optional cutting line indicator, work light. The body should be heavy duty metal.
- (viii) Maintenance free automatic centralized oil lubrication system.
- (ix) Hydraulic pressure system to match with different cutting widths.

- (x) Built-in safe knife changing device from the front side.
- (xi) Light on the front table/cutting line.
- (xii) 3 spare knives (excluding fitted in the machine) with protective boxes.
- (xiii) 15 spare cutting sticks required with the machine.
- (xiv) The following two sets of technical documents to be delivered along with the equipment:
 - a. Printed Brochures having Detail Technical Specifications.
 - b. User's Manual.
 - c. Operations Guide containing detailed instructions for operation and maintenance of the machine.
 - d. Electrical/Electronic circuit diagrams etc.

GENERAL:

- (i) Machine must be painted with heat proof paints as where required. The other parts be also painted with rust resist paint.
- (ii) The grade of steel and other metal should be specifically mentioned. The certificate from reputed test laboratories of the grade must be attached.
- (iii) The certificate or proof of the components used of the international brand should also be attached to verify.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Programmable Three Side Trimmer

1. Speed : 500 books per hour
2. Maximum Trimmer Size (upto) : 300 x 380 mm
3. Maximum Trimming Height : 60 mm
4. Hydraulic Pressure
 - Pre : 70kp (154 PSI)
 - Main : 2000kp (4400 PSI)
5. Power Supply : 400/440 Volts 50 Hz (3 phase)

- Efficient cutting/trimming for Magazines, Brochures, Text Books, Note Books, Catalogues, Annual Reports etc.
- High grade cast iron structure, engineered for maximum rigidity and durability to be used for main frames, should incorporate latest safety standards for Guillotine and Three Knife Trimmer by ISO/CE, PLC based control system with diagnostics, 'Zero-Zero' stop brake in case of power failure operations not in accordance with safety procedure, drive with electromagnetic clutch-brake system, capable of handling large formats.
- Adjustable hydraulic clamping of books, quick return of clamp to save cycle time, mechanical movement of clamp, swing and dip action of all three knives against cutting sticks, superior trimming technology for precision finish and ripple free cut.
- The waste paper must be collected in a bin for easy disposal.
- Automatic pre-clamping of pile.
- Automatic pile slides into cutting station.
- Motorized conveyor belt delivery system.
- Efficient electrical magnetic clutch and brake system.
- Automatic checking of the clamping pressure.
- Automated trim cycle with hydraulic ram clamps for correct pressure for the weight and delicacy of the paper stock.
- Electro-mechanical safety devices.
- Automatic centralized lubrication systems.
- All doors are to be fitted with interlock safety switches which ensure highest safety of operations. The front knife is to be shielded with a cover to give protection during clamp, knife changes and routine maintenance. There should be a separate operational mode in order to ensure the safety.
- The quick Knife change system should be easy to operate and save considerable lead time.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Automatic Folding Machine with 6 Folds (Buckles and Cross)

[Size : 28" x 40" with automatic rotary stream feeder System]

- Robust Sturdy, vibration free, made of high quality and heavy duty metal frame.
- Control system with compatible control platforms, folding roller technology, folding roller driver quick adjustment of perforator shafts, buckle plates with swing deflectors.
- Cross fold unit (knife type), mobile delivery system, PLC based control panel, online perforation.
- Having adjustment for different paper from 40 GSM to 110 GSM
- Online pressing of folded forms and vertical stacking and batch counting.
- Automatic lifting of paper feeder at pre-set time intervals.
- Centralized lubrication system.
- Machine should have various electro-mechanical safety devices.
- Extra Grip folding rollers for end-to-end process reliability, smooth sheet transport, and impressive folding quality.
- High performance suction Wheel to ensure fast and precise pickup and removal of each pre-separated sheet and transport of it in a straight line.
- Double sheet detector to avoid double sheet feeding.

Optional Attachments:

- Online gluing attachment for producing booklets of 8 or 12 pages.

The other Technical Specifications are as under:

Paper Feeding Size	: Maximum : 700 mm x 1015 mm Minimum : 210 mm x 297 mm
Smallest fold	: 60 mm
Pile height	: 800 mm
Buckle plates with swing reflectors	: Minimum - 6
Number of Knives	: Minimum - 6
Maximum folding speed	: 150 m/min.
Minimum folding speed	: 25 m/min.
Delivery Unit counting.	: Vertical stacked delivery with pressing and batch counting.
Power Supply	: 415 Volts, 3 Phase, 50 Hz. Built in/Outside stabilizer.

Training Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Fully Automatic Perfect Binder (3 or 4 Clamps)

- Robust and sturdy construction for vibration free performance.
- Book clamps should be easily settable by turning one knob and pressure adjustment should be proper.
- Strip type milling cutter, milling and roughening cutter with efficient waste removal of scoring system.
- Oval / round shaped path.
- Automatic pile-cover system with on line and four lines crease.
- 3 roller gluing systems with reverse spinner, separate side gluing attachment, with separate side-glue tank and disc type applications, head & tail cut off system.
- Pre-pasting station for accurate cover registration.
- Variable speed of operations.
- Hot melt (EVA) spine gluing unit should be integrated with 40 kg premelter. The gluing system should be removable on castors to replaced with any other applicator such as a PUR system.

The other Technical Specifications are as under:-

1. No. of clamps : 3
2. Speed : 500 books per hour & above
3. Book Block size
 - Height : 105 – 360 mm
 - Width : 105 – 330 mm
 - Thickness : 1.5 – 60 mm
4. Grammage body paper : 60 – 170 gsm
5. Cover Size
 - Width : 212 – 720 mm
 - Height : 105 – 370
6. Grammage cover paper : 80 – 350 gsm
7. Spine preparation station : 0 – 4 mm
8. Vertical Cover feeder
 - Pile Height : maximum 150 mm
 - Scoring : 4 or 2 time scoring
9. Spine Length (Minimum) : 105 mm
10. Spine Length (Maximum) : 360 mm
11. Spine Thickness : 5 cm
12. No book – no cover control system : To be provided
13. Power Supply : 400/440 Volts 50 Hz (3 phase)

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Online 12 clamp Perfect Binder with 18 stations gatherer and on line 3 knife trimmer with conveyors

A. Perfect binding line with inline gathering and trimming:

Configuration to be capable of producing 5000 books per hour with EVA hotmelt binding and optionally with PUR hotmelts.

A1. Gatherer:

- 18 gathering stations
- Gatherer to work as stand alone as well as in line
- Gatherer should be able to run at higher speeds of 8000 cycles/ hour in stand alone mode, not connected to the binder.
- Should be shaft-less with separate drive
- Should work with integrated vacuum technology Winjector (only the need for compressed air and not separate vacuum pumps)
- Signature inspection systems that will verify the correctness of the signature fed into a gathering station
- Hand feeding station
- Should have special pick up features for difficult / thin signatures
- Integrated air nozzles for single sheet pick up
- automatic run-up and run-down of the machine
- automatic start-and-stop function of the gathering machine in case of a fault warning, without perfect binder stop
- Signatures should be gathered and transported in vertical position
- Crisscross delivery in offline mode
- Transfer unit to perfect binder.

Technical data Specifications

Mech. Speed : 1000 - 5000 cycles/h inline

Mech. Speed : 1000 - 8000 cycles/h offline

Format range

Product Height : 105 - 370 mm

Product Width : 75 - 320 mm

Opening of Transport Channel : max. 80 mm

Number of Feeding Stations : 12 stations

A2. Perfect Binder:

Must be robust and with electro mechanical controls and should work under general conditions of power supply, without needing any additional protection systems

- 18 coated clamps with central adjustment
- in feed channel with one jogging station

- two spine preparations, equipped with one: 6.2 kW main milling motor with one dust milling tool & 2.2 kW frequency-controlled spine preparation motor with one notching and brushing tool
- Additional "Dove tail" notching tools to be provided for special notching
- Suction device and fume extractors
- Hot melt (EVA) spine gluing unit should be integrated with 40 kg premelter. The gluing system should be removable on castors to be replaced with any other applicator such as a PUR system.
- Hotmelt side gluing unit, movable with two discs, adjustable in height and scraper control
- Rotary cover feeder with pulsed compressed air. Should be able to handle gate fold covers without spot gluing, easily
- Cover separation should be through Winjector technology
- Scoring station with 2 and 4 scores and divided scoring tools. 80mm diameter scoring discs should be provided that can easily handle thick covers like 350 gsm.
- Cover aligning should be by chain-to-clamp, which provides accurate cover registration even after years of usage.
- Cover pressing duration should be approximately over a length of 70mm so that the books are nipped adequately. and pressing station incl. one set pressing rails
- Long plate chain delivery with low angle to carefully transport the books out of the binder
- Lay down device, short for smooth lay-down of the products and connection with a conveyor system
- Optional Stack Delivery (in cases where the conveyor and trimmer are not opted for)

Technical data:

- Mech. Speed	:	1000 - 5000 cycles/h
- Format Range	:	product height: 140 - 370 mm
- Product Width	:	105 - 320 mm
- Product Thickness	:	2 - 50 mm
- Cover Height	:	140 - 375 mm
- Cover Width	:	208 - 640 mm
- Clamp Opening	:	12 - 90 mm
- Opening of Infeed Channel	:	10 - 80 mm
- Product Hang-out	:	10 mm / fix

A3. Conveyor :

To convey books to the in line 3 side trimmer, with speed controls

A 4. In line trimmer

- Pneumatic head gauge
- Silicon spray device for side knives
- No-book No-cut control
- Adjustable clamping pressure
- Fully automatic central lubrication with low level control
- Fully automatic position for size change
- Clamp plates, cutting tables
- Speed 900-2700 cycles per hr.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

**Fully Automatic Flow line consisting of 8 Stations, Automatic Gathering,
Saddle Stitching, Trimming with Cover Feeder Machine**

A. Saddle Stitching with inline gathering, trimming with Cover Feeder:

Configuration to be capable of producing minimum 5000 books per hour.

A1. Gatherer:

- 8 gathering stations
- Gatherer to work as stand alone as well as in line
- Gatherer should be able to run at higher speeds of 8000 cycles/ hour in stand alone mode, not connected to the binder.
- Should be shaft-less with separate drive
- Should work with integrated vacuum technology.
- Signature inspection systems that will verify the correctness of the signature fed into a gathering station
- Hand feeding station
- Should have special pick up features for difficult / thin signatures
- Integrated air nozzles for single sheet pick up
- automatic run-up and run-down of the machine
- Signatures should be gathered and transported in vertical position
- Crisscross delivery in offline mode

Technical data Specifications

Mech. Speed : 1000 - 5000 cycles/h inline

Mech. Speed : 1000 - 8000 cycles/h offline

Format range

Product Height : 105 - 370 mm

Product Width : 75 - 320 mm

Opening of Transport Channel : max. 80 mm

Number of Feeding Stations: 12 stations

A2. Saddle Stitching:

Speed :	Mechanical Speed Min – 2000 cycles per hr
	Max – 8,000 cycles per hr
Book Size- Trimmed	Min - 148 X 105 mm
	Max – 500 X 305 mm
Untrimmed	Min- 150 x 105 mm
	Max- 510x 320 mm
Auto Signature feeding stations	Min- 1

	Max- 12
Thickness	Max – 12 mm
Signature Feeding:	A Number of Signature form feeder are used where <i>a unique unfolding mechanism, signatures are unfolded and fed to conveyor</i>
	Should have the suction and gripper pick up system (either one is used)
	Signatures sensors to be provided to detect missing signatures, if any.
	Easy and quick set up.
	one vacuum pump for 6 feeders.
Cover Feeding:	Folded cover to be placed on the station nearest to the stitcher capable of handling up to 250 gsm covers, in folded format
Stitching Station:	
	Indigenously developed stitching heads are acceptable- 4 heads installed with each stitching module with possibility to upgrade to 6 heads. Staple shape variable by using different set of knives in the stitching head.
	Wire loop stitch option
	Automatic On-Off of the heads to ensure that the signatures to be rejected are not stitched.
	Defective and incomplete copies to be diverted into the rejection tray. The rest are to be forwarded to the three knife trimmer.

A3. Conveyor :

To convey books to the in line trimmer, with speed controls

A 4. In line trimmer

- Pneumatic head gauge
- Silicon spray device for side knives
- No-book No-cut control
- Adjustable clamping pressure
- Fully automatic central lubrication with low level control
- Fully automatic position for size change
- Clamp plates, cutting tables
- Speed 900-2700 cycles per hr.

Training

Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Fully Automatic Programmable Swing Machine

- Machine should be Robust, sturdy and one base construction. Minimum vibration through solid frame design.
- Machine should be able to sewing of books with thread.
- Automatic signature image recognition to prevent incorrect signature.
- Guided signature transport.
- Smooth and stable swing process through air jet.
- Suction opening mechanism for light weight stocks

1. Mechanical Speed : 8000 cycles per hour
2. Book sizes
 - Min. signature length & width : 120 mm x 80 mm
 - Max. signature length & width : 510 mm x 320 mm
 - Max. signature thickness : 4 mm
3. Capacity : Sew section - up to 1000 pages of 60 to 80 gsm of paper
4. Sword opening : 8 mm (high folio or low folio)
5. No. of stitches : 13
6. Stitch length : 16.5 mm
7. With/without blind stitch : possible with all stitch types
8. Lubrication : Automatic centralized lubrication system.
9. Power Supply : 400/440 Volts 50 Hz (3 phase)

Training Supplier shall impart at least 2 weeks training on site at the place of installation.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.

4. Supplier shall impart necessary/required training to staff of Managerial level at their manufacturing plant.
5. Warranty shall start from the date of handing over the machine for production.
6. Supplier to submit pre-installation manual on being successful tenderer within 30 days.
7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Fully Automatic Double Head Digital Paper Counting Machine

1. Counting technology : Pin-&-Blade
2. Maximum counting speed : 2,500 spm
3. Maximum counting speed with tabbing : 2,500 spm
4. Count cycle time : 3 x 500 sheets in 60 secs
5. Maximum pile height : 220 mm
6. Material weight range : 40-200 gsm
7. Batch size : 5-9,999
8. Airborne noise : up to 78dB(A)
9. Maximum total count : 999,999
10. Table format : 1060 x 760 mm (Airfloat)

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Auto Power Punching Machine for Wiro/Spiral

1. Wiro Size can be fitted : 3:1 and 2:1
2. Wiro holes : Square and Rectangle
3. Other Punching : Wiro Punching with Half Moon in Center for Hanging Calenders
4. Capacity : Machine can cut 25 to 30 Pages in one stroke
5. Platform : Gauges or Wooden Platform
6. Safe Operation : Fully Covered Body for safe operation
7. Metal :
 1. High Quality Steel for Die
 2. Harden and Grinded Punch and Die Plates
8. Die Changing : Simple Die Changing
9. Other features :
 1. Spiral, Comb Die can be fitted on Same Machine
 2. Single Line Creasing can also be fitted
10. No. of Holes : 20 holes

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Auto Power driven Wiro closing Machine

- | | | | |
|----|-------------------------|---|--|
| 1. | Feeding Mode | : | Manual |
| 2. | Handling of Double Wire | : | Automatic cutting, insertion & closing |
| 3. | Wire Specifications | | |
| | Diameter | : | 114"-718" |
| | Pitch | : | 4:1", 3:1" ,2:1" |
| 4. | Max. Paper Width | : | 520 mm |
| 5. | Max. Binding Width | : | 507 mm |
| 6. | Min. Paper Length | : | 75 mm |
| 7. | Max. Hanger Length | : | 375 mm |
| 8. | Working Speed cycles/hr | : | 1000 |
| 9. | Size of Worktable (WxD) | : | 660 mm x 300 mm |

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 5. Warranty shall start from the date of handing over the machine for production.
 6. Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).
 7. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Box Strapping Machine

1. Strapping Speed : 12 Straps per minute or more
2. Package Size
 - (i) Minimum : 60 mm (width)
 - (ii) Maximum : 1500 mm x 1500 mm x 1500 mm
3. Type of Model : Table
4. Strap Width : 6-9-12-16 mm
5. Power Supply : Single phase 220 V/240 V 50 Hz
6. Tension Strength : 55 Kg. (maximum)
7. Sealing Method : Heat Sealed

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Hydraulic Trolley

1. Operation : Hydraulic
2. Control : Manually operated Hand pump
3. Capacity : 1500 kgs
4. Overall width : 530 mm
5. Fork width & Specn. : Fabricated 160 mm wide x 40 mm deep from tested steel in one piece C section for greater strength
6. Minimum Height when Fork lowered : 83 mm / 85 mm
7. Maximum Height of Fork When raised : 205 mm
8. Height of lift : 120 mm
9. Fork Roller : Two 80 mm dia x 80 mm wide of fibre wheels
10. Steering Wheels : Two 175 mm dia x 50 mm wide fibre Wheels
11. Spares : Set of wheels for each Trolley

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Wheel Trolley

1. Capacity : 1000 Kg.
2. Chasis : The chasis shall be of steel fabricated construction. The load shall be concentrated on certain areas depending on the material to be transported. The spacing of the angle iron frames, etc, shall be close enough to prevent the distortion of the top plate.
3. Platform : The platform shall preferably be of minimum 4 mm thick plate. These mild steel plates shall be ribbed and welded with 25 x 6 mm flats at 300 mm centres. The plates shall be fitted to chasis by means of 10 mm csk bolts at 450 mm centres. The platform shall have hinged toe boards on all four sides
4. Turntable : The turntable shall be easily manoeuvrable. The pivot pin for the turntable shall be of adequate size made from class 4 of IS 1875:1992 'Specification for carbon steel billets, blooms, slabs and bars for forgings (fifth revision)' and hardened at the journal portion. It shall have a lock nut and split pin at the bottom to prevent the separation of the turntable of the turntable after assembly. Provision for preventing dirt or water ingress into the bearing shall be made. Provision for greasing shall be made.
5. Handle and Hooks : Four solid cured on type rubber tyred wheel. Each wheel shall withstand a maximum load of 400 kg without showing any permanent deformation. The wheel shall be fitted with rims and single row deep grooved ball bearing provided with dust seal and arrangement for lubrication. The axles shall be made from 50 mm mild steel square billet.
6. Painting : The trolley shall be painted with anti-corrosive bituminised black paint on the under carriage and inside the box. The sides shall be painted with synthetic enamel of golden yellow colour on top of primer coat.

Note:

1. The manufacturer should have Service Network in NCR Delhi for prompt repairing.
2. Warranty/Guarantee of the Equipment should not be less than 2 years.
3. Safety arrangements to conform to the Factory Act and Electricity Act.

Wire Stitching Machine – 5/8 inch

1. End Use : Stitching of books, pamphlets, magazine, loose sheets
2. Device : Both sides and saddle stitch with adjustable back gauge
3. Capacity : 5/8 inch or 16 mm
4. Range of Spine : 0 to 25 mm
5. Range of Wire : Round S.W.G. 18 to 26
6. Stitching Size : Crown width 13 mm with adjustable shank length
7. Speed : Note less than 150 stitches per minute
8. Power : 400/440V AC (3 phase) 50 cycles
9. Accessories : Four Spools
10. Tools : Standard Tools
11. Misc. : Erection manual, parts, catalogues and other technical literature.
12. Safety measures as per the Factory Act and Indian Electricity Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Wire Stitching Machine – 1 inch

1. End Use : Stitching of books, pamphlets, magazine, loose sheets
2. Device : Both sides and saddle stitch with adjustable back gauge
3. Capacity : 1 inch or 25 mm
4. Range of Spine : 0 to 25 mm
5. Range of Wire : Round S.W.G. 18 to 26
6. Stitching Size : Crown width 13 mm with adjustable shank length
7. Speed : Note less than 150 stitches per minute
8. Power : 400/440V AC (3 phase) 50 cycles
9. Accessories : Four Spools
10. Tools : Standard Tools
11. Misc. : Erection manual, parts, catalogues and other technical literature.
12. Safety measures as per the Factory Act and Indian Electricity Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Wire Stitching Machine – 1.5 inch

1. End Use : Stitching of books, pamphlets, magazine, loose sheets
2. Device : Both sides and saddle stitch with adjustable back gauge
3. Capacity : 1.5 inch or 38 mm
4. Range of Spine : 0 to 40 mm
5. Range of Wire : Round S.W.G. 18 to 26
6. Stitching Size : Crown width 13 mm with adjustable shank length
7. Speed : Note less than 150 stitches per minute
8. Power : 400/440V AC (3 phase) 50 cycles
9. Accessories : Four Spools
10. Tools : Standard Tools
11. Misc. : Erection manual, parts, catalogues and other technical literature.
12. Safety measures as per the Factory Act and Indian Electricity Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Lamination Machine with Thermal and Cold attachment

The machine is capable of laminating the Plastic/Polythene/Cello phase film etc. on printed paper and board such a Book covers, Magazine covers, reports etc. by using indigenous Plastic/Polythene Cello-phase films and adhesive. The machine is of sturdy construction and will be able to function in normal room temperature.

The other technical specifications are as under:-

1. Minimum Sheet Size : 8.6" x 11.9"
2. Maximum Sheet Size : 18" x 24"
2. Length : Any length
3. Speed : 0 to 1000 meters/hour
4. **Maximum production** : 11'000/h
5. **Sheet weight** : 100 - 600 g/m²
6. **Adhesive application** : 1.8 - 4.0 g/m²
7. **Maximum film diameter** : 400 mm / 15.7"
8. Power : 400/440V AC (3 phase) 50 cycles
9. Tools : Standard Tools
10. Misc. : Erection manual, parts, catalogues and other technical literature.
11. Safety measures as per the Factory Act and Indian Electricity Act.

GENERAL:

- (i) Machine must be painted with heat proof paints as where required. The other parts be also painted with rust resist paint.
- (ii) The grade of steel and other metal should be specifically mentioned. The certificate from reputed test laboratories of the grade must be attached.
- (iii) The certificate or proof of the components used of the international brand should also be attached to verify.

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Fully Automatic Disc Perforating Machine

1. Max sheet size : 24 inch (600 mm)
2. Min dist. between two discs : 1 inch (25 mm)
3. Max dist. between two discs : 23inch (575mm)
4. Speed : 350 RPM
5. Linear speed of paper : 150 ft / mn

Warranty and AMC

Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Fully Automatic Nipping Machine

1. Book Width : 330 mm
2. Book Spine (Min-Max) : 20 mm – 110 mm
3. System Clamp Pressure : 4000 kg.
4. Nipping Pressure (Adjustable upto) : 3000 kg.
5. Hydraulic Oil Capacity : 35 liters
6. Display : Digital
7. Power saving : The motor switches off automatically after a pre-set delay time provided the Recycle Switches are not activated within the set time.
8. Safety : Both the Push Buttons are required to be pressed simultaneously for initiating the cycle; an intricate Safety Device (*sensor based*) should be incorporated as additional protection in case of malfunction of Recycle Switches or the operator's hands are in the way of the clamping area.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Shrink Wrap Packing Machine

1. Sealing Dimensions (WxL) : 380 mm x 500 mm
2. Tunnel Opening (H) : 50 mm / 200 mm
3. Maximum Product Dimensions (WxLxH) : 330W x 480 L x 100/150 Hmm
4. Maximum Film width : 480 mm
5. Wrapping speed : Up to 900 Products per hour
6. Heaters : 2kW Spiral + 0.5kW Strip

With the following features:

- Automatic control and adjustment of sealing time
- Cleaning function
- Product counter

Note:

4. The manufacturer should have Service Network in NCR Delhi for prompt repairing.
5. Warranty/Guarantee of the Equipment should not be less than 2 years.
6. Safety arrangements to conform to the Factory Act and Electricity Act.

Plastic Pallets

1. Size : 36 inch x 48 inch
2. Shape : Rectangular
3. Process of manufacturing : Rotomolding
4. Capacity : 4000 kg.
5. Material : Plastic - First Grade Material with perfect finish
6. Pallet Type : 4 Way Entry

Note:

1. The manufacturer should have Service Network in NCR Delhi for prompt repairing.
2. Warranty/Guarantee of the Equipment should not be less than 2 years.
3. Safety arrangements to conform to the Factory Act and Electricity Act.

Annexure-IV

(Mechanical Instruments/Machineries)

Knife Grinder Machine

1. Grinding Capacity upto : 115 cm
2. Grinding Wheel : Segment Type
3. Clamping : The machine should have electromagnetic clamping as well as mechanical clamping with swinging type adjustable to any required angle between 0-90 degree.
4. Movement of Carriage : Be automatic to and fro without jerk in reverse
5. Cooling System : Automatic pouring system of coolant material, coolant pump with electric driven.
6. Electrical Equipment : 3 suitable electrical motors-one for grinding head, one for carriage reverse movement and one for coolant pump.
7. Power : 400/440 V AC (3 phase) 50 cycles
8. Tools : One set of working tool
9. Safety measures as per the Factory and Indian Electrical Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Tool Grinding Machine

- Grinding Wheel distance of up and down : 60mm
- Speed : 2800rpm
- Voltage : 380 V, 3 Phase
- About Work Table Dia. : 75mm

Safety measures as per the Factory and Indian Electrical Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. Warranty shall start from the date of handing over the machine for production.
 4. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Gas Welding Set

Type of Product	Gas Welding Machine
Supply Voltage	42.5 V- 57.5 V (AC)
Technology	IGBT Based
Input Power	6 KVA
Frequency	50-60 Hz
Phase	1 Phase
Open Circuit Voltage	56 V
Welding Current Range	10-250 A
Length	368 mm
Breadth	152 mm
Height	228 mm
Input Current	43.6 A
Max. Electrode Size	4 mm

Safety measures as per the Factory and Indian Electrical Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:
1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR.
 2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. Warranty shall start from the date of handing over the machine for production.
 4. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.

Power Drill Machine

1. Drilling Capacity (mm) : 38
2. Spindle Travel : 220 mm
3. Material : MS, CI
4. Spindle Nose : MT-4
5. No. of Spindle Speed : 8
6. Motor Power (HP) : 1.5 – 2.5
7. Tools : One set of working tool
8. Safety measures as per the Factory and Indian Electrical Act.

Warranty and AMC Warranty along with the spare and service of the machine/equipments to be provided for a period of 1 year from the date of successful commissioning and 4 years of Annual Maintenance Contact (AMC).

- Note:1. The Manufacturer directly or through their authorized representatives should have Service Network in Delhi/NCR for prompt after sales service support with their own well-trained at least 4 nos. of service engineers.
2. The manufacturer should attend the machine within 8 hrs. in case of breakdown and have their store to supply of spare parts immediately to avoid idling, the maximum response time to provide required spare parts should not be more than 5 working days from date of lodging the complaint.
 3. The firm should furnish a certificate to guarantee supply of spare parts for at least 15 years from the date of installation of the machine.
 4. Warranty shall start from the date of handing over the machine for production.
 5. Manufacturer should provide all updates pertaining to the software of machine free of cost till the warranty/guarantee and AMC period.
