

Technical Specifications

Thermal CTP

Thermal CTP – Computer to Plate for Digital Imaging of Offset Thermal Printing Plates with offline developing equipment facility with standard accessories.

1.	Technology	Thermal Imaging Plate Setter
2.	Machine Type	6 ups External Drum
3.	Control System	PLC based easy & controlling system
4.	Media Supply	Plate loading/unloading by pneumatic system which is stable than gear-based loading & unloading system.
5.	Drum	External Drum
6.	Plate Type	Should be able to expose Infrared Sensitive Thermal Plates.
7.	Exposing Head	Up to 64 Channel with 830 nm Laser
8.	Resolution	2400 DPI
9.	Max. Hanged Line	450 LPI
10.	Repeatability	± 0.005 mm
12.	Dot Reproduction	1 to 99%
13.	FM Dots output	10 µmAM/FM hybrid screening
14.	Output Speed	Up to 35 plates per hour .
15.	Max Plate Size	838 x 990 mm
16.	Min. Plate Size	267 x 215 mm
17.	Plate Thickness	0.15 to 0.4 mm
18.	Plate Loading	Manual
19.	Power Consumption	Less than 1 KW
20.	Type of plates to be used	Thermal conventional and process less.
21.	Compressor	Compressor capacity 5K.W. with 280 liter tank capacity.

(A) Off-Line Plate Processor (Thermal)

1.	Plate Thickness	0.15 to 0.4 mm
2.	Processing Speed	0.5-1.4 m/min
3.	Tank Capacity (Developer)	22 Ltr

(B) Other Ancillaries for CTP and Plate Processor

1.	CTP Software	Supports latest version of Adobe PDF Print Engine (version 6) & Window 10/11 OS.
2.	Machine Software	Prinergy Evo Lite RIP and Imposition Software , Integrated CIP3, Hard Copy Proofing features & In-Render Trapping features (to Compensate for press mis-registration) .
4.	Imposition	Single user client should be built into the package.
5.	UPS for CTP & Processor	15 KVA with inbuilt isolation transformer UPS.
6.	Accessories	Computer (Desktop Computer with Window 10/11 OS) and Compressor
7.	Note: The approved tenderer should supply 100 Nos. of Thermal Plates along with required chemicals.	

Essential Features:

1. Machine should have auto balancer mechanism.
2. Machine should have auto laser pairing system.
3. Machine should have temperature-based auto focus feature.
4. CTP machine should be remote controlled by Mobile App.
5. Machine should be supplied with latest compatible Ferro Printer.

Essential accessories: -

1. Set of Tools. - One set.
2. List of standard accessories and set of electrical and mechanical spare parts to be supplied with the machine.
3. Spare part Catalogues, Maintenance manual, electrical drawing and operating manual to be supplied with the machine.
4. Manufacturer to be ISO 9001-2008 Accredited Company.
5. Kit of frequently damageable spare parts must be supplied with machine.

Technical Specifications

Web Offset Printing Machine

A-1 size Blanket to Blanket 2-Hi Printing Unit Web Offset Printing Machine with separate Reel Stand, Sheeter Unit, straight folder half page folder and Quarter Folder unit, Voltage control Stabilizer & Accessories.

1	Cut Off Size	594 mm
2	Web width	Up to 915mm
3	Printing Area	580x889mm
4	Max web dia	1100mm
5	Plate Width	620 mm. (As per machine design)
6	Plate Length	As per machine design
7	Plate Thickness	0.3mm
8	Paper Stock	45-90 GSM
9	Blanket thickness	1.65 mm.
10	Machine Height	As per machine design
11	Maximum Printing Speed	30,000 cph
12	Maximum Printing Speed Quarter fold and Straight fold	25,000 cph
13	Sheeter Speed	15,000 cph
14	Printing Unit Module	Blanket to Blanket 2-Hi 2 Color (Back to Back) Printing for A-4 size 16 Page Signature, Single Color (Back to Back) Printing for A-4 Size 32 Pages Signature with vertical web leads.
15	Reel Stand	Pneumatic reel stands with disc break.
16	Folder (Quarter fold and straight folder) and Folder Ratio.	High Speed Gripper and Jaw Type Six Cylinder Folder with Quarter Folder and straight folder Attachment , Folder Ratio is 2:2:2 and 1:2:1
17	Sheeter	Sheeter for sizes A-1 of Sheets.
18	Electronic Copy counter	8 Digit

Essential Feature: -

1. 2+2 Color back to back print should be print by 2 Hi Printing Tower.
2. Machine should be capable for accurate dot formation at High speed.
3. Sturdy, Cast-iron box type side frames on both sides (operating & Drive side) for smooth running and stability.
4. All cylinders to have Helical Gears.
5. All gears to be hardened and ground.
6. Blanket fixing should be T-Type Blanket Bar.
7. Different Dia ink form rollers minimum two for each plate.
8. Running lateral register on both plate cylinders in each unit on operator side for operator ease and circumferential registration in all cylinders for each unit.
9. Ink roller wash up device integrated into printing units.
10. Tool less Slit type plate lock-up system or easy plate clamping system
11. Motorized Brush-mist Dampening System with Centralized water circulation systems.
12. Water fountain rollers and water tray to be made up of chrome plated.
13. Pneumatic On/Off system (ink feed, ink form, dampener form and main impression on all print unit.)

14. Infra-red Web Break Detector.
15. Central Oil Bath Lubrication System.
16. Air Compressor for Pneumatics with Air Drier.
17. Free standing Central Operating System (Consol).
18. Operator safety to be ensured by providing Safety Guards with Electrical interlocking.
19. Units to be disengaged with the help of Clutch system.
20. Manual Cranking of folder to be provided on operator side.
21. Automatic web tension control with disc brakes and dancing rollers and Feed Roll.
22. Machine should be capable to print 16 pages A4 Size in Two color signature and 32Pages A4 size in Single color signature.

Folder: -

1. Jaw type three cylinder folder (2:2:2)
2. Kicker (0 to 99 programmable).
3. Slitter mechanism for tabloid production.
4. Electronic copy counter.
5. All Cylinders to have Helical Gears.
6. Quarter Folder Attachment.
7. Safety to be provided to stop machine automatically in case of paper jam/overload with High-speed quarter fold attachment.

Sheeter: -

The sheeter unit is capable to slit the printed web into sheets like A-1 sizes of sheets.

Electricals: -

ISI mark Motor Complete with 3 Phase 414/440 Volts. 50 Hz, DC drive for speed control.

Essential accessories: -

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|---------------------------|---|----------|
| 1. Plate bending device. | - | One No. |
| 2. Plate punching system. | - | One No. |
| 3. Set of Tools. | - | One set. |
| 4. Set of Blanket | - | One set |
5. List of standard accessories and set of electrical and mechanical spare parts to be supplied with the machine.
6. Spare part Catalogues, Maintenance manual, electrical drawing and operating manual to be supplied with the machine.
7. Manufacturer to be ISO 9001-2008 Accredited Company.

Technical Specifications

Programmable Stitching, Punching, Numbering with Bar Coding Facility with Automatic Feeder and Delivery

(A) Stitching and Punching Unit		
1	Stitching Type	Side Stitching
2	Book Length	Max. 510 mm Min. 150 mm
3	Book Width	Max. 300 mm Min. 105 mm
4	Book Thickness	Max. 7 mm Min. 4 Sheets
5	Stitching Wire	Rust Proof High Quality Round Stitching Wire
6	Stitching Wire Gauge	21 – 27 SWG.
7	Stitching Wire Spool	2.1 Kg
8	Machine Dimension	As Per Design
9	Stitching Head	High Quality Head with Stop and Stitch Action.
10	Quantity of Heads	2 Nos.
11	Speed	Up to 2,500 A4 Size Copies/Hour.
12	Feed Type (with Rear Loading)	Automatic Answer Sheet (60-90 GSM) and Folded Signature Feeder.
13	Feeder Type	Jaw and Gripper Type Auto Feeder.
14	Feeder Width	510 x 300mm, Auto-adjust for all the stations.
15	No. of Feeder Stations	03 Station
16	Feeder Overlap	0 mm
17	Die Punching Head	Single
(B) Numbering and Bar-Coding Unit;		
1	Printing Type	Thermal Ink Jet Variable Data Printing.
2	Machine Type	Thermal Ink Jet Printer with Print Head with 8" Touch Controller.
3	Printing Character Height	Max. 25 mm, Min. 1.5 mm.
4	Printing Length	Max. 1000 Character.
5	Printing Speed	Ideal for 3,000 A4 Size Copies/ Hour.
6	Printing Resolution	Up to 600 X 600 DPI.
7	Font Selection	True Type Window Fonts/Printer Fonts.
8	Printing Character Set	Pre-Loaded Editable Function with a Facility to Draw as per requirement with a maximum logo print Height of 25 mm.
9	Numbering capacity	Able to Print Sequential Numbering in ascending & descending order up to 10- digit character.
10	Terminal Degree of Protection	IP 64
11	Add on Print Head Module	Maximum Four

Essential Features: -

(A) Stitching and Punching Unit:

1. Machine should be PLC Controlled Programmable with Touch Screen (HMI).
2. Machine is suitable for both types of production (Landscape and Portrait) in A4 Size Answer book/Printed Signatures.
3. Machine supplier should be self-manufacturer of the Stitching heads of the supplied machine.
4. Machine should be supplied with self-made heavy Duty 2 Heads of Side-Stitcher.
5. Auto Feeder/Delivery of the machine should be capable to handle Sheets of 60 GSM and above or folded Signatures.
6. Automatic Feeder should be provided for smooth production, without breakdown of Answer Sheets/Book Works.
7. Machine should be able to make Online Operation of auto Feeding and Delivery of Answer Sheets with online side Stitching, Punching, Numbering and Bar Coding for Answer books.
8. Die Punching will be done online with a die mounted on machine so that a Punch can be made in the Answer Sheets.

(B) Numbering and Bar-Coding Unit:

1. The Printer should be individual controller and which its needed can be detached.
2. Printer should include desired Sensors, Encoders, Power Supplies and Other Cables.
3. Printer should be connected to Desk Top Computer (DTP).
4. Ink cartridges of Black or Spot color.
5. Printer should able to Print Variable Data like Serial Number, Bar Codes, etc.
6. Printer should able to Print alphanumeric characters in Single, Duplicate and Triplicate up to 10-digit character also.
7. The printer should be compatible with Microsoft Window 10/11 & all needed software drivers should be provided.

(C) Electrical: -

1. Machine will be supplied with ISI marked Motor with 5 HP, 3 Phase 440±25 Volts, 50 Hz, AC Drive with speed control facility.

(D) Essential Accessories: -

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| (1) | Black Ink Cartridge | – 02 Nos. |
| (2) | Set of Toolbox | – 01 Set. |
| (3) | Punching Die | – 01 No. |