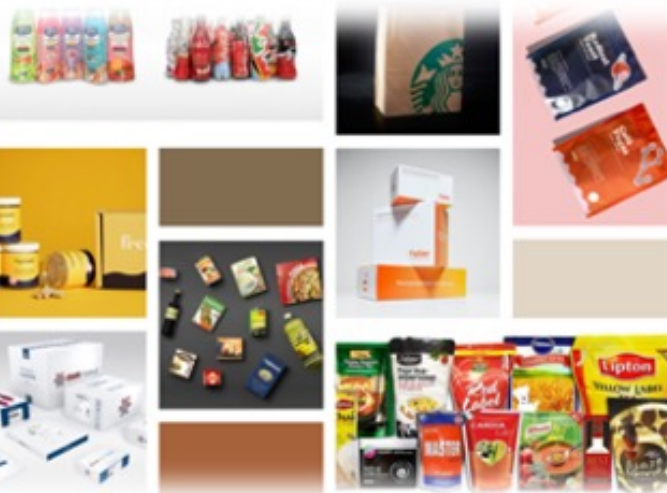


The background image shows a blurred industrial environment with blue structural elements and machinery. In the foreground, a control panel with a monitor is visible. The monitor displays a technical diagram or schematic. A thick red rectangular border is superimposed over the center of the image, framing the text.

MODULES AND AUXILIARY EQUIPMENT



An Introduction :
imprinting
excellence
worldwide since
1946



An Introduction: Our history

Sri K.D. Kohli receiving
the Kohinoor Ratna

The Printer's House is an industry leader in manufacturing of Web Offset Printing Machines from India . A renowned name when it comes to manufacturing rotary web offset presses , providing the world with a better way to print.

The Year was 1946. K.D. Kohli, a freedom fighter-newspaperman, started The Printers House (tph).

Since then, tph has carved a formidable reputation as a quality conscious technology driven manufacturer of precision machinery. Tph's adherence to global standards has enabled to export its products to more than 40 countries with over 20,000 printing units installed worldwide.

The equipment is manufactured in facilities located at Ballabhgarh, Near Delhi. Tph takes pride in being a company of Indian origin, started by an enterprising freedom fighter turned Newspaperman Mr. K.D. Kohli. With eight decades of in -depth experience in precision engineering, design, and manufacturing tph is now a name to reckon with.

However, it is in our humble origins we take solace and hope to continue to grow whilst supplying a product that can match any global standard.



THE TPH FAMILY

TPH boasts an employee pool filled with skilled engineers & professionals.

TPH has 10 branch offices in major Indian cities and over 30 agents worldwide

The TPH family also extends to its loyal and crucial vendor partners , some of whom have grown with us for over 60 years.



THE GLOBAL PRESENCE

With exports to over 60 countries , TPH boasts a huge export portfolio which exemplifies our commitment to deliver high quality and high precision products with world class quality.

MANUFACTURING FACILITIES

The TPH Orient group manufacturing campus spans 20 acres in area with lush green landscape

The campus houses various manufacturing units including a CNC workshop fitted with state of the art CNC's for mechanical engineering purposes. Additionally our numerous testing and quality control equipment and pool of engineers allows us to provide world class products globally.

Our campus has facilities for products such as printing chemicals, offset printing machines, flexo printing machines, folder gluers, die cutters, high efficiency solar modules, printing plates, printing blankets, defense and aerospace engineered products etc.

OUR PATRONS



With over 20,000 printing units supplied worldwide TPH enjoys strong relationships with some of the most distinguished and reputed commercial printers, publishers, and news houses in the world.



Our distinguished Patrons

hindustantimes **अमरउजाला**

दैनिक भास्कर  **दैनिक जागरण**

लोकमत  **नवभारत**

राजस्थान पत्रिका **The Tribune**

 **दिव्य भास्कर** **भारत** **REPRO**

आसक्ति **संदेश**

श्रीगङ्गा **तीनकां**

नमस्ते తెలంగాణ **മാധ്യമം**

ഭരതാഭിമാനി **सुदूर**

The Herald **PUNCH**

LeDEFI MEDIA GROUP **The Daily Star**

প্রথম আলো **বর্তমান**

মানবকণ্ঠ **সুপ্রভাত**

আজাদী

PRINTING MODULES



4 HI Tower

The global popularity /acceptance of Orient Range single circumference and single width web offset printing machines is mainly due to the following reasons

- Robust and proven design for trouble free operations
- Easy operation and maintenance ensuring simple and quick make ready
- Compact design for maximum utilization of space
- Short vertical web lead , ensuring perfect registration
- An option of 5 cut offs -508 , 533 , 546 , 560 , 578 mm (*)
- Compatibility of machines with other makes GOSS, SSC, Magnum etc
- Available in 4 speeds : 16000 , 30000 , 36000, 50000 CPH (*)



33- Colour Satellite

The basic unit consists of a body of high grade, stress relieved cast iron which is machined on sophisticated computer numerical control(CNC) machines to ensure interchangeability.

The Orient range of Printing elements include Mono Units with Integral reel stands , stack units ,ARC with Stack, 3 Colour satellites and 4 Hi towers.

The mono unit is capable of printing one colour on either side of web. Alternatively , 2+0 colour combination can also be achieved by Direct Litho Printing. The three colour satellite is capable of Printing 3+0, 2+1, 1+2 colour combination on one web.



Mono Unit

The stack unit is identical to the mono unit but without the reel stand . It can be mounted on 3-colour satellite to print 4+1 , on mono unit to print 2+2.

It can be stacked as 4 high tower to print 4+4 , or 4+2 or 4+1 with one web . With 2 webs , 4 high tower can also be used to print 1+1 , and 4+2 or 2+2 and 2+2 combinations, with three webs 1+1,1+1 and 2+2 or 1+1,1+1 and 1+1 combinations can be printed.

(*) for the specific information , please refer to the individual catalogues.

REEL FEEDING MODULES

REEL STAND WITH / WITHOUT PNEUMATIC DISC BRAKE

The reel stand RSDB is provided with pneumatically operated disc brakes in lieu of spring controlled shoe brake. In this model the position of the dancing arm is controlled by a special valve, which is operated by a cam. The dancing arm through the disc brake controls the Web Tension. Due to inherent design of the disc brake system and pneumatic control, this system controls the tension better than shoe type brake with spring control.

AUTO REEL CHANGER

- SIDE LAY : +/- 10mm
- MAX. ROLL CAPACITY : 42"/1070mm
- BRAKE : Fully automatic pneumatically operated Disc Brakes with four calipers
- EXPIRY ROLL DIA : 120mm after pasting
- INFEED SYSTEM : Built in, close loop, through independent DC drive
- REEL LOADING : Through trolley suitable for 965 to 1070mm dia rolls
- CONTROLS : Built in auto / manual controls PLC operated/Digital drives
- DANCING ARM : To control web tension before infeed roller, close loop system
- ACCELERATION : Through belt driven by AC motor synchronization
- ROLL WIDTH : 35"/889mm max.
- DIAMETER SENSING : Continuous dia. sensing and display on HMI to control the brake pressure on different dia.

- The reel changer is provided with tension control through dancing arm which is controlled Pneumatically and electronically.
- Provision for mounting stack on Reel Changer to work as single colour unit.
- Box Type Cast Iron frames for more sturdiness with provision for leveling and grouting.
- PLC Control for Pasting Cycle.
- Tension and Brake Controlled by dancing arm and Pneumatic system.
- Provided with loading trolley for easy reel loading and two nos.
- Pneumatic Shafts.
- Independent Brake for each Reel Shaft

Technical Specifications

Maximum Reel width	-	1020mm
Maximum Reel diameter	-	1270mm
Maximum Reel weight	-	700kg
Maximum Web Speed	-	420m/min.
Pneumatic Pressure	-	7 Kg/Sq.cm.
Machine weight	-	3000 kg
Hoist weight	-	600 kg



Reel Stand With Pneumatic Disc Brake



Auto Reel Changer



Zero Speed Splicer

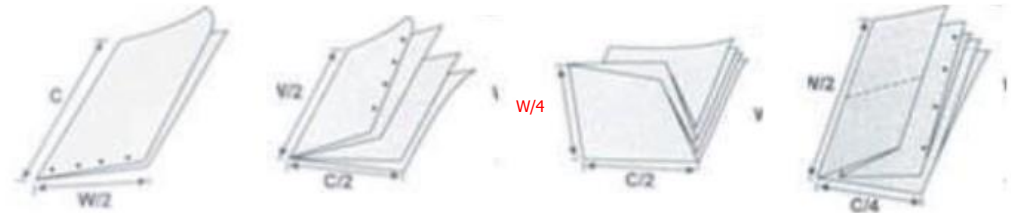
FOLDER OPTIONS



*Orient folder range comprises:

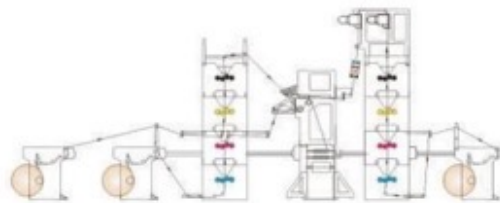
- Orient Standard 1:2 Jaw Folder, upto 16000 cph
- Orient Super 1:2 Jaw Folder, upto 30000 cph
- Orient X-Cel 2:2 Jaw Folder, upto 36000 cph
- Orient Tucker Folder, upto 50000 cph

SIGNATURE OPTIONS

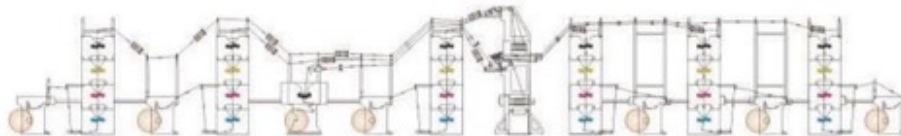


Products	Cut-off	Broadsheet	Tabloid	Quarterfold (Magazine)	Double Parallel or Digest (2-on)
Signature size (Untrimmed sizes) Depending on web width used	630mm	330 mm to 444 mm x 630 mm	315 mm x 330 mm to 444 mm	165 mm to 222 mm x 315 mm	157.5 mm x 330 mm to 444 mm
	578mm	330 mm to 444 mm x 578 mm	289 mm x 330 mm to 444 mm	165 mm to 222 mm x 289 mm	144.5 mm x 330 mm to 444 mm
	560mm	330 mm to 444 mm x 560 mm	280 mm x 330 mm to 444 mm	165 mm to 222 mm x 280 mm	140 mm x 330 mm to 444 mm
	546mm	330 mm to 444 mm x 546 mm	273 mm x 330 mm to 444 mm	165 mm to 222 mm x 273 mm	136.5 mm x 330 mm to 444 mm
	533mm	330 mm to 444 mm x 533 mm	266.5mm x 330 mm to 444 mm	165 mm to 222 mm x 266.5 mm	133 mm x 330 mm to 444 mm
	508mm	330 mm to 444 mm x 508 mm	254 mm x 330 mm to 444 mm	165 mm to 222 mm x 254 mm	127 mm x 330 mm to 444 mm

(*) for the specific information , please refer to the individual catalogue



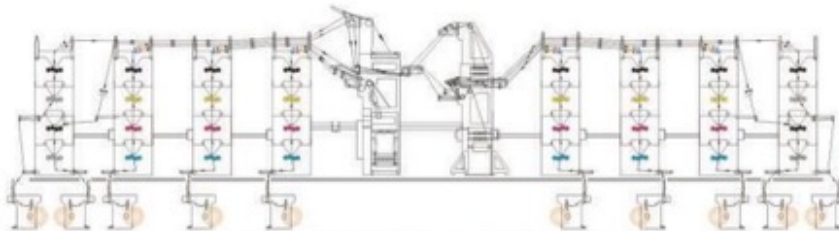
12 Page Broadsheet - 4 Page Colour
RS + RS + 4H + 5F + 4H(UV) + RS



28 Page Broadsheet - 24 Page Colour
ARC1 + 4H1 + ARC2 + 4H2 + ARC1/CS1 + ARC3 + 4H3 + UF/TF + 4H4 + ARC4 + 4H5 + ARC5 + 4H6 + ARC6



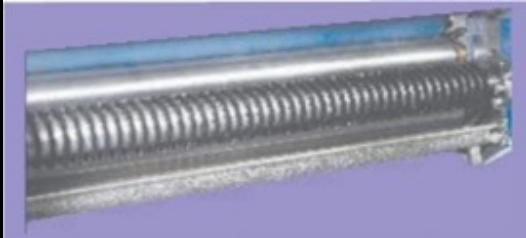
24 Page Broadsheet - 16 Page Colour
ARC1 + 4H1 + S/3CS1 + ARC2 + UF/TF + 4H2 + ARC3 + S/3CS2 + ARC4 + S/3CS3 + ARC5 + S/3CS4 + ARC6



40 Page Broadsheet with 24 Page 4+4 Colour and 16 Page 2+2 Colour
(5 Webs on Tuck-in Folder • 5 Webs on 2:2 Folder • Fully Automated • All the ARC's are in the basement)
4H1 + 4H2 + 4H3 + 4H4 + TF + 2:2F + 4H5 + 4H6 + 4H7 + 4H8
ARC1 + ARC2 + ARC3 + ARC4 + ARC5 + ARC6 + ARC7 + ARC8 + ARC9 + ARC10

TYPICAL CONFIGURATIONS

ACCESSORIES



BRUSHMIST

The contact less Brushmist dampening system incorporates independently variable-speed, motorized, stainless Steel dampener fountain rollers, chrome plated dampener vibrator rollers and stainless steel trays with inlet/Outlet.

This roller train ensures a uniform water film onto the plate mounted on the plate cylinder.



SPRAY DAMPENING

Spray Dampening Systems is provided in place of Film or brushmist dampening system. It increase efficiency and print quality, reduced start-up waste, and savings in water and ink. Short payback makes the spray dampening system a necessary accessory for news paper presses.

The system has patented valves allowing a higher spraying cycle frequency, delivery of precise water volumes, and uniform dampening of the plate cylinder.

Pneumatic cylinders



PNEUMATICS

The pneumatic on-off control is provided for Ink & Dampening rollers and impression cylinder with the help of Pneumatic cylinders and a gang of solenoid valves. It isolates the rubber parts/rollers from other contact parts when machine is idle.

It saves operational time & makes printing unit user friendly and easy to control even from remote location.

MOTORIZATION

The Motorization is provided for running circumference register and side lay register for whole machine along with Motorized compensator on folder for each printing machine.

Independent control of each motor is provided on the central control desk for remote operation. Also, it becomes Integral part of the system in case auto registration control device is provided with the printing unit.

AUTO REGISTRATION

TPH offers an Automatic Registration control system with a proven technology. It is a close loop system equipped with 'intelligent' camera with integrated digital signal processor. It comes with an easy-to-use touch screen user interface.

The major advantage of this system is that it leads to huge savings by reducing wastage considerably which takes place during startup of the press.

OTHER ACCESSORIES

(Remote inking, Auto ink pumping system, UV web drying system, stacker, Plate, Bender & punch.



AUTO INK PUMPING

Auto ink pumping system is provided with Ink Pumping & Filter Assembly, Auto Ink Filling Arrangements, Ink piping, Centralized dedicated PLC control for auto ink filling arrangement.

Remote Inking

TPH offers highly efficient remote inking system for its printing units.

Each system comprise of 24 segments of the ink fountain, individually driven by its own digitally controlled motor.

Individual segments are leak free & move linearly to the ink fountain roller.

The ink flow control is done from a centralized computerized console.

State-of-the-art software and electronics provide unmatched precision, accuracy and speed in controlling and pre-setting ink fountains.

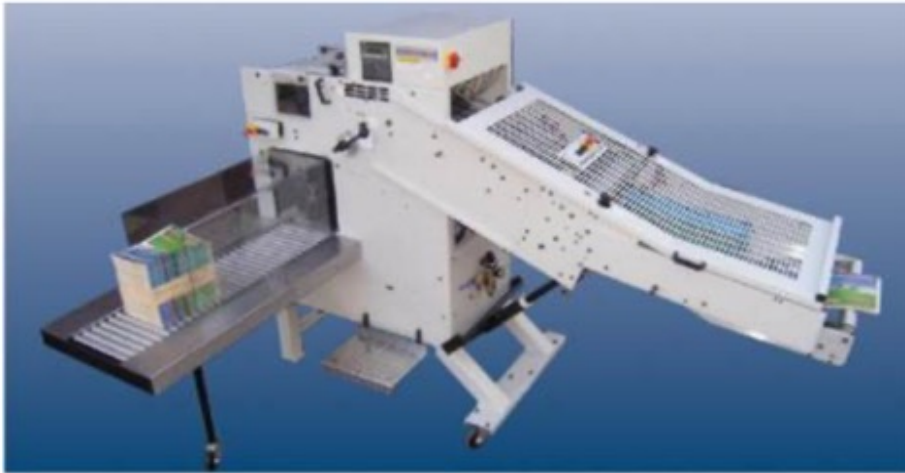
Remote Ink Control System leads to a huge savings in time & money as its background memory provides for setting the next job while the current job is running.

Interface capabilities with the CIP3 format can also be provided for ink key present.

UV SYSTEMS

- UV curing in newspaper printing is a relatively new concept but is gaining popularity fast due to several advantages over the conventional gas-based heat set system, in that it is cheaper & requires lesser space.
- TPH can provide a Two Lamp or Four Lamp UV curing system to print high saturation and high gloss color on glazed newsprint and other semi-commercial substrates.
- The UV curing system being offered by us features the high intensity deep focus reflector system which guarantees fastest cure.
- It offers easy-touch operator-friendly keypad control of the UV System. Installed at operator console, it allows press operator to signal start up, adjust output and shut down the UV system.





Stacker

The stacker is equipped with divert gate for automatic copy ejection, stream aligner with side belts, squeeze roller, mechanical counter, gap former, upper bin unit with patented flipper fingers and turntable with integrated stack compression.



Plate Bender and Punch

Manual Pneumatic plate bender & plate punch with fine accuracies & user friendly in operation.

ELECTRICAL & CONTROLS

DRIVE AND TRANSMISSION

- All units and folder are shaft driven by a DC motor , which is installed independent of the unit and folder and is located Pparallel to the drive shaft on folder .
- The units are connected with torsionally rigid Thomas coupling provided on the drive shafts.
- Units can be silenced from the main drive with the help of quick coupling /decoupling arrangement.

MAIN CONTROL PANEL

- Main control panel with PLC based switchgear,push buttons and all indications.
- Analog/digital DC drives
- Field reversal
- Interlock /safety devices for over current, short circuit & over temperature protection
- All systems and wiring conform to international standards

OPERATING CONTROL STATION

- An independent free standing operator console with a master dampener control can also be offered.
- Located conveniently near the folder for ease of operations. It consists of a modular desk for a press start up, centralized printing function controls and auxiliary equipment which includes
- Main controls with illuminated indications and digital displays
- Printing controls allowing both manual and automatic control sequence
- Auto sequential centralized impression throw on/off common for all units with time-delays for ink form and ink feed rollers
- Master control for dampener increase/decrease
- Lockable total counting, odd copy count and electronic batch selection system with pneumatic controls
- Touch Screen(HMI) on operating console

ANALOG DRIVE

- Full Convertor, 6 Pulses, Thyristor controlled.
- Stepless speed variation.
- Current limit, field failure, single phasing, electronic over current protection.
- Dynamic braking through resistance.

DIGITAL DRIVE

- Digital full Convertor, Four Quadrant Regenerative Thyristor controlled.
- Microprocessor Controlled.
- Fast and easy installation.
- Keypad with display for digital drive tuning & diagnosis.
- Regenerative braking.
- Over Voltage, over current, short circuit & field failure protection.
- Orient X-press comes with complete automation, which can be provided for Orient Super and X-Cel models also.



Main control panel with double side access to all components



Operating control station

THE CNC CENTER : WORLD CLASS MANUFACTURING FACILITIES



- **SMAIC model used**
(Select, Measure, Analyze, Improve and Control)
- Centralized control of CNC programming
- Final inspection by Poli Italian make Co-ordinate measuring machine.
- With several crores of capital investment in the company the infrastructure, buildings, and machinery are truly a force to reckon with on a global level.

Quality Standards

- TPH is an **ISO 9001:2008** company
- TPH also has certification

OHSAS 18001:2007

for health and safety Management System.

&

ISO 14001:2004

for Environmental Management System.

- Over **3,000** quality checks are conducted for optimum performance

OUR CONTACT DETAILS

The Printers House (P) Ltd
10 , Scindia House
Connaught Place , New Delhi ,
India

Tel : + 91-11-23313071-73

Fax : + 91-11- 23310490

Email : tphho@tphorient.com

URL : www.tphorient.com