

TONE

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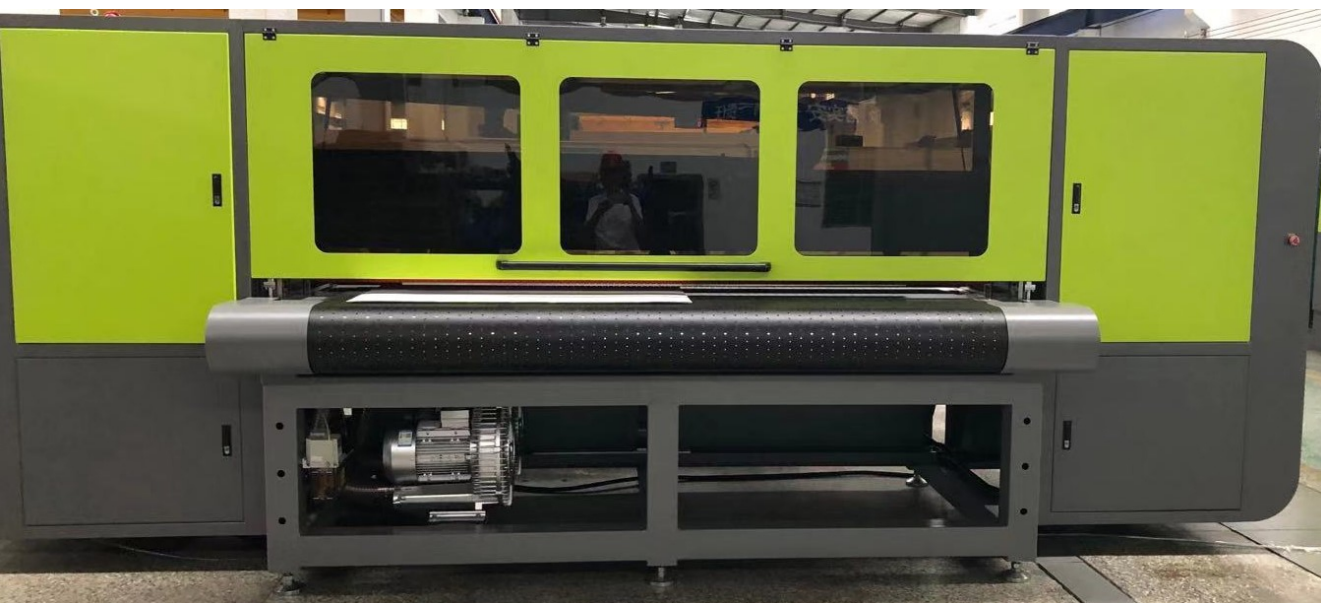
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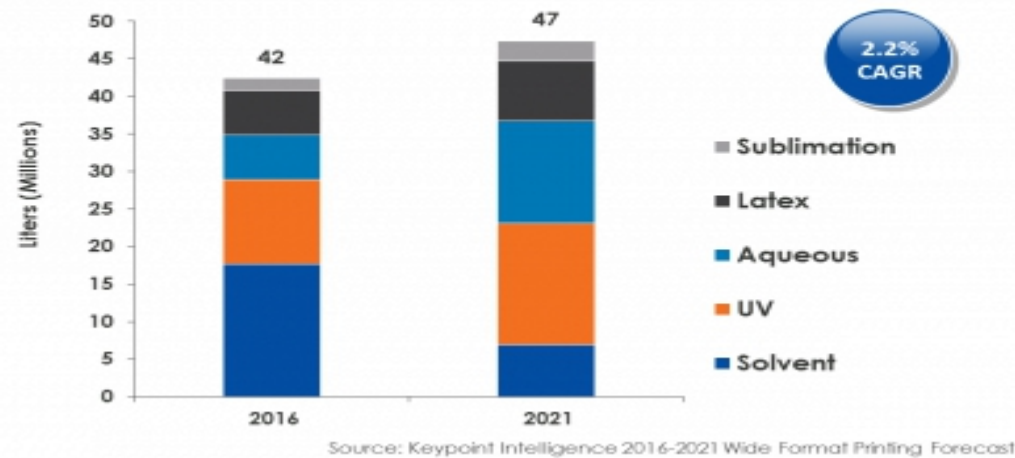
TAI YI DIGITAL PRINTING MACHINE



掃描式數碼印刷機



2016-2021 Digital Wide Format Ink Volume by Type



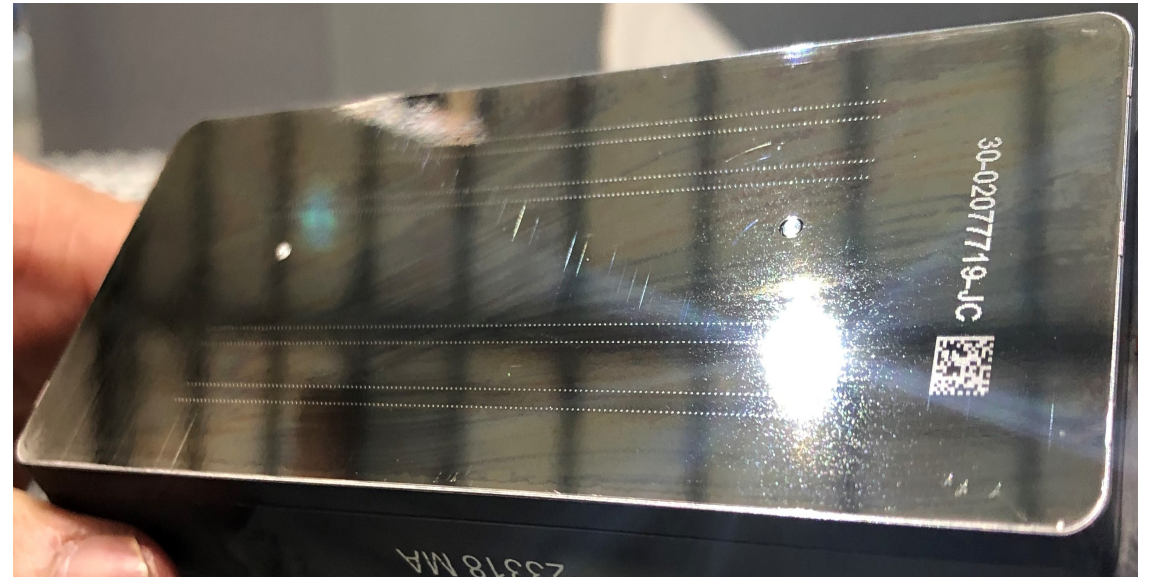
Digital printing machine

Tai Yi digital head can using on three difference ink:

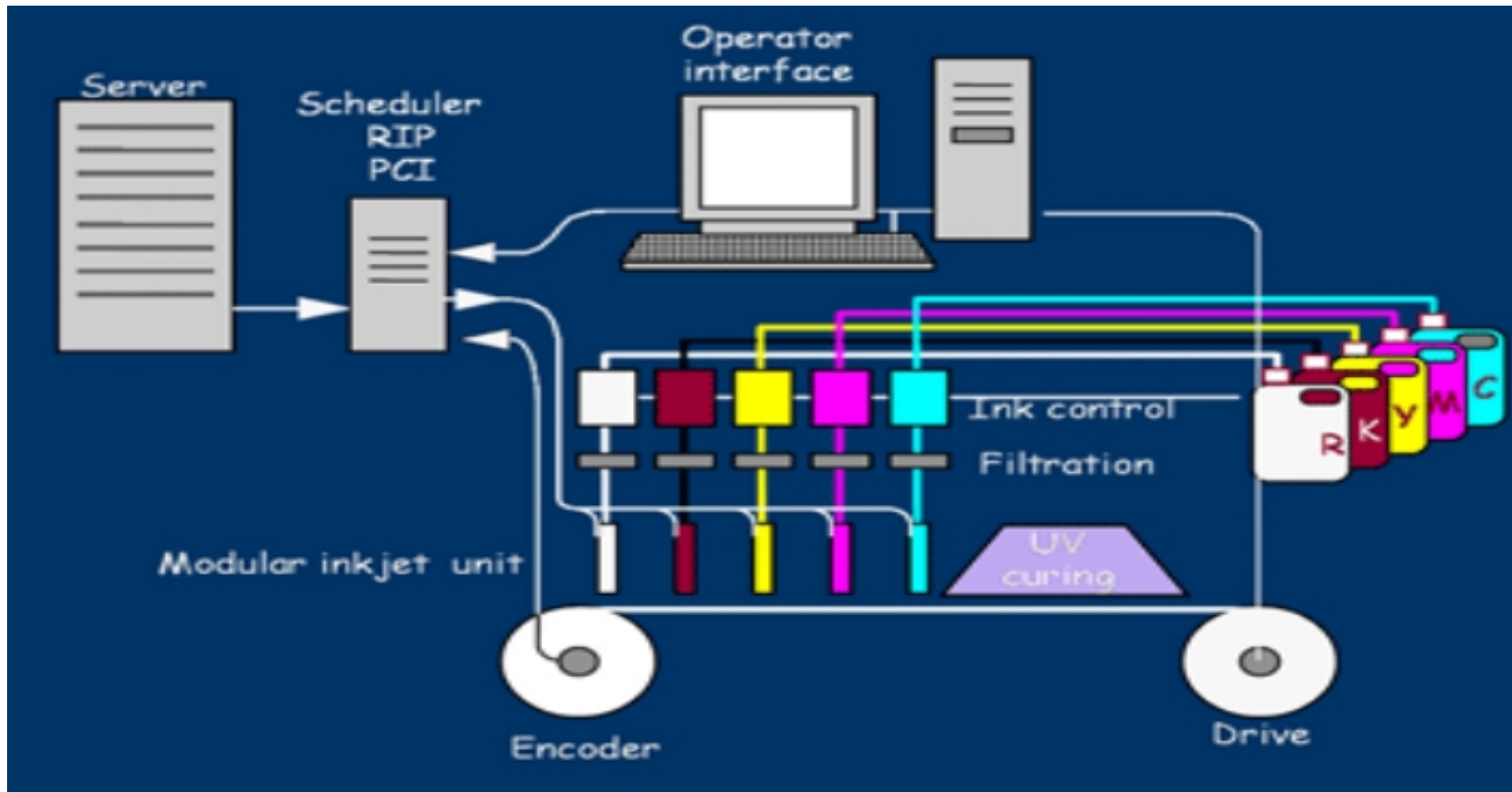
- 1, Aqueous
- 2, Aqueous Dye
- 3, UV ink

Tai Yi digital printer can print on three difference liner paper:

- 1, Kraft paper
- 2, White top paper
- 3, Light coating paper (White)



STRUCTURE



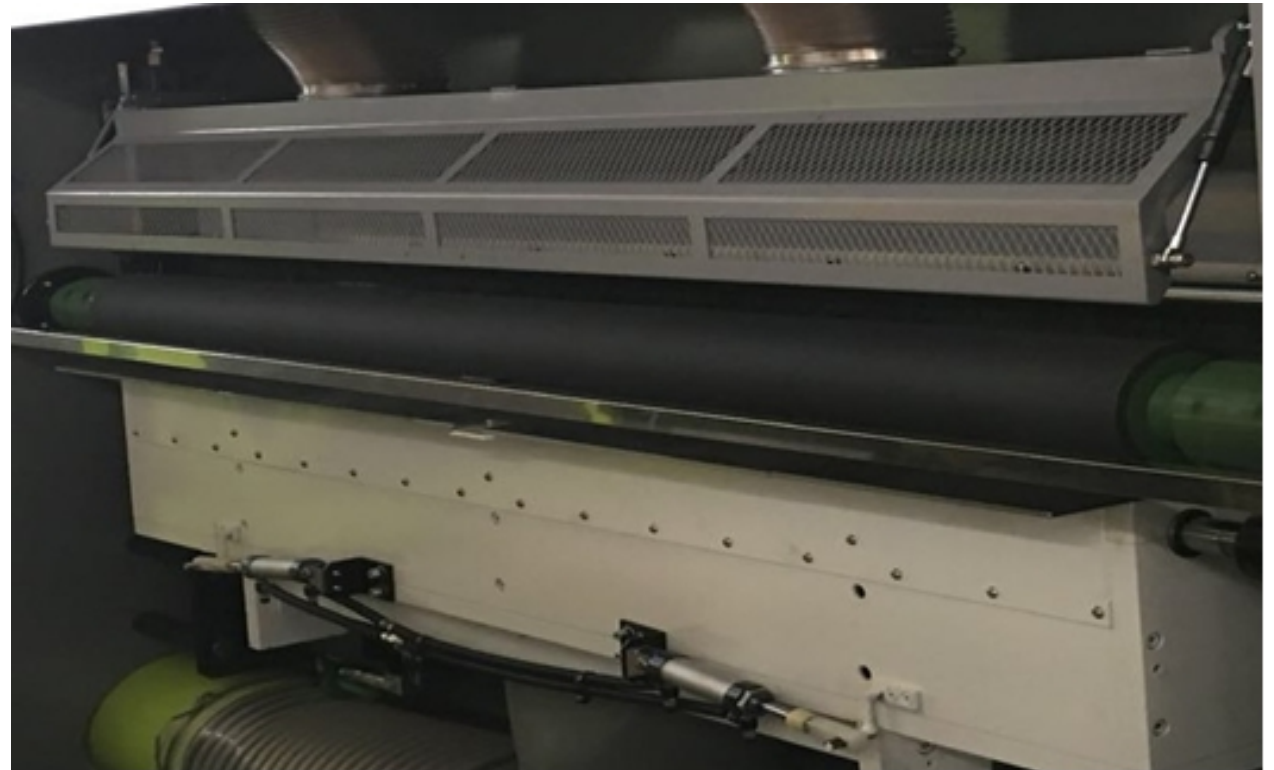
Feeder unit

Four shafts lead edge non-press feeding , four independent servo drives, two pieces on one side , servo motor 's brand is England CT, power of every one is 3.3KW;static dust removal system, multiple brush and fan blower scrap of paper , improve printing quality, sticky dust roller(rubber roller),clean the roller by labor.



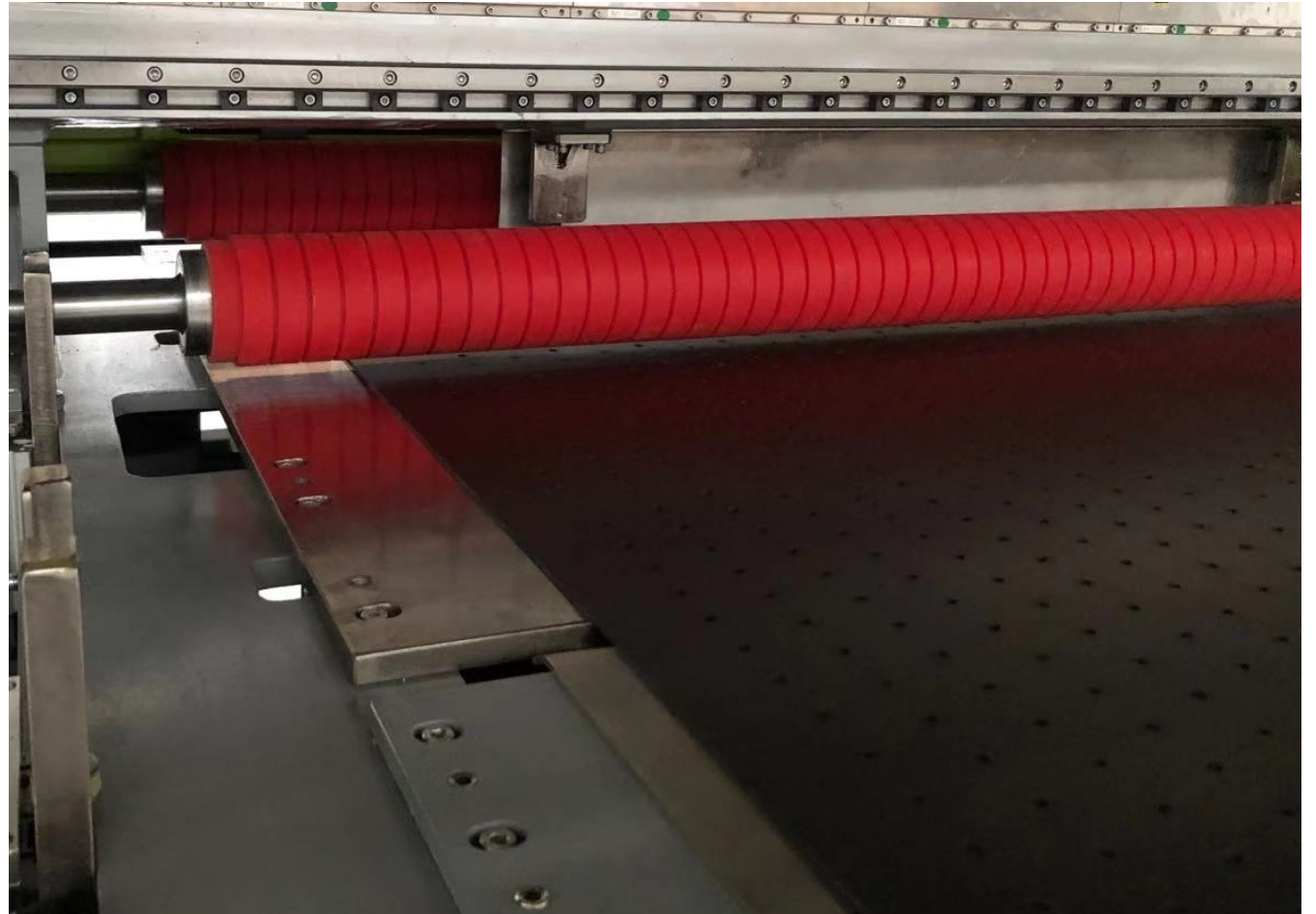
Feeder unit

Pull roller will be automatic adjustment the thickness according the board.
The roller with dust suction to avoid the dust go through printing unit.
This roller will be raise without feeding board

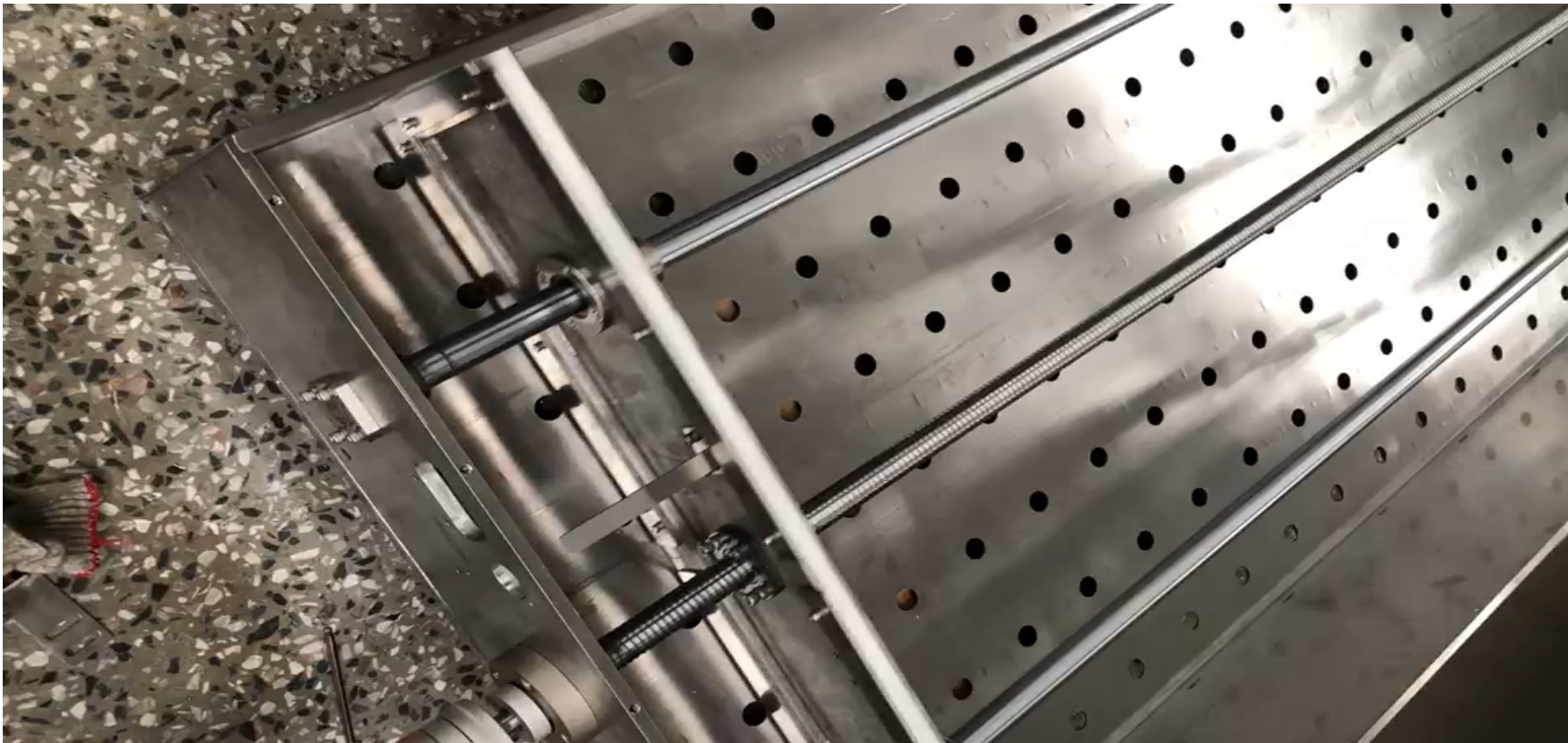


Feeder unit

Link with printer pull roller and vacuum belt.
Make sure all the paper transfer is straight all the times.
Printing register will precision.



Automatic Vacuum belt control device



INKJET HEAD

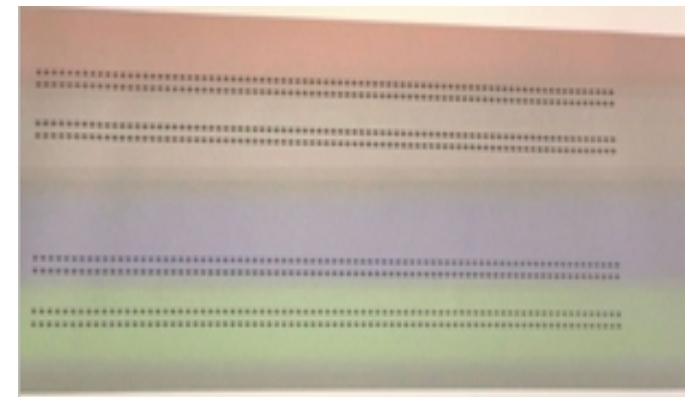


Printer unit

StarFire™ Ditmax 1024 print head: internal recycle supply ink、changeable ink droplet、detachable fixed structure and nozzle design with high density, it is able to almost satisfy all kinds of high standard drop-on printing demand.

Remark: print head of single color or print head of two color(Dpi decrease a half),the print head that TaiYi used are print head of single color.

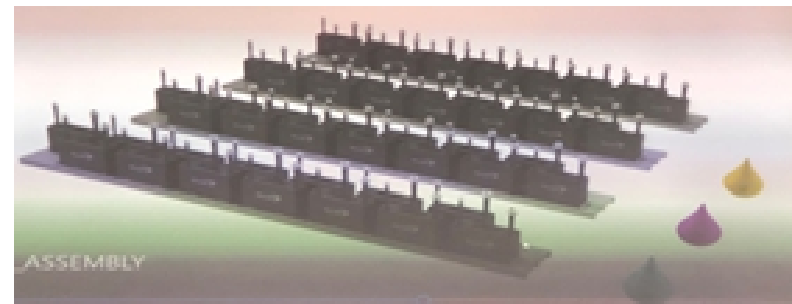
One print head have 1024 holes, 8 lines parallel arrange on single nozzle panel, resolution reach 400dpi, and that all 1024 nozzle can independently drop-on ink , also drop-on ink together.



Printer unit

The most printing accuracy is 400dpi(dot per inch): $25.4/400=0.0635\text{mm}$,dpi is output resolution, ppi (pixels per inch) is unit of image resolution.

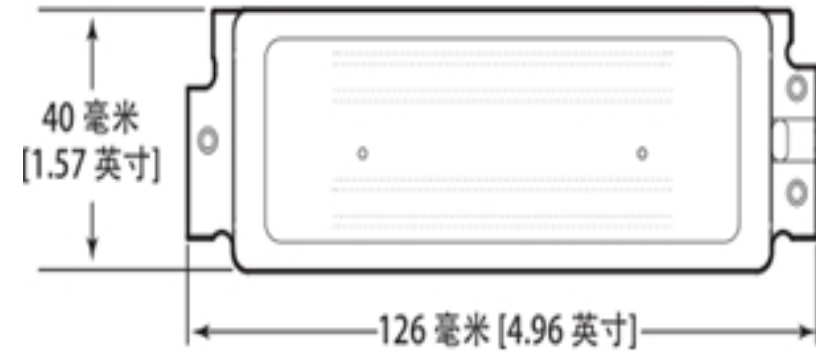
One color includes 24 print heads , one print unit of two color is 48 print heads , two print units of four color is 96 print heads.



Printer unit

Printing width of one print head:2.25inch ,
64.96mm; if printing width is 1 meter , the
number of print head is $1000/65=16$ pcs.

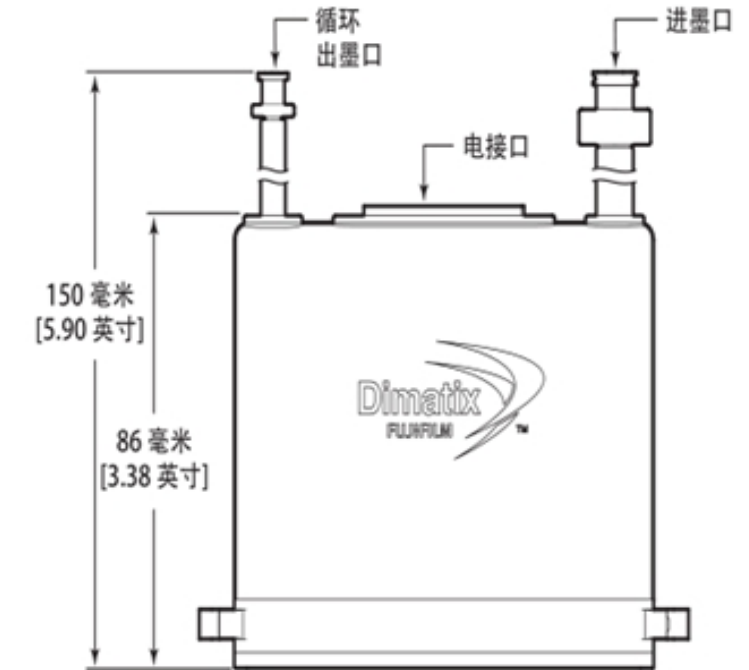
Sprayed coating plate of metal
nozzle is wear-resisting.



Printer unit

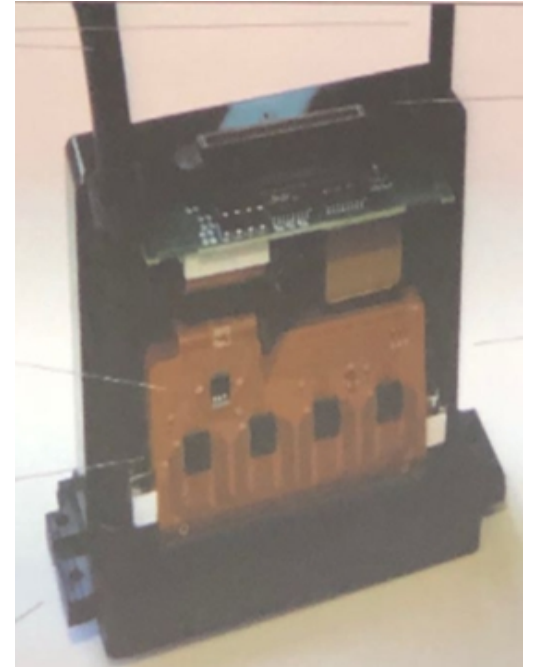
Distance between print head and medium is 3mm.

StarFire™ Ditmax 1024 print head apply RediJet internal recycle technology, via ink circulation continuously in internal nozzle and ink chamber of nozzle panel, extend working time, reduce downtime time, and reduce duration of starting, it is suitable for high concentration ink, easy to precipitate ink and fast-dry ink. We know in the process of digital printing, the ink blockage and broken line will happen easily, operator have to stop to maintenance of ink pressing. StarFire™ Ditmax 1024 print head apply RediJet internal recycle technology use the lowest ink cost achieve the fastest ink filling, 16 hours standby, eliminate the blocking of ink and bubble problem completely, decrease the operator's workload.



Printer unit

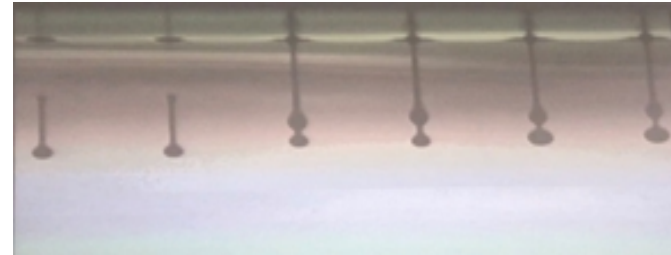
Print head is core of digital printer, traditional consumable part, because of chemical corrosion, pollution of ink supply system, damage of electric and physical cause the blocking of print head, blocking of ink system or nozzle plate scraped. If you meet the above problem generally , you have to change the whole printer head. StarFire™ Ditmax 1024 print head is the first repairable print head, its every part(nozzle plate and every nozzle piece etc.) are able to be disassembled, washing, repaired changed and reposition, it will decrease the cost of whole machine and working of long time. And StarFire™ Ditmax 1024 print head have mane accurate calibration point inside and outside, accurate disassembling & installment, easy operation, reduce the cost of setup and calibration in repair of print head.



Power: the blower between feeder and printer unit, 5.5KW, destination of paper-out, 5.5KW, sputtering ink , 3KW; print unit:5.5KW;and else: lift motor , belt running vacuum transfer , ink supply motor , heating motor and so on .

Printer unit

TaiYi applies 30pl—volume of
a drop
(1pl= 1000 cube micron=10⁻⁶
cube mm)



Mount pace of Ink jet head

Basically can mounting max to 6 colors and each color can mounting 4 heads.
Also you can choose more printing heads for single color to increase the printing speed



Store area for ink

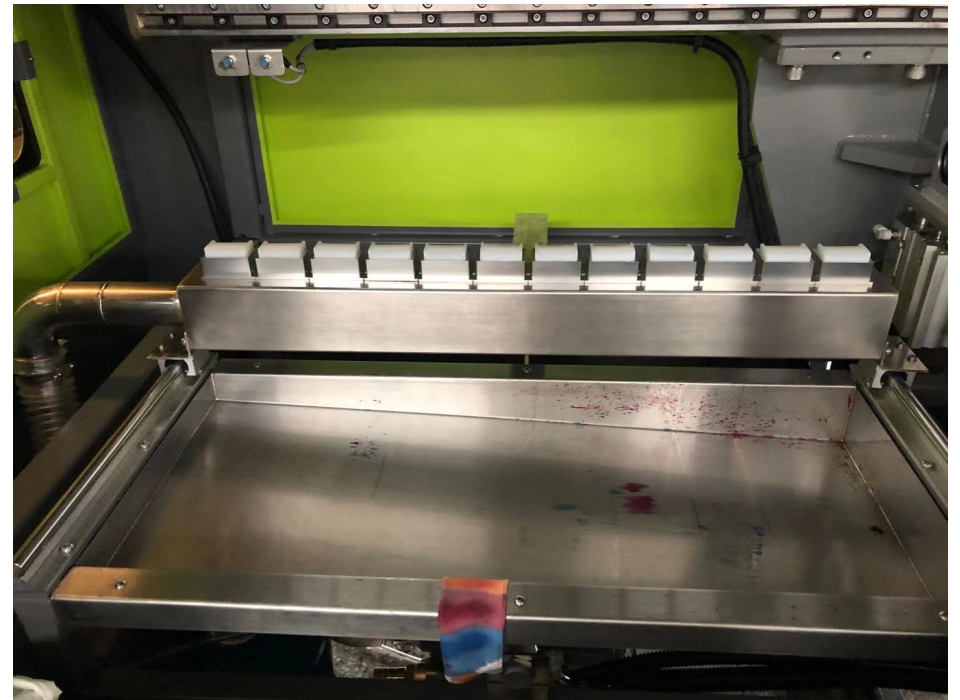


Wipe area

When the printing head not be using . They will park in the wipe area in order to keep ink jet head always is clean



If ink jet head is serious dirty in the opposite side have bigger area clean the ink jet by manual



Repairable of Printer Head

Shanghai Wit-Color Digital Science & Technology Co., Ltd.

Ink consumption

File Name

Size 476.29mm x 317.53mm

Total consumption of ink by m² 0.08 ml/m²

 0.03511 ml/m²

 0.00442 ml/m²

 0.02396 ml/m²

 0.01845 ml/m²

Sample



Sample



Suction system:

2 venation
suction belt for transfer the board
(number of the ven depend on the
machine wide)



Accumulation:

50 kilo accumulation tank for store the ink and water.



Operator penal :

- Order insert
- Color modify
- Ink consumption
- Analysis
- Easy operate

