Overview of T-shirt Printing Technologies

Which is best for you?
E-PRESENTION REVIEW

DIFFERENT TECHNOLOGIES

PROS AND CONS

COMPARISON

QUESTIONS TO ASK

OKI TEXTILE TRANSFER SYSTEMS

CONTACT INFO
Garment decoration includes the following items.

- Inks
- Media
- Equipment
- Software

Our Goal is to assist and guide you in your selection process of the system which is right for you.
DIFFERENT TECHNOLOGIES
THE TECHNOLOGIES

**DIRECT-TO-GARMET**

DTG is a process of using pigment ink to print directly on garments.

**DYE SUBLIMATION**

Dye Sub involves printing to paper and then heat transferring the image to garments using heat.

**SCREEN PRINTING**

Silk Screening is a method of creating an image on garments by pressing ink through a screen with areas blocked off by a stencil.

**TONER TEXTILE TRANSFER**

Toner Textile Transfers utilize special OKI printers for imaging on paper and then heat transferring to garments.
# DIRECT-TO-GARMENT

<table>
<thead>
<tr>
<th><strong>TECHNOLOGY</strong></th>
<th>Prints Direct to the T-shirt</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>T-SHIRT FEEL</strong></td>
<td>Slightly Raised Feel</td>
</tr>
<tr>
<td><strong>SPACE REQUIRED</strong></td>
<td>50~100 Sq Ft</td>
</tr>
<tr>
<td><strong>T-SHIRT TYPES</strong></td>
<td>Cotton Only</td>
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<tr>
<td><strong>QUANTITIES</strong></td>
<td>On-Demand</td>
</tr>
<tr>
<td><strong>SET-UP TIME</strong></td>
<td>Minimal</td>
</tr>
<tr>
<td><strong>INK TYPE</strong></td>
<td>Pigment</td>
</tr>
<tr>
<td><strong>CAPITAL COSTS</strong></td>
<td>$5,000~$300,000</td>
</tr>
<tr>
<td><strong>WORKFLOW</strong></td>
<td>Press, Print, Press and Cure</td>
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</table>
DIRECT-TO-GARMENT

PROS

• Prints Direct-to-Garment for Easier Production
• Complete System Concept

CONS

• Only Works with Cotton T-shirts—Nothing Else
• WorkFlow Increases Total Imaging Time
• White Ink is Problematic
• Daily Maintenance is Extensive
• Limited Warranty on Print Heads
• Total System Costs High
• Black T-shirts Must be Pre-treated
## DYE SUBLIMATION

<table>
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<tr>
<th><strong>TECHNOLOGY</strong></th>
<th>Print to Paper and Transfer</th>
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<tr>
<td><strong>T-SHIRT FEEL</strong></td>
<td>No Feeling, Dyes the T-shirt</td>
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<td>50~100 Sq Ft</td>
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<tr>
<td><strong>T-SHIRT TYPES</strong></td>
<td>Polyester Only</td>
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<tr>
<td><strong>QUANTITIES</strong></td>
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<tr>
<td><strong>INK TYPE</strong></td>
<td>Dye Sub</td>
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<tr>
<td><strong>CAPITAL COSTS</strong></td>
<td>$2,000~$100,000</td>
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<td><strong>WORKFLOW</strong></td>
<td>Press, Print, Press and Cure</td>
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Dye Sublimation

**Pros**
- Provides Bright Brilliant Color
- Image is Dyed Into Shirt for Long Term
- Small Format is Minimal Investment
- Many Polyester Coated Promo Items for Versatility

**Cons**
- Only Works with Polyester
- Only Works with White Background
- Suspect Inks Cause Print Head and Printer Failures
- Maintenance Requirements
- OEM Running Costs High
SCREEN PRINT

TECHNOLOGY
Ink is Forced through Screen

T-SHIRT TYPES
All Fabrics

INK TYPE
Plastisol

T-SHIRT FEEL
Raised Non-flexible Feel

QUANTITIES
Large Quantity of Same Image

CAPITAL COSTS
$5,000~$300,000

SPACE REQUIRED
10-10,000 Sq Ft

SET-UP TIME
2-4 Hours

WORKFLOW
Make-ready, Print, Cure
SCREEN PRINT

**PROS**

- Works on all Colors Substrates
- All Fabrics are Compatible
- Image Lasts Longer
- Best Price Structure for Larger Quantities

**CONS**

- Must Do Large Quantities of Same Image, No On Demand
- Image and Screen Preparation Can Take Up to Four Hours
- Image Limitations Due to Line Screen
- Daily Maintenance is Extensive
- Steep Learning Curve
- Total System Costs High
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<tr>
<td>Toner to Media and Transfer</td>
<td>All Fabrics</td>
<td>Toner</td>
<td>25 Sq Ft</td>
<td>Minimal</td>
<td>On-Demand</td>
<td>$2,800~$10,000</td>
<td>Print and Transfer</td>
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</table>
TONER TEXTILE TRANSFER

**PROS**
- Prints on Black, Dark, Light and White
- No Maintenance Needed
- Widest Array of Fabric and Substrate Compatibility
- Lowest Cost
- High Printing Speed
- Easy to Use

**CONS**
- Fabric Feeling Not as Good as Dyed
- Large Quantity Runs Not as Cost Effective
QUESTIONS TO ASK
WHICH PRINTING PROCESS IS FOR YOU?

• DO YOU NEED ONE-OFF CUSTOM T-SHIRTS?
• DO YOU NEED TO PRINT ON MORE THAN ONE TYPE OF FABRIC?
• DO YOU NEED TO IMAGE MORE THAN T-SHIRTS?
• DO YOU HAVE LIMITED BUDGET AND SPACE?
• ARE YOU ABLE TO OPERATE A DESKTOP PRINTER?
IF YOU ANSWERED YES TO MOST OF QUESTIONS, THEN OKI TEXTILE TRANSFER PRINTERS ARE RIGHT FOR YOU!
OKI TEXTILE TRANSFERS
OKI T-SHIRT SYSTEM

INCLUDES

Four Components to System

- OKI Textile Transfer Printer
- Insta Heat Press
- CADLink RIP for OKI
- One-step and Two-step Transfer Media
OKI 711WT

LETTER SIZED WITH WHITE

- 8.5”x 14” Sized Imaging (Paper Only Available for Letter Size)
- Very Little Maintenance Needed
- Onsite Warranty
- Prints for Black, Dark, Light and White Fabrics
- No Pre-treat Needed for Shirts
- Prints Image at Two Seconds for Each Sheet
- Huge Array of Media for Many Substrates and Applications
- Does Far More than T-shirts
- Best Cost Structure
- Onsite Warranty
- $3,395 List Price
OKI 831-TS

TABLOID SIZED WITH BLACK

- 11”x 17” Sized Imaging
- Prints for Light and White Fabrics
- No Pre-treat Needed for Shirts
- Virtually No Maintenance Needed
- Onsite Warranty
- Prints Image at Two Seconds
- Huge Array of Media for Many Substrates and Applications
- Best Cost Structure
- Does Far More than T-shirts
- $2,095 List Price
OKI 8432WT

**TABLOID SIZED WITH WHITE**

- 11”x 17” Sized Imaging Prints for Black, Dark, Light and White Fabrics
- Prints Image at Two Seconds
- No Pre-treat Needed for Shirts
- Virtually No Maintenance
- Onsite Warranty
- Five Year Warranty on LED Arrays
- Huge Array of Media for Many Substrates and Applications
- Best Cost Structure
- Does Far More than T-shirts
- $6,495 List Price
INSTA HEAT PRESSES FOR OKI

Insta 201 Heat Press
13”x 13”
$725

Insta 158 Heat Press
15”x 20”
$1,695

Insta 256 Heat Press
16”x 20”
$1,995
CADLINK RIP FOR OKI

SUPERIOR PRODUCTION

• Works Great with OKI 831-TS, 711WT and 8432WT
• Unmatched Color and White Toner Imaging
• New Technology “No Ink” Production Queues Included for Garment Printing for Softer Hand
• Longer Lasting
• Exceptional Toner Cost Savings Due to Screening
• Optimized Screens Also Provide Sharper Image Details
• Factory Created Color Profiles Provide Vivid Colors
• Most File Types Supported for Easy Imaging
• Efficient and Intuitive Production Workflow Tools
• Interactive Layout Tools Enhance the Workflow
• Tiling Capabilities for Making Larger Images than the size of the Printer
• $495 List Price
ONE-STEP PAPER-NO CUT, NO WEED

FOR WHITE AND LIGHT FABRIC

• Great Colors with Nice T-shirt Feeling
• Transfers Complex Images with No Weeding or Contour Cutting Required
• Very Good Stretchability and Washability
• User Friendly Workflow
• Available in Letter and Tabloid Size
TWO-STEP PAPER-NO CUT, NO WEED

FOR BLACK AND DARK FABRIC

- Weedless and No Contour Cutting Needed for Imaging
- Two Step Process for Excellent Results
- Low Processing Temperature
- Very Good Stretchability and Impressive Washability
- Great White Opacity for Vibrant Transfer
- No Pre-treatment Needed
- Manufactured for Use with OKI’s 8432WT and 711WT White Printers
OKI C831-TS BUNDLE

START-UP TABLOID PACKAGE

• Get Started in T-shirt Business for $2,795
• Includes 831-TS, Insta 201 Heat Press and Start-up Kit with Paper
• 11”x 17” CMYK Printer
• Great for White and Light Fabrics
• Upgrade to an Insta 256 Professional Press for Only $1,250
• Add CADLink RIP for $495
OKI 711WT BUNDLE WITH INSTA 201

GREAT COMBO--$4,150

- Lowest Cost System for Black, Dark, Light and White Fabrics
- Full System Including Printer, Heat Press and Start-up Kit
- Start-up Kit Includes Two-Step Paper, T-shirt Folder and Other Accessories
- Add CADLink RIP for $495
- $4,150
OKI 8432WT BUNDLE

FULL PREMIUM SYSTEM--$8,895

• Full Premium System Including Premium Insta 256 Heat Press and CADLink RIP
• Start-up Kit with Paper Included
• Everything Needed to Start a T-shirt Business
• $8,895 List Price
TECHNOLOGY COMPARISON TO OKI
OKI VS SUBLIMATION

OKI

• LED Array Warrantied for Five Years
• No Maintenance Required—Printer Can Sit for Extended Periods and Be Used Immediately
• Imaging Speed of 2 Seconds per Sheet
• No Precoating of Shirt Needed for Dark / Black
• More Substrate Compatibility Including All Types of Fabrics and Hard Surfaces such as Mugs, Glass, Metal and Many Others
• Easy to Use as Desktop Printer

DYE SUBLIMATION

• Limited to Polyester
• Must Use Printer Daily
• Hard Surfaces Must be Coated
• Longer Learning Curve
• Cost per Copy More Expensive
## OKI VS DIRECT-TO-GARMENT

### OKI
- LED Array Warrantied for Five Years
- No Maintenance Required—Printer Can Sit for Extended Periods and Be Used Immediately
- Imaging Speed of 2 Seconds per Sheet
- No Precoating of Shirt Needed for Dark / Black
- Less Heat Transfer Steps and Time Needed
- More Substrate Compatibility Including All Types of Fabrics and Hard Surfaces such as Mugs, Glass, Metal and Many Others
- Great Price Point Starting at $2,095 to $6,495

### DTG
- Printhead Clogs Means Limited Warranty
- Must Use Printer Daily and Must Perform Daily Maintenance at Beginning and End of Work Day
- Imaging Speed Between 2 to 5 Minutes per Shirt
- Precoating Solution Needed to Image White—Costs $4,000~$7,000 Extra
- Many Extra and Longer Heat Press Steps
- Limited to Garment Printing
- Extensive Training on RIP Software and Maintenance Cause Long Training Cycle
- List Price: $15,000 to $35,000
CONTACT INFO
THANK YOU

CONTACT INFO
Contact Graphics One for Info on Your Local Equipment Provider.

EMAIL: SALES@GRAPHICSONE.COM
WEB: WWW.GRAYGRAPHICSONE.COM
WEB: WWW.PRISMINKS.COM