



# DESCO

Printing systems for  
the cap and closure industries



### World Leading Printing Solutions

Desco Machine Company is an innovator of high quality, cost efficient printing systems for the Cap and Closure industry sector. We have been manufacturing industry leading solutions since 1985, and as a division of Apex Machine Company, we offer significant developments and technical advances for our product range.

Many applications are unique in the cap and closure industry, and we start by analyzing each customer's specific printing requirements. We then provide a detailed, comprehensive equipment recommendation, with the result being the most cost effective integration of printing features and accessories available at the most competitive price possible.

### Modern Manufacturing

Desco Machine Company is dedicated to Manufacturing Excellence. We are staffed with experienced industry professionals who are leaders in their fields, which enables us to achieve and maintain that excellence.

We provide the printing machines, associated handling equipment, spare parts, printing plates, inks, blankets, and print consumables...the complete package. Our laboratory is available for special sampling and ink testing trials, and our graphics department offers full service design and plate-making, including laser plates, using the very latest technologies.

### Exceptional Service

Desco knows that our customers expect and require superior service. We provide up to date project reports while your equipment is being designed and manufactured, and our ability to pinpoint the status of machinery moving through production illustrates our ability to keep our customers informed.

You can be assured that our customer care does not stop after you receive your Desco printing system. We work with you every step of the way to ensure your printing machine has the long trouble-free life typically associated with our equipment. Long after your system arrives on your floor, our technicians will ensure that your printing machine/s are inspected, serviced, and adjusted.

One of the many benefits of our relationship with Apex Machine Company is that we can now offer a larger worldwide presence for both sales and service. We now have technicians worldwide that travel extensively installing and servicing our machinery.

Desco is committed to providing the highest quality printing equipment, consumable products, and most importantly, superior service to our customers.

Our goal is to develop a long-term relationship with each and every Desco system owner to forge a partnership and ensure that your company is completely satisfied with their investment - **now and in the future.**



*State of the art 50,000 square foot manufacturing facility on our 8 acre site*





## Our Range Of Cap & Closure Printers

Desco Machine Company has extensive experience in printing and decorating caps and closures. Recognizing the industry's challenges of superior adhesion and attractive graphics combined with uptime maximization, we have developed systems that overcome those challenges as well as address the need for ease of use and line integration, high speed production, and low cost of ownership.

Desco's world-renowned superior construction, combined with industry leading dry offset printing heads, has always offered the highest level of reliability and quality for the production of all types of artwork onto caps and closures of varying sizes and dimensions.

Models are available to suit all levels of production, and each machine is available with a range of options that cannot be matched by any other manufacturer. We offer a variety of product handling solutions to suit individual requirements for automated feeding, inspecting, sorting, boxing, counting and packaging.

Whatever your requirements, Desco has the best solution available. Our machines are customized to meet your specifications to provide a perfect fit for your production needs, and based on our global experience of over 1,300 machine installations; we will supply the right solution.

## Standard Benefits Offered On Desco Cap & Closure Printers

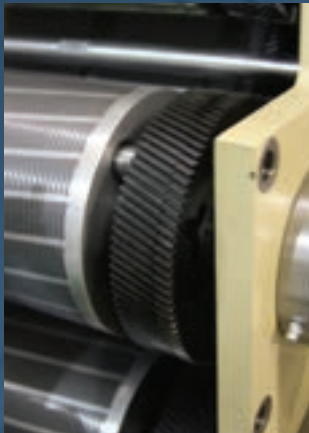
FEATURE	BENEFIT
Welded Steel Construction	Rigid integrated structure prevents any flexing or movement of the print carriage assemblies to ensure flawless print accuracy.
Positive Timing throughout the Machine	As a helical gear driven machine, there are less wear and tear related issues which are typically associated with timing belts and chains.
Adjustments for Print Height & Print Pressure	Print system is easily and quickly adaptable for different sizes of closures, reduces downtime.
Accurate Registration Printing in up to 8 Colors	High quality printing without variation from product to product.
Anti-Backlash Plate Cylinder Gearing	Eliminates any gear marking or inconsistencies in print due to imperfect gear adjustments, providing a higher printing quality.
All Printing in One Pass – Line, Halftone, Full Process or any combination	All colors are transferred to the product in a single rotation of the offset blanket drum, thus guaranteeing registration and quality.
Micro Axial & Radial Plate Cylinder Adjustments	Allows fast and precise adjustments for registration between colors when setting up new artworks, reduces downtime.
Swing-Away Ink Roll Sections	Provides easy access for operators for plate mounting and for cleaning, saving time and effort.
Variable Speed Ink Fountain Roll Drive Motor	Ensures totally consistent ink transfer every time the dance roller operates to add ink to the print head distribution rolls, providing better quality printing.
Swing Arm Control Panel	Operator can control and monitor the system from different positions around the machine, saving time and effort.
Full System Control through PLC	Provides operators with all the necessary information and controls to run and service the machine.
Safety Shielding & Guarding	Prevents accidents – meets Statutory Requirements.

## Rotary Cap Printers

### DRCP-2+2 Four Color Printer

The DRCP-2+2 Rotary Style system incorporates two print/dry stations enabling you to print up to two colors, dry them, print up to two more colors, and dry them again at speeds over 4000 parts per minute. It also allows for a double layering of basecoat in the first print station and then two color printing in the second.

The system is simple to operate and includes enhancements that keep downtime to a minimum, require low maintenance and enable quick changeovers, which meet the necessity of today's changing market requirements.



**DRCP-2+2 CAPABILITIES** Maximum colors: 4

#### LOADING & FEEDING

2, 3 or 4 lane chute  
Single bin/elevator sorter  
Dual bin/elevator sorter  
Turntable, singulator, airveyor

#### OTHER

Drying - on platen - ultraviolet (x2)  
Operating speed: 4000+ ppm

#### PRINT TECHNOLOGY

Dry offset  
Swing away dry offset color head  
Lift off dry offset color head  
Flexapex®  
Base coat station  
Clear coat station





## DRCP-4 Four Color Printer

The DRCP-4 Rotary Style 4-color closure printing system is designed to maintain print concentricity at speeds over 4000 parts per minute. All four colors are printed in one pass with superior ink opacity and perfect registration. The DRCP-4 is a completely gear driven system, and incorporates Running Registration, which enables radial and lateral adjustments while the system is operating.

Some of the advantages of the DRCP-4 include the ability to print light ink colors on dark substrates, fast copy changeover, and simple, operator friendly control.

- Lacquer overcoat system available after UV drying inside the machine
- Corona or flame pre-treatment
- Machine can be provided with up to 4 colors
- Totally automatic and capable of orienting, feeding, pretreat, printing, UV drying, counting and boxing closures
- Welded steel construction
- Ink is cured while closure is still on platen
- Perfect register printing (gear to gear drive system)
- Running registration - radial and lateral adjustment can be made while press is operating
- Anti-backlash gearing throughout
- Swing-away roll section for access to plate cylinder
- Variable speed motor driven ink fountains

### DRCP-4 CAPABILITIES Maximum colors: 4

#### LOADING & FEEDING

2, 3 or 4 lane chute  
 Single bin/elevator sorter  
 Dual bin/elevator sorter  
 Turntable, singulator, airveyor

#### PRINT TECHNOLOGY

Dry offset  
 Swing away dry offset color head  
 Lift off dry offset color head  
 Flexapex®

#### OTHER

Drying - on platen - ultraviolet  
 Operating speed: 4000+ ppm

## Linear Cap Printers

### DCP-3 Three Color Printer

The DCP-3 linear closure printing system is our most economical and simplest system to operate. With a very low investment, this printer will provide consistently superior quality printing on closures at speeds over 3000 parts per minute for many years.

If your goal is to print up to three colors on closures and have the ability to add ancillary components now or at a later date, the DCP-3 is an ideal, cost efficient system that will meet those requirements.



**DCP-3 CAPABILITIES** Maximum colors: 3

#### LOADING & FEEDING

2, 3 or 4 lane chute  
Single bin/elevator sorter  
Dual bin/elevator sorter  
Turntable, singulator, airveyor

#### PRE-TREATMENT

Single flame assembly  
Dual flame assembly

#### PRINT TECHNOLOGY

Dry offset  
Swing away dry offset color head  
Lift off dry offset color head  
Flexapex®

#### OTHER

Drying - on platen - ultraviolet  
Operating speed: 1600-3200 ppm





## DCP-4 Four Color Printer

The DCP-4 is our least expensive linear style printer capable of printing in up to four colors on caps and closures. The DCP-4 will provide consistent service on a day-to-day basis for many years, and since all our systems are built with a "building block" concept, it can be automated in various ways, either when initially purchased or at any time in the future.

These automation options will increase production efficiency, lower labor costs, and meet your specific production requirements.

- Various size closures
- 3000 plus parts per minute
- Perfect register printing
- Solid state DC variable speed drive
- Over-ride clutch protection of machine
- Convenient, positive pressure & ink flow controls
- Adjustable speed ink fountain roll

**DCP-4 CAPABILITIES** Maximum colors: 4

### LOADING & FEEDING

2, 3 or 4 lane chute  
 Single bin/elevator sorter  
 Dual bin/elevator sorter  
 Turntable, singulator, airveyor

### PRINT TECHNOLOGY

Dry offset  
 Swing away dry offset color head  
 Lift off dry offset color head  
 Flexapex®

### PRE-TREATMENT

Single flame assembly  
 Dual flame assembly

### OTHER

Drying - on platen - ultraviolet  
 Operating speed: 1600-3200 ppm

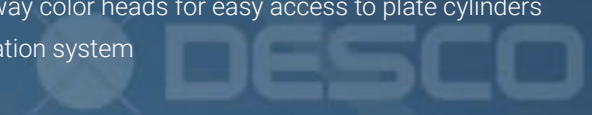
## DCP-4+4 Eight Color Printer

The DCP-4+4 is an extended version of the DCP4 with a second 4-color print station. This makes the machine capable of printing in up to eight colors, including half-tones and fine lines in a linear format. Incorporated on the DCP-4+4 are two print/dry stations enabling you to print up to four colors on your closures, dry them, print up to four more colors, and dry them again.

A lacquer over-coating station or base coating station can also be incorporated into one of the print stations. Artwork possibilities are endless, and your customers will be able to provide enhancements to their closure artwork not available from any other printing system.

The DCP-4+4 is modular in design, and the system can incorporate many different options and ancillary items now or at a later date as your production demands increase.

- Capable of up to four colors at the first print tower
- Second print tower applies up to four additional colors
- Two ultraviolet curing stations
- Micro printing pressure adjustments throughout machine
- Perfect register printing
- Removable or swing-away color heads for easy access to plate cylinders
- Automatic chain lubrication system



## Inside Cap Printers



### DUTCLP - Inside-Cap Laser Printer

The Desco Under The Cap Laser Printer represents state-of-the-art UTC printing. The DUTCLP is the most advanced, reliable, and cost effective laser printing system on the market today, with operating costs and maintenance requirements that are far lower than those of any competing technology.

Printing with the DUTCLP delivers clear, permanent, environmentally safe, defect-free marks which are precisely positioned with the two dedicated laser systems integrated into the system.

Unlike conventional non-contact marking methods such as ink jet, the process require no inks or solvents, no clean up, and no disposal of hazardous wastes. Maintenance requirements are minimal and consumable material costs are virtually eliminated.

The DUTCLP is simple to operate and can run unattended 24 hours a day, and any segment of the DUTCLP can be integrated into an existing closure production line at speeds up to 1400 parts per minute.



### DICP-12 - Four Color Inside-Cap Printer

The Desco Inside the Cap Printer is capable of printing up to four colors inside caps at speeds of 1500 closures per minute via the Dry Offset printing method. The system includes a feeding system, 4-color print station, inspection conveyor, 5-foot long conveyor, and ultraviolet drying system. The DICP will provide you with perfect register printing for many years and is the most cost effective system available for this type of specialty printing.

- Perfect register printing - up to four colors
- Solid construction
- 12 inch or 6 inch diameter magnetic plate cylinders available
- Variable speed drive
- Corona treater

#### *Accessories & Options*

- Inventory bins
- Sorter
- Dryer



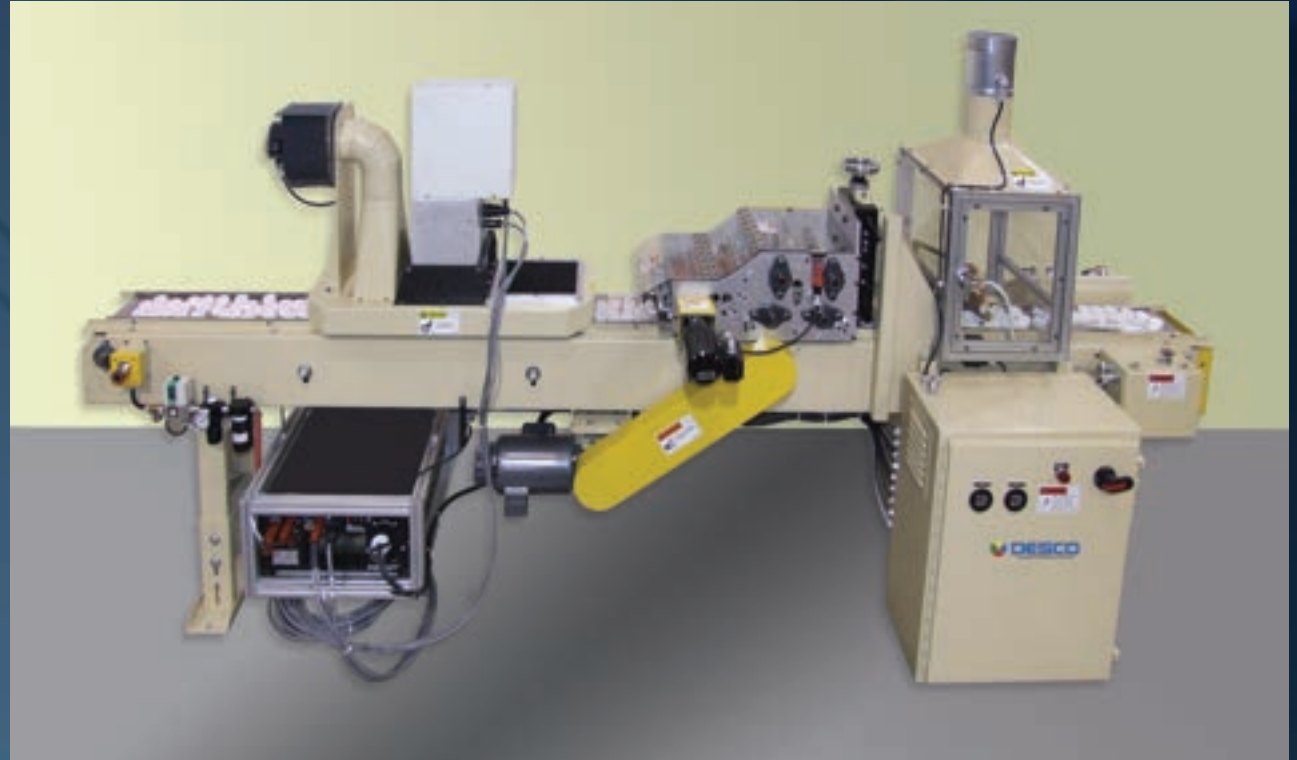


## DHLP Hi-Lighter Printing System

Desco's Hi-Lighter Printing System is the industry standard for printing raised images on closures. If the requirement is for consistently perfect register to the raised image on closures with the lowest part tolerances in the marketplace, the DHLP will provide it.

The DHLP is capable of feeding, flame treating, highlighting the raised image, and UV curing closures at a rate exceeding 2000 parts per minute, with no pucks or mandrels required.

The closures are highlighted twice in the printing station, ensuring complete coverage, and the system is simple to operate, can run unattended 24 hours a day, and can be integrated into an existing closure production line.



Hi-Lighter Color Head

## Options & Ancillary Equipment

### Flexapex® - near silkscreen quality offset print

Flexapex® is the most exciting advance in offset printing technology in decades. It works by providing a combination of the benefits of flexographic and offset print technologies and it permits the laying down of up to 5 times the amount of ink that is possible with conventional dry offset printing, enabling the transfer of substantially heavier ink films.

Flexapex® allows the printing of improved solids and more definite, crisper images wherever color density is needed. A further benefit of the Flexapex® process is highly predictable quality and density repeatability on re-runs.

FlexApex® technology has been developed by our parent Apex Machine Company and it is a technology already widely in use, with great success, in a number of industry fields including medical, automotive and other areas requiring great vibrancy and depth of color for markings, solids, etc.

Flexapex® conversion print heads are now available as an option on all new machines and also as a retrofit for most existing Desco and similar machinery in the field.

For more information about Flexapex® technology and how it can transform your printing capability to set you apart from competitors, just give us a call.



*Flexapex® Replacement Color Heads*



*Feeding and Boxing*



*Swing-out Color Head*



### Protect People, Assets & The Environment

Safety and health are important customer concerns in every market segment, so it's essential to ensure maximum efficiency and productivity as well as protect your brand image. More than ever, you need to implement smart solutions that will make your machines safe and protect your operators.

Our process depends on partnership. You know how to make your products and we know how to make the machines that print those products while keeping your operators safe. Together we collaborate to develop and implement solutions that not only improve machine safety but meet regulatory compliance and reduce your overall risk.

We work with you to develop simple, effective ways to protect personnel from the dangers posed by automated equipment. Some of our solutions include Steel Cage Enclosures and Complete Lexan Guard Enclosures.



*Infeed Pick-off Shute*



*Magnetic Plate Cyinders*



*Corona Treater*



*Complete System Lexan Enclosures with Fully Framed, Safety Interlocked Doors*



*Steel Cage Print Tower Machine Mount Enclosure with Interlock Doors Front and Back*



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