

# White Toner vs. Direct-to-Film Comparison Guide

Feature	White Toner	Direct-to-Film
Maintenance	Toner based printing - Little to no maintenance required	Ink based printing - constant maintenance to prevent clogging or streaking
Idle Time	Can sit idle for extended time without issue	Must be running and cycling constantly to prevent clogging
Substrates	No limitation to application substrates including magnets, banners, window cling and labels	Limited to mainly textile transfers
Speed	Fast print speed	Slow print speed
Space required	Desktop	Automated - 100 sq ft with ventilation Manual - Desktop
Adhesive Step	Adhesive sheet	Adhesive powder
Size of Transfers	Cut sheet printing (A4 - Super B)	Roll to roll printing up to 24" wide (High production)
Cost of equipment	\$3,000 - \$10,000	Automated - \$10,000 - \$50,000 Manual - \$3,000 - \$5,000
Ventilation Required?	No	Yes
Wash Cycle	15 - 50 washes depending on paper used (up to 100 with Premium)	50+ washes
Durability	Very Good	Excellent
Stretch of Transfer	Good / Very Good depending on transfer paper used	Excellent
Type of runs	Short run	Medium to large runs
Batch printing?	Yes	Yes for automated system on roll No for manual system
White Printing	Under and Over print capabilities	Overprint only
Specialty Printing?	Sublimation, Fluorescent, Clear, Security and Metallic options	No
Black Printing	When using white toner, black is made with composite colors. True black can be made when white is not needed	CMYK + W channels at all times
Automation	No	Yes, with larger systems
Alignment to garment	Easy using page edges	More difficult - rolls need to be cut apart - pages don't have straight edges
Hand	Papery feel with thicker graphics and/or certain papers	Soft even without rasterization
Cost per print	Approx \$2.50 (A4, 2 Step paper)	Automated - Less than \$1.00 (A3) Manual - \$1.25
Process Time	3 Minutes	Automated - 6 Minutes Manual - 9 Minutes
Need for negative space / rasterization	High	Low
Resolution	Very Good	Excellent
Color Vibrance	Very Good	Excellent
Heat Press Quality	High quality with pressure gauge recommended	Basic press is sufficient
Amount of artwork prep required	More	Less
Equipment Durability	5 - 6 Years	3 - 4 Years