

## IRONSIDES NOR'STAR SYSTEM

### The Beacon for Your Document Factory

Track, report and analyze your entire production process to make informed, data-driven business decisions.

The Ironsides Nor'Star System provides you with the business intelligence required to help you improve efficiency, profitability and identify growth opportunities. Real-time data collection allows you to monitor and track each job down to the piece level while analyzing actual production costs from prepress through production, finishing, sorting, packaging, shipping and mailing for each job. Robust auditing capabilities ensure that your customer's SLA requirements are met and 100% compliant with all major rules and industry regulations.



### Three software platforms for your requirements:

#### Ironsides AOT Automated Order Tracking



Ironsides AOT provides real-time visibility to all prepress operational activity for improved efficiency and time savings. The platform monitors and tracks the prepress process providing you with greater visibility into your workflow starting with order intake, through prepress and into the production process. Identify and track individual records, in real-time, as orders are received and move through your workflow. Comingle similar jobs for production batching while orders are in prepress helping to save costs, especially with ink jet printing. Detailed reporting helps prepress managers track jobs to identify potential bottlenecks and understand where and why rework was required.

#### Ironsides APT™ Automated Production Tracking



Ironsides APT ensures the integrity of individual pieces and complete jobs across multiple production lines while providing performance benchmarking information to optimize production. Ironsides APT tracks pages and collations being printed, finished, mailed and shipped, in real time, across all brands of continuous and cut sheet printers, ink jet printers, inserters, and finishing equipment. With Ironsides APT, you always have desktop access to work-in-process, production benchmarking, integrity accuracy and delivery metrics necessary to optimize business performance.

#### Ironsides ACA Automated Cost Analytics



Ironsides ACA automates the collection of data from all your production steps starting with order intake through prepress, print production, finishing, bindery, sorting and mailing. Powerful data analytics and detailed reporting highlight the actual cost of each job, contract, or client. You have instant visibility into their true costs per day, week, etc. or by shift, equipment customer and much more. Ironsides ACA allows you to make more informed business decisions to drive profitability, grow your business and identify new application opportunities.

# NOR'STAR: Business Intelligence Throughout Your Document Factory

The Ironsides Nor'Star System is a business intelligence tool that combines automated tracking and reporting with cost analytics to provide document factories with valuable insights required to effectively manage in today's manufacturing dynamic. Ironsides Nor'Star's open architecture can adapt to any production environment and connect data in real-time across prepress, production equipment, finishing, sorting, packaging and mailing. Production managers have real-time, end-to-end visibility into their entire work-in-process to better manage staff, machine throughput and capacity; identify bottlenecks; reduce errors; and ensure 100% distribution compliance. Powerful cost analytics provide business executives with the ability to track actual costs compared to estimates to better understand margins and improve facility profitability.

## End-to-End Job Tracking

Automatically track and manage every job and every piece through your entire manufacturing flow from the time an order is received through prepress, production, finishing, sorting, bindery, packaging and mailing to ensure that all work has been produced and assembled correctly.

## Powerful Data Analytics

Instant access to real-time data and analytics, through one central dashboard to help you improve both business and job planning.

## SLA and Productivity Management Tools

Improve machine and staff throughput, reduce bottlenecks and eliminate errors with detailed reporting and alerts that help to identify and understand your real production capacity. Eliminate errors and manage production efficiency, ensuring that the most demanding SLA requirements are 100% fulfilled.

## Cost Analytics

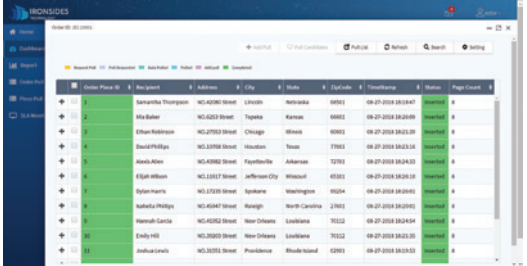
Understand the true costs of each job by tracking production data through your production flow with instant analysis against your estimates to understand your real (not average) margins more accurately and immediately.

## 100% Document Integrity and Compliance

Manage privacy compliance risks with detailed reporting that ensures all jobs are fully compliant with all industry rules and government regulations.

## Open Architecture

Adapt to any production environment by integrating with all new or existing hardware and software systems on your production floor.

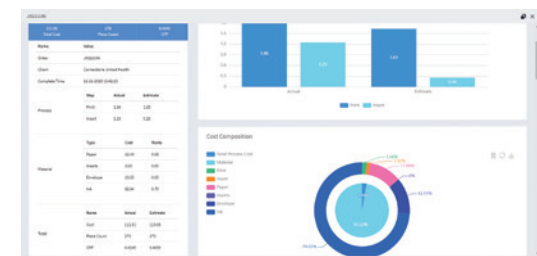


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2	Mike Baker	NC 4200 Street	Togata	Kansas	68602	08-27-2018 10:20:09	2
3	Chen Robinson	NC 27000 Street	Chicago	Illinois	60602	08-27-2018 10:21:10	2
4	David Phillips	NC 30700 Street	Houston	Texas	77002	08-27-2018 10:23:10	2
5	Wendy Allen	NC 4200 Street	Fayetteville	Arkansas	72702	08-27-2018 10:24:10	2
6	Elgin Wilson	NC 10017 Street	Jefferson City	Missouri	65102	08-27-2018 10:26:10	2
7	Stephen Harris	NC 27000 Street	Charlotte	North Carolina	27102	08-27-2018 10:28:10	2
8	Wendy Phillips	NC 4200 Street	Warrington	North Carolina	27102	08-27-2018 10:30:10	2
9	Harold Garcia	NC 4200 Street	New Orleans	Louisiana	70102	08-27-2018 10:32:10	2
10	Lady Hill	NC 30000 Street	New Orleans	Louisiana	70102	08-27-2018 10:33:10	2
11	Indira Lundy	NC 30000 Street	Providence	Rhode Island	02902	08-27-2018 10:34:10	2

Order Tracking



Production Tracking



Cost Analytics

## Ironsides Service and Support

Ironsides' Global Professional Services and Technical Support Team is available to help you. Our dedicated staff will assess your needs and make recommendations based on your unique goals and production workflow. We will work with you on an implementation strategy and provide technical support and training to ensure you meet your business objectives.