# Sequence

# Work Instructions...Engineering, Manufacturing,Made Easy!Quality, Training

**Improve Productivity** In Multiple **Business Areas** With The Right **Work Instruction Tools!** 





Engineering, Manufacturing, Quality, Training

# Are Work Instructions A Growing Problem In Your Organization?



Engineering, Manufacturing, Quality, Training

# Possibly the Missing Piece



To Your "Design To Manufacture" Process





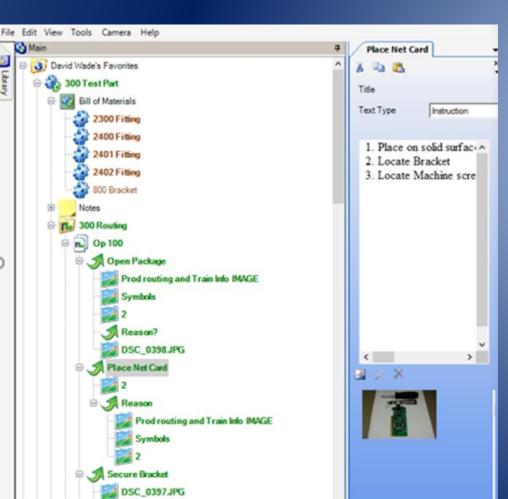
### Spending Endless Hours Writing & Formatting Work Instructions?





#### Engineering

### **Use The RIGHT Authoring Tool ...**



# Rapid Editing, Database Driven No Manual Formatting!



Made *Easy!* 

Engineering

### Typical Customer Results ...

## **Reduced Authoring** Hours >50%!

### **Increased Capacity For Other Work!**



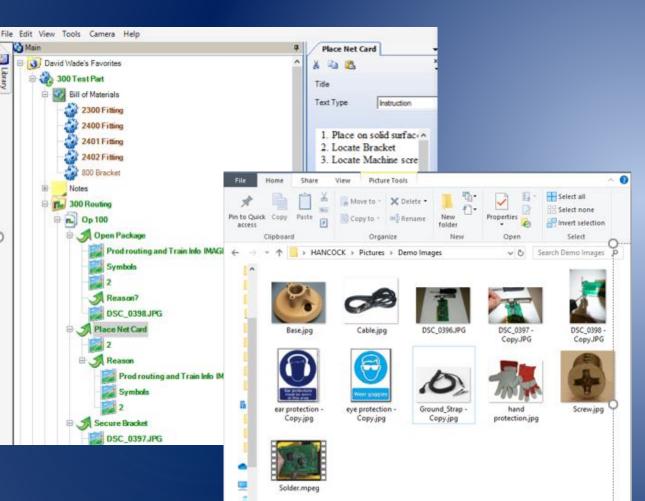
#### Engineering

Where Do You Spend Time Creating Work Instructions?





#### Engineering



**Formatting? Finding Photos? Locating The Proper Information?** 





### Customer Results ....



"Reduced Change Implementation Time 95%"





### Customer Results ...

#### SECHAN ELECTRONICS Performance every time.



"Achieved Manufacturing Engineering Capacity Gains of 20% Due To Redline Tracking!"







# Let's Compare Authoring Time Using "Office" Tools vs. A Better Way!





# Time Comparison: Create A Typical **10 Page Instruction Document**

# Using MS Office = 50-80 Hours **Using Sequence** Software = 8-10 Hours!



Made *Easy!* 



Significant Time Saved By ... Automatic Formatting Smart Reuse of Common Content Gathering Info – Data, Photos, Videos Improved Collaboration With Others **On Redlines, Approvals** 





### Customer Results ...



Detect the difference.



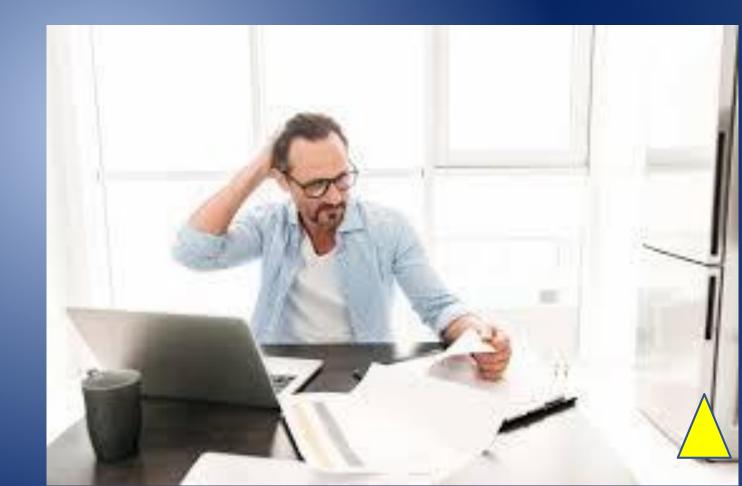
# "Reduced Cycle Times By 2 Weeks."



Engineering

# Are Change Requests Time Consuming?

# Redlines Yet Another Problem?









#### Streamline Your **Process on Changes & Redlines!**

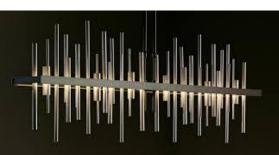
### **Reduce Ediling Time** From **Hours to Minutes!**





### Customer Reports ...

HUBBARDTON FORGE.



**"Documentation Management** for All Departments Was 30 Hours Per Day (3 Full Time People); NOW, Reassigned to Other Product Throughput Work."





### Customer Results ...



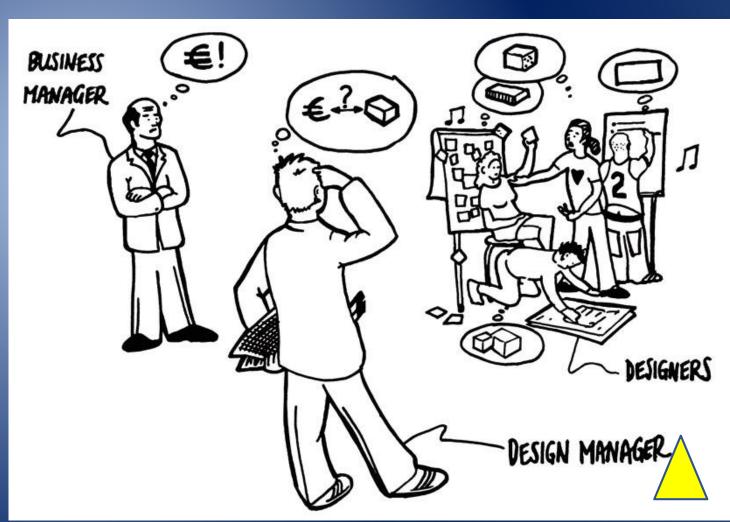


"Engineering Changes Took 1-1/2 Hours. Today is takes 5 minutes."



#### Engineering

Have Problems Managing Revisions with NO Change **History**?





#### Engineering

# Revision History Is Automatically Archived!

Number:300	Rev:	Version:4	Approved:9/20/2019 3:01 PM	Supersedes:9/20/2019 3:00 PM

#### 1 Notes

Version	Note	Approved By	Approved	Status
	due to ECN123 BOM changed added 3 new			
2	parts.	David Wade	8/30/2019	Completed
2	'300 Test Part' was approved by 'David Wade'	David Wade	8/30/2019	Completed
3	'300 Test Part' was approved by 'David Wade'	David Wade	9/20/2019	Completed
4	'300 Test Part' was approved by 'David Wade'	David Wade	9/20/2019	Completed

#### 2 References

Number	Revision	Title	Туре	Version	Approved
300 Routing		300 Routing	Document	4	9/24/2019
500	C1	STRUT	Subassembly	2	7/18/2019

#### **3 Bill of Materials**

Part Number	Revision	Name	Qty	Unit	Reference Designator
2300		Fitting	12.000	EACH	
2400		Fitting	2.000	EACH	
2401		Fitting	5.000	EACH	A1
2402		Fitting	4.000	EACH	D1
800		Bracket	1.000	EACH	

# Published & Available When Needed!



#### Engineering

### Are Using "Office" Products and PDFs Effective?









**Use An Authoring** Too **Specifically Designed For** Work Instructions!







Server MS SQL or Express Imagine ...

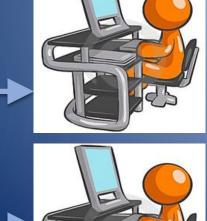
A Single Database For ALL Authors To Create Their Work Instructions!



#### Engineering





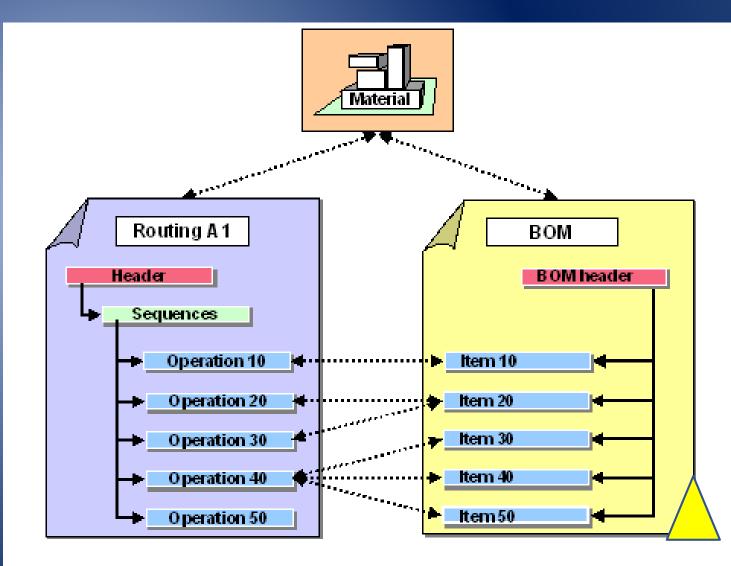


# A Collaborative, Network Environment!

#### Full Version Control, Approval Process, Publish to PDF or Real-Time Electronic Views



#### Engineering



# Want To Import YOUR **ERP/MRP** Data **To Your Work** Instructions?





Let ERP/MRP Maintain Your Data ... But, Import That Data To Build Work Instructions With Current **BOMs + Routings + Operations** Increases Accuracy, **Speeds Authoring!** 



#### Manufacturing Operations

For Complex Product Assembly





#### Manufacturing Operations

Still Using Paper Instructions In Manufacturing?

### Ready for Paperless?





#### Manufacturing Operations

### Do You Need Step-By-Step,

## Visual Work Instructions?





#### Manufacturing Operations

## Leading Complex Manufacturers

Prefer Simple, Easy to Use, Step-By-Step Visual Instructions





#### Manufacturing Operations

## Real-Time Scrollable View Only Shop Floor Interface

Reference Library		Log Out Cam Wade	≫ Sequence
1A Breeze			10/10/2019 8:05 AM Version 17
<ul> <li>1A Breeze</li> <li>I Sold Back edges</li> <li>1. Fold Back edges</li> <li>2. Touch only outer edge</li> <li>3. Don't drop any debris on material</li> <li>4. Reveal the Base Mounting Base</li> <li>5. Netcard</li> </ul>	Sharp Edge Hazard		10/10/2019 8:05 AM Version 17
Prod routing and Train Info IMAGE	Symbols	2	DSC_0398.JPG

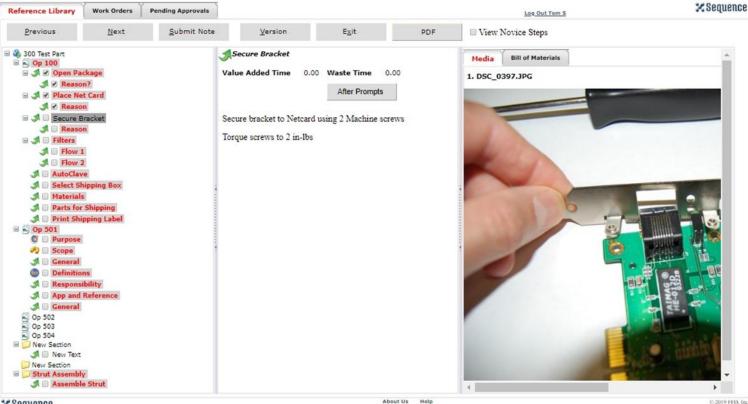
#### 3.1.1) Reason?

1. To Keep material Flat 2. Reduce or Eliminate contaminates



#### Manufacturing **Operations**

# **Real-Time Interactive Interface** With E-Signature, Manual Data Entry & More!



**Step-By-Step** Instructions, **Standard** Format

🗶 Sequence



Manufacturing Operations

## Customer Results ...





"Real Benefits in Visual ... Errors Are Reduced, Cycle Time Data Available, Helps Us Make Improvements!"



Manufacturing Operations

#### Worried About Having Older Versions of Work Instructions On the Shop Floor?





Made *Easy!* 

Manufacturing **Operations** 

### Eliminate Outdated Instructions & **Avoid Build Errors!**

# **Reduce Time Wasted Searching** for Paper or Files to Use!

## **Realize ROI – Less Than 1 Year!**



Manufacturing Operations

### Having Problems With Rework & Scrap?

Need Fast Turn-around on Instructions?

## **Excessive Rework Costs?**





Manufacturing Operations

#### Improve Results With Step-By-Instructions to Match Process and Work Flow ...

#### With Either Paper Or Electronic Instructions!



Manufacturing Operations

### Customer Results ...





"Reduced Rework from 7% to 4.3%"





#### Manufacturing Operations

Wasting Time Managing Work Instruction **Using Folders** & Binders?





Manufacturing Operations

Tired of Printing Endless Paper Work Instructions for the Shop Floor?





#### Manufacturing Operations

#### Go Paperless! Real-Time Work Instructions!

Reference Library		Les Out Cam Wade	34 Sequence
1A Breeze			10/10/2019 8:05 AM Version 17
🝠 3.1) Open Package			^
<ol> <li>Fold Back edges</li> <li>Touch only outer edge</li> <li>Don't drop any debris on material</li> <li>Reveal the Base Mounting Base</li> <li>Netcard</li> </ol>			
	Sharp Edge Hazard		
Prod routing and Train Info IMAGE	Symbols	2	DSC_0398.JPG
THO PHOE	Symbols	2	030_0390.0PG

#### 3.1.1) Reason?

1. To Keep material Flat 2. Reduce or Eliminate contaminates



Manufacturing Operations

### Customer Results ...

#### SECHAN ELECTRONICS

Performance every time.

## "Reduced Labor for Paper Printing ... Saving \$60K Annually."



Manufacturing Operations

## Improve Manual Data Recording From Paper To Electronic!



# Sequence

Work Instructions... Made **Easy!**  Manufacturing Operations



**Use Keyboard or Bar Code To Record Relevant Process Info Parts or Work** Completed Signoffs with **E-Signature** 



#### Manufacturing Operations

Need to Improve Cross-Training?





## Flexible Use of Labor?



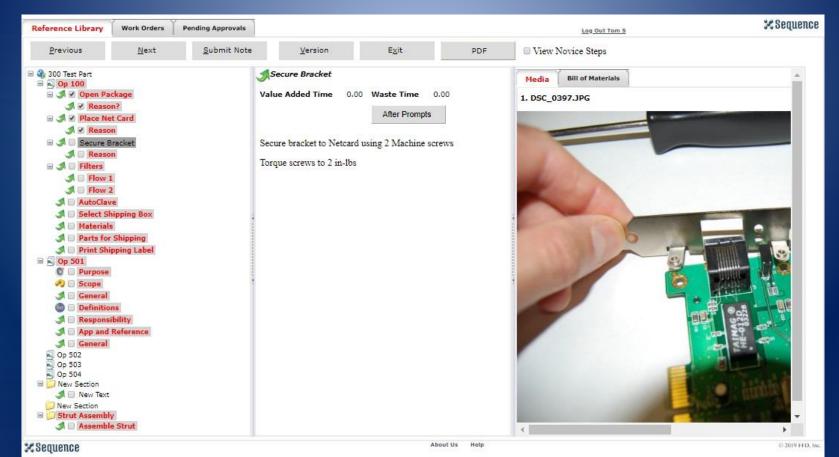


#### Manufacturing **Operations**

#### **Standard Presentation of Content** Across Work Cells

Made *Easy!* 

**Sequence** Work Instructions... Made **Easu!** 





#### Manufacturing Operations

#### Want Electronic Work Instructions

With Your MES Shop Floor System?





Manufacturing Operations

Bring Real-Time Electronic Work Instructions To Your MES Shop Floor System Workstation!

Automatically Brings Correct Instructions To the Right Work Center!



Manufacturing Operations

#### Need To Increase Shop Floor Productivity?

#### And Profitability?





Made *Easy!* 

Manufacturing **Operations** 

## **Consider Real-Time Electronic** Instructions!

No hunting for instructions! No Using the Wrong Files!



Manufacturing Operations

#### Use Barcodes!

Loads Instructions Automatically For THAT Work Center!



Manufacturing Operations

### More Customers Improvements

- Improved Order Start Times
- More On-Time Deliveries
- Happier Employees & Customers





### Improve Quality Results







### Is Product Consistency A Problem?



#### Are Work Instructions A Cause?



Made *Easy!* 



## Step-By-Step Work Instructions **Significantly Reduce**

- Customer Complaints
- **Excessive Rework & Returns** •
- Increased Shipping Costs
- Late Deliveries
- Lost Orders!





#### Are Poor Work Instructions Causing Non-Conformance?

	NON-CONFORMANCE STATUS REPORT						
SI No.NCR No.		LOCATION	CONTENT	Status			
1	56	Column @ Block-A GF GY02/X14	02/X14 Out of Plumb				
2	43	B-F from Mez. To 2nd Floor	Position Columns	sub			
3	40	GF B-C G(X31/Y03)	Plumb Column	closed			
4	38	B-E First flr GX24/Y18	of Position Columns	closed			
5	35	B-E GF to Mezz. G X33-34/Y17-18	d out of Plumb	closed			
6	32	B-D Corewall 19 G X32/Y12	major pours in conc	closed			
7	29	GF GL X18 bet Y14 and Y15	d defective conc	closed			
8	28	GF G X24 bet Y15-Y16	(derable offset)	closed			
9	27	GF G X24-X25/Y14	fective conc	closed			
10	22	GF G X29-X30	ulging	closed			
11	21	G X23/X24 Y19-20 X25/Y18-19	8 Columns out of position and sizes are not as aproved drawings	closed			
12	10	Raft floor Finishing	Undulation found on Raft bay 14&17				
13	12	Raft floor Finishing on bay 25	Many undulations/level diff./ Foot prints bay 25				





#### Still Recording & Signing Results Via Paper Reports?

Is Compliance Driving E-Signature & Electronic Records?







#### **Electronic Work Instructions**

## Enables CFR21 Part II Signoffs & Operator Data Collection!





### With Sequence Software, Customers Report

- Reduced Non-Conformance
- Met Regulatory Compliance
- Increased customer satisfaction!





### Increased Demands with Regulatory Compliance and Customers?







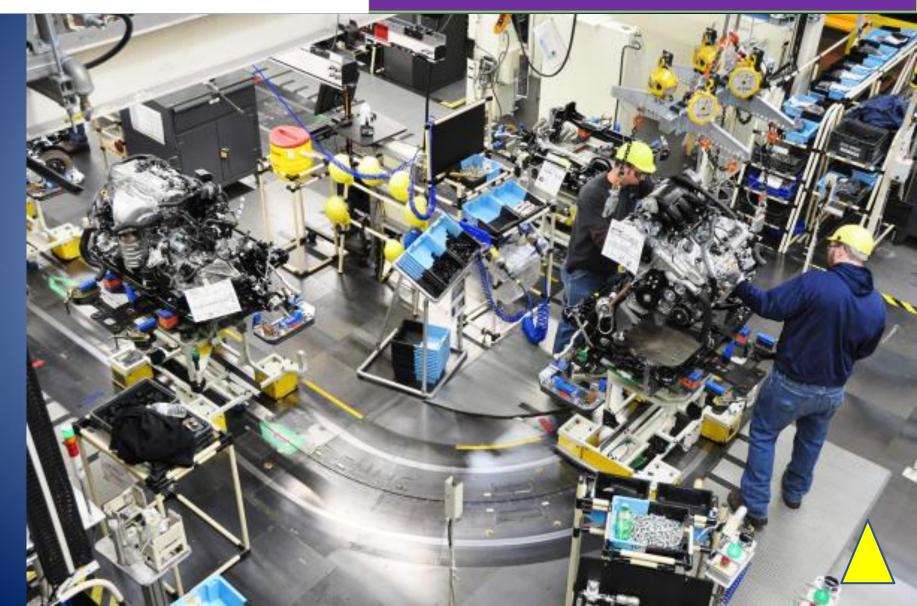
### Supports Regulatory Compliance with Auditable History







Improve Training With Standard, Visual Instructions







#### Are Non-Conformance Issues Due to Training?

#### Using Difficult To Follow Instructions?





Made *Easy!* 



**Train Workers with** "Easy To Understand" Step-By-Step Work Instructions ....

**Create Consistent Results and Increased Productivity!** 





Reference Library	Work Orders	Pending Approvals					Log Out Tom 5	🔀 Sequence
Previous	Next	<u>S</u> ubmit Note	Version	Exit	PDF	□ View	Novice Steps	
300 Test Part     Op 100     Op 100     Op 100     Op 700     Op 100     Op 700     Op 700     Op 701     Op 501     Op 501     Op 501     Op 501     Op 502     Op 503     Op 504     New Section     New Section	on? et Card on Bracket on 1 2 ve hipping Box s r Shipping ipping Label ibility Reference		Secure Bracket Value Added Time 0.4 Secure bracket to Netcare Torque screws to 2 in-1bs	After Prompts d using 2 Machine scr	.00 etws	Media 1. DSC_0	Bill of Materials	

#### Standard Format, Process, Tasks Media





#### Need To Improve Training Documents?

Align With Assembly Skills & Tasks?







## Customize Your Training Aids, Use A Consistent, Standard Format For All Process and Task Training!





Are More **New Employees** Oľ **New Products** Increasing Your Training **Demands?** 







Get Standard Work Instructions Consistent Format ...

On Paper, OR With Real-Time Electronic Interface







### Considering "Training Within Industry" (TWI) Methodology?





## TWI Training Aids, Consistent Format For All Process and Task Training!





A Solution That Delivers Cost Savings, Increased Profits, and Continuous Improvements! <u>Achieve ROI – Less Than 1 Year!</u>

- Significant Savings in Engineering Time, Increased Capacity
- Reduced Shop Floor Errors & Rework / Repair Costs
- Increased Customer Satisfaction, Reduced Returns and Lost Orders
- More On-Time Deliveries
- Increased Quality
- Reduced Printing Costs
- Increased Compliance, Reduced Risk



## Have Questions? Our Engineers Are Available!

Ask Us For A Demonstration To See More!