



# Driving Efficiencies in Your Plant

Ed Potoczak, Dir of Industry Relations

**IQMS**  
Manufacturing ERP



## **Born on the shop floor**

Our founder was a frustrated Operations Manager who created his own software tools for MRP, production scheduling, monitoring and tracking

## **One system written by IQMS to help manufacturers manage entire business**

from quoting and sales to shipping and warranty tracking, and everything in between

**Get the only functions you need now** and grow as you become comfortable and want more

**Lightning fast drag-and-drop scheduling** to handle demand volatility

**A best-kept secret** > 1,100 parts suppliers use IQMS Manufacturing ERP and Execution Systems

**Specialized for Automotive** - AIAG APQP, PPAP, SPC, Tool Management, Traceability

**Supports TS / IATF 16949 standards** in the Quality Management System

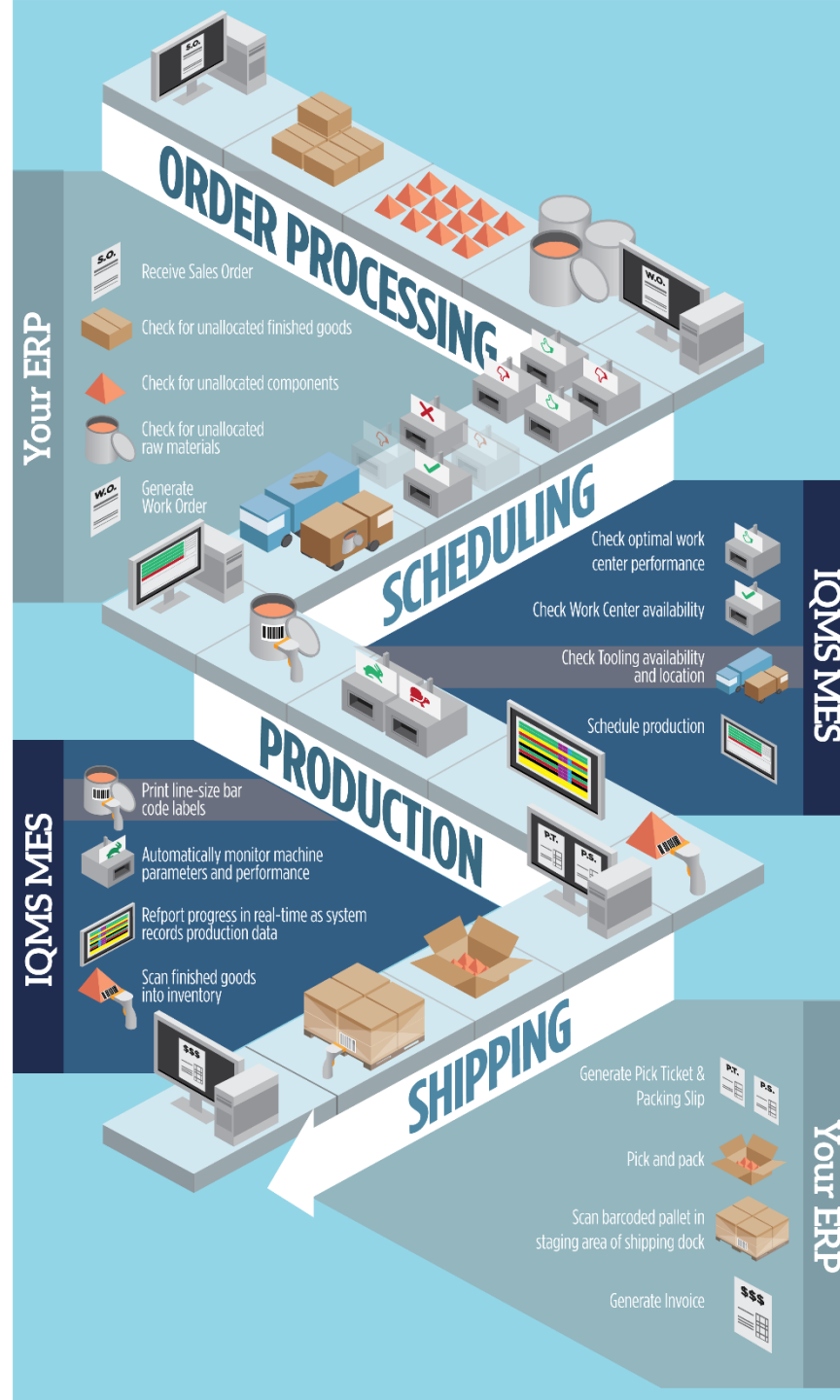
## **Real, practical Smart Manufacturing with 20 years of monitoring thousands of machines**

Built at the request of our customers; integrated through our own hardware and software into our systems to automatically connect you to operations on your factory floor in real-time

# IQMS

Manufacturing ERP

## Lean Information Flow



Choose the deployment option that best fits your business needs

# With **IQMS** Choice Is The *New Cloud*

Manufacturing ERP



## On Premise

- Your Servers
- Perpetual License
- Software Maintenance & Support



## Hosted

- Servers in 3<sup>rd</sup> Party Data Center or Secure Cloud
- Own Your Perpetual License
- IT & IQMS Software Maintenance & Support Services



## Cloud

- IQMS Secure Cloud
- Monthly Subscription includes License, Hardware, Maintenance & Support Fees





**IQMS**  
Manufacturing ERP



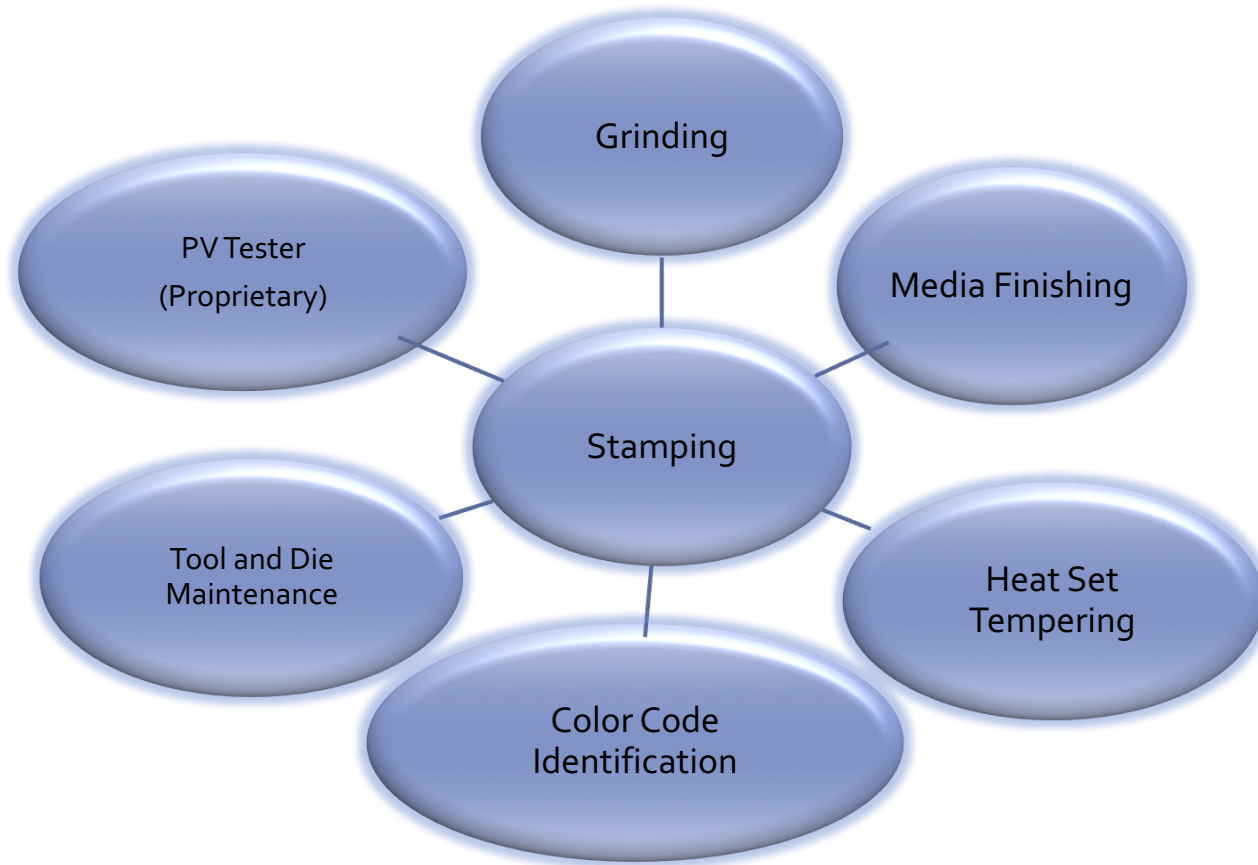
# Overview

- History 1978-Present
- Products
- Transforming Through ERP
- Lean 6S





# In-House Capabilities



# Customers



# Why ERP

- Enhance Customer Satisfaction
  - Labels
  - Packing Slip
  - Invoices
  - Bill of Lading
  - EDI
- Enhance Production
  - Scheduling
  - Production Reporting
  - Inventory Control
- Support TS/IATF 16949 Systems



# Customer Touchpoints



## PACKING LIST

SID # 66677

Date 1/31/2017

Bill To:

Ship To:

Supplier #		Duns #		Date Shipped		Ship Via	
		09-8674047		1/31/2017		FEDEX/FDX8 GROUND	
QTY	Part Number	Description	Purchase Order	Lot Num	Rev	Weight	Boxes
25	1X351143A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351134A	CHART-REAR DIFF PINION SHIM	UX37Q	07216-E2	EXP	1	1
25	1X351135A	CHART-REAR DIFF PINION SHIM	UX37Q	07216-E2	EXP	1	1
25	1X351136A	CHART-REAR DIFF PINION SHIM	UX37Q	07216-E2	EXP	1	1
25	1X351137A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351138A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351139A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351140A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351141A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351142A	CHART-REAR DIFF PINION SHIM	UX37Q	07226-E1	EXP	1	1
25	1X351131A	CHART-REAR DIFF PINION SHIM	UX37Q	07216-E2	EXP	1	1
25	1X351132A	CHART-REAR DIFF PINION SHIM	UX37Q	07216-E2	EXP	1	1
25	1X351133A	CHART-REAR DIFF PINION SHIM	UX37Q	07216-E2	EXP	1	1

Bill of Lading #: 66677

Total # of Cartons: 13

Gross Weight: 21

13

Total # of Pallets: 0

Tare Weight: 13

8

Net Weight:

Truck #

FROM: Northern Industrial Manufacturing 41000 Executive Drive Harrison Twp. MI, 48045 United States of America www.northernindmfg.com 5864682790		TO:		<b>MIXED LOAD</b>	
PART NUM	TOTAL QTY	PART NUM	TOTAL QTY	PART NUM	TOTAL QTY
24261830	1200	24277407	600	24277408	600
# PACKS	QTY PER PACK	# PACKS	QTY PER PACK	# PACKS	QTY PER PACK
4	300	2	300	2	300
PART NUM	TOTAL QTY	PART NUM	TOTAL QTY	PART NUM	TOTAL QTY
24277411	1000	24277412	500	24277413	400
# PACKS	QTY PER PACK	# PACKS	QTY PER PACK	# PACKS	QTY PER PACK
4	250	2	250	2	200
LICENSE PLATE (S): 5JUN098674047000104792					GROSS WEIGHT: <b>175 KG</b>

FROM:  
Northern Industrial Mfg  
41000 Executive Drive  
Harrison Twp. MI, 48045  
586-468-2790  
MADE IN USA

QUANTITY: <b>250</b>	MATERIAL HANDLING CODE: <b>x</b>	REFERENCE: <b>F8W0008P</b>
PART NUMBER: <b>24277411</b>		
LICENSE PLATE (1): UN 098674047 000109010		SHIPMENT DATE: <b>24Feb 2017</b>
CONTAINER TYPE: <b>12</b>		GROSS WEIGHT: <b>KG</b>

\*1S000109010\*

X  
EMPTY?: STOCKMAN?:

WASHER-13567CLU



# Enhance Production

Northern Industrial Manufacturing Manufactured Internal Label

Scheduled Work Orders

4/10/2017 4:21:39PM

Page Number: 1

PART  
NO.

**Z-1483-G1**



QTY (Q)

**2500**



LOT NO.

**77777-7**

Northern Industrial Manufacturing  
41000 Executive Drive  
Harrison Twp. MI, 48045

LOT NO.



MFG DATE

04/10/17

Part Weight

0.4275

BOX LB

1,068.75

Work Order #		Final Thickness	Cycles Required	Pieces Completed	Production Hours	Start Date	Lot #
Work Center Number: G1		GARDNER 2H30					
2557978			10,000				
2557977			10,000				
3601384		Z-1484-G1	3,325	3,000			
3596545		Z-1484-G2	3,325	3,000			
3601387		Z-1485-G1	3,350	14,000			
3596550		Z-1485-G2	3,350	17,000			
3601555		Z-1479-G1	3,700	20,000			
3596726		Z-1479-G2	3,700	20,000			
3601971		Z-1738-G1	3,350	20,000			
3597124		Z-1738-G2	3,350	20,000			
3601995		Z-1740-G1	3,400	20,000			
3597149		Z-1740-G2	3,400	20,000			





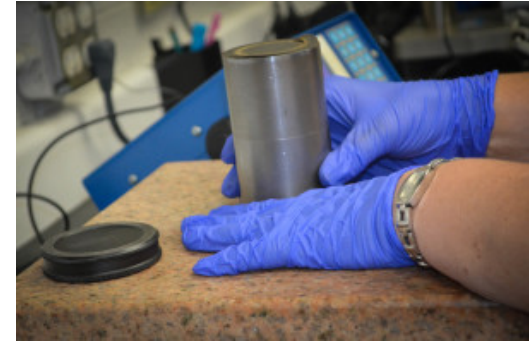
# Enhance Production (Continued)

Work Center	Work Center Description	Mfg #	Order #	WO#	Tot Cycles	Prod Hrs	SU Hrs	Total Down	Chargeable Down	Exp. Date	FG Lot #	AVG Cycle	STD Cycle	Freeze Calc	WD Cycl
	10 CUBIC FOOT	Z-0579-M3		3911322	0.1397	4	1	0.0	0		03147-F1	3,600	3,600		
	10 CUBIC FOOT	G-3591-M1		3917875	1	8	1	0.0	0		04127-F1	54,000	54,000		
	10 CUBIC FOOT	G-3775-M1		3917854	1	8	1	0.0	0		04137-H1	54,000	54,000		
V6	10 CUBIC FOOT	Z-0582-M3		2691013	0.336	4	1	0.0	0		03107-F1	7,200	7,200		
S3	110A BLISS ( C )	Z-0685 BLANK 136		1844765	7,873	4	2	0.0	0			1.4	1.4		
S3	110A BLISS ( C )	G-1830-ST		3801106	9,751	5	2	0.0	0			1.6	1.6		
S6	110B BLISS (G )	G-4086/4099-ST		3934714	7,582	4	2	0.0	0			1.2	1.2		
S6	110B BLISS (G )	G-4086/4099-ST		3934714	7,582	4	2	0.0	0			1.2	1.2		
V9	15 Rosemont	Z-0692-M1		2745045	0.2	0.5	1	0.0	0		01307-C3	3,600	3,600		
	15 Rosemont	Z-1466-M1		3910170	0.15	0.5	1	0.0	0		04107-C1	3,600	3,600		
V1	15 Rosemont	Z-1464-M1		2669788	0.15	0.5	1	0.0	0		04067-D3	3,600	3,600		
	15 Rosemont	G-1830-M3		3907845	0.5223	1	1	0.0	0		03087-C2	3,600	3,600		
S4	150A VERSION ( D )	Z-0685 BLANK 145		2972834	7,116	3.5	2	0.0	0			1.4	1.4		
S1	150B Version (A)	M-45204-ST		3252038	4,687	2.5	2	0.0	0			1.6	1.6		
S1	150B Version (A)	M-45204-ST		3252038	4,681	2.5	2	0.0	0			1.6	1.6		
S2	175 BLISS ( B )	Z-9595 BLANK 152		3252036	6,204	3	2	0.0	0			1.4	1.4		
	20 CUBIC FOOT SWECO	G-3591-M2		3912325	1	0.5	1	0.0	0		04127-F1	1,800	1,800		
	20 CUBIC FOOT SWECO	G-3775-M2		3912294	1	0.5	1	0.0	0		04137-H1	1,800	1,800		
	20 CUBIC FOOT SWECO	Z-0579-M4		3906050	0.1397	0.5	1	0.0	0		03147-F1	1,800	1,800		
V5	20 CUBIC FOOT SWECO	Z-0582-M4		2689241	0.336	0.5	1	0.0	0		03107-F1	1,800	1,800		
	20 CUBIC FOOT SWECO DRY	M-45204-M1		3908716	0.23435	1	1	0.0	0		04137-A2	3,600	3,600		
	20 CUBIC FOOT SWECO DRY	M-45204-M1		3908717	0.3073	1	1	0.0	0		04057-A1	3,600	3,600		
	3 CUBIC FOOT BROWN	Z-0692-M2		3904620	0.2	0.5	1	0.0	0		01307-C3	1,800	1,800		
	3 CUBIC FOOT BROWN	Z-1466-M2		3905287	0.15	0.5	1	0.0	0		04107-C1	1,800	1,800		
	3 CUBIC FOOT BROWN	M-45204-M2		3904411	0.23435	1	1	0.0	0		04137-A2	3,600	3,600		
V2	3 CUBIC FOOT BROWN	Z-1464-M2		2669789	0.15	0.5	1	0.0	0		04067-D3	1,800	1,800		
	3 CUBIC FOOT BROWN	G-1830-M4		3904120	0.5223	0.5	1	0.0	0		03087-C2	1,800	1,800		
V2	3 CUBIC FOOT BROWN	M-45204-M2		3904411	0.3073	0.5	1	0.0	0		04057-A1	3,600	3,600		
S5	75 BLISS ( E )	Z-9948-ST		3934717	20,882	10	2	0.0	0			1.6	1.6		
G1	GARDNER 2H30	Z-1466-G1		3729838	3,000	1	1	0.0	0			1.4	1.4		
G1	GARDNER 2H30	Z-1466-G2		3725083	3,000	1	1	0.0	0		04107-C1	1.4	1.4		
G2	GARDNER 2H30	M-45204-G1		2779563	4,687	2	1	0.0	0			1.4	1.4		
G1	GARDNER 2H30	Z-1464-G1		3729819	3,000	1	1	0.0	0			1.4	1.4		
G1	GARDNER 2H30	Z-1464-G2		3725063	3,000	1	1	0.0	0		04067-D3	1.4	1.4		



# Support TS/IATF 16949 System

- Lot Traceability
- Certs
- Document Control
- Preventative Maintenance
- Transition to IATF QMS



# Lean 6 Sigma

- Organize and Label
- Clean and Paint
- Maintain Equipment
- Visual Tool Boards
- Analyze Bottlenecks



# Questions



Jeff Hohlfeldt

Vice President

Northern Industrial Manufacturing

Cell: [313-468-2824](tel:313-468-2824)

Office: [586-468-2790](tel:586-468-2790)

[jeff@northernindmfg.com](mailto:jeff@northernindmfg.com)

<http://www.northernindmfg.com>

