



Cutting Edge Quality, QDA Powered

A global manufacturer of power tools and home floor care appliances sought out QDA SOLUTIONS to help achieve their quality initiatives for their plants worldwide. The company's rigorous product development, cost containment and quality management programs drive the company's operational efficiencies which improved gross profit by 13.3%, and net profit by a whopping 50.7%. In order to offset the impact of global commodity and wage inflation, the company has implemented aggressive productivity initiatives, and requires a quality system capable of driving their six-sigma goals.

The companies Machine Shop facility in GuangDong HouJie City has been in operation for over twenty years. It has fifteen workstations dispersed throughout the plant that connect to a variety of digital gauges, wireless gauges, Zeiss and Mitutoyo CMMs, Z-MIKE non-contact optical readers, Mahr contour plotters, air gauges, and other devices. These workstations collect real time data and feed it to centralized management PCs.

They built the "total quality management network" using QDA solutions.

QDA is a powerful suite of software modules that facilitates achievement and verification of quality goals such as process control, cost reduction, process optimization and standard compliance documentation.

It is flexible and can be integrated seamlessly into existing processes and IT infrastructures.

QDA SPC

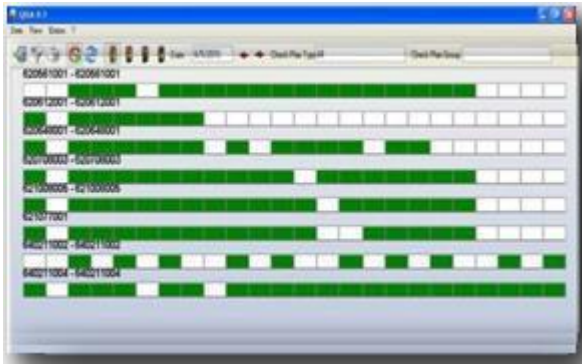
QDA's SPC module has been implemented in several areas within the Machine Shop.

In the images below we can see collected data measurements and tolerances on machined parts, displayed in real time and deployed to distributed desktops. And, the control charts are generated, giving quality professionals a visual point of control.



Daily Reporting

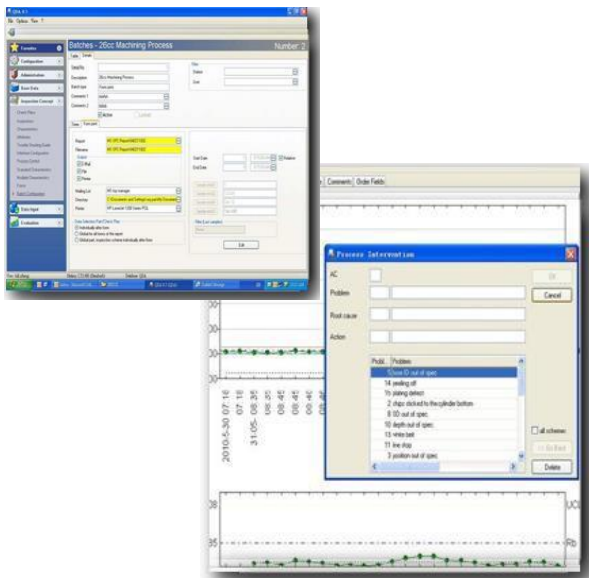
Managers receive daily reports where they can review the entire manufacturing. They can, for example, view the status of check plans:



The efficiencies gained are substantial. "QDA helps us to visually monitor and directly control our processes and reduce scrap," notes the Q.A. "We now manage quality efficiently and systematically. The program stores, analyzes and displays data so that we can easily understand the history, monitor the current situation and anticipate future quality issues with an impressive degree of accuracy."

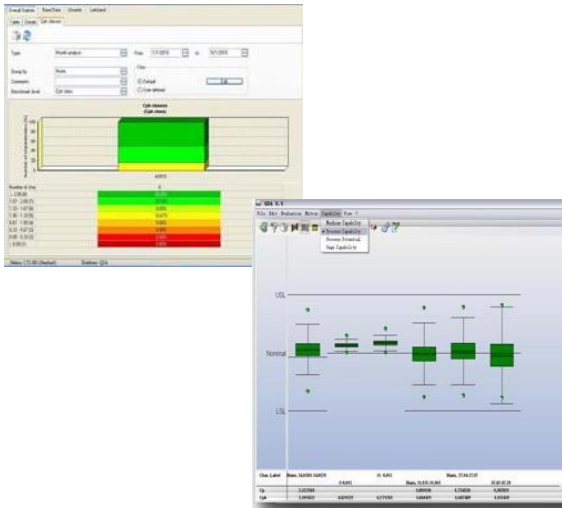
The data is refreshed by the minute, allowing them to track and attack any issues as they occur.

They receive information on batch processes running throughout the plant and automatic feedback on process intervention:



Long Term Reporting

The company can also assess overall and long-term effectiveness. Here with a view of Process Capability and an overview of Cpk classes:



Quality Planning

Easy-to-use, efficient QDA software ensures that data is collected quickly and accurately. As an integral module within QDA, PPAP's uninterrupted link to the CAD tool eliminates unreliable data transfer. Real-time availability of relevant data guarantees conformance to ISO and VDA standards.

Item	Item Name	Item Description	Item Status	Item Type	Item Category
1	PPAP Requirements	PPAP Requirements	Yes	1	Requirements
2	Control Plan	Control Plan	Yes	2	Control Plan
3	Dimensional Requirements	Dimensional Requirements	Yes	3	Dimensional Requirements
4	Material Requirements	Material Requirements	Yes	4	Material Requirements
5	Process Requirements	Process Requirements	Yes	5	Process Requirements
6	Performance Requirements	Performance Requirements	Yes	6	Performance Requirements
7	Inspection Requirements	Inspection Requirements	Yes	7	Inspection Requirements
8	Testing Requirements	Testing Requirements	Yes	8	Testing Requirements
9	Documentation Requirements	Documentation Requirements	Yes	9	Documentation Requirements
10	Customer Requirements	Customer Requirements	Yes	10	Customer Requirements
11	Supplier Requirements	Supplier Requirements	Yes	11	Supplier Requirements
12	Internal Requirements	Internal Requirements	Yes	12	Internal Requirements
13	External Requirements	External Requirements	Yes	13	External Requirements
14	Other Requirements	Other Requirements	Yes	14	Other Requirements

PPAP Document List

Management and KPI Reporting

The QDA Management and KPI Reporting Solution facilitates achievement of time-to-market, cost and revenue objectives by consolidating quality data acquired from disparate manufacturing devices and systems into useable business metrics. Here the Machine Shop scorecard presents percentage goal achievement for several KPIs, including casting, machining, plating and honing quality, warranty and scrap.

MS-HL WEEKLY/MONTHLY PERFORMANCE SCORECARD																							
No.	KPI	Measurement	2010 Goal	2010	2011	Jan	Feb	Mar	Apr	May	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	2012	
1	Customer Satisfaction	Customer Satisfaction	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%
2	Production Efficiency	Production Efficiency	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
3	Quality Control	Quality Control	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
4	Inventory Management	Inventory Management	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%
5	Cost Reduction	Cost Reduction	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
6	Customer Retention	Customer Retention	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
7	Production Cycle Time	Production Cycle Time	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
8	Customer Complaints	Customer Complaints	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
9	Production Quality	Production Quality	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
10	Customer Satisfaction	Customer Satisfaction	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%	4.5%

The Machine Shop has taken advantage of several modules of QDA, harnessing the synergies of quality integration and moving their quality operations and standards forward significantly. In doing so, they have been recognized as one of the most advanced and automated manufacturing plants in China. Since the software's implementation, the plant has achieved:

- > higher levels of accuracy and efficiency
 - > quicker problem resolution
 - > greater overall process improvement
 - > significant cost savings
 - > greater operational flexibility
 - > better financial returns
 - > increased competitiveness and market share
- ... keeping this company on the forefront of **Cutting Edge Quality.**