ASIDATAMYTE

Producción bajo control

Reducir costes

Optimizar Calidad

Corregir fallos

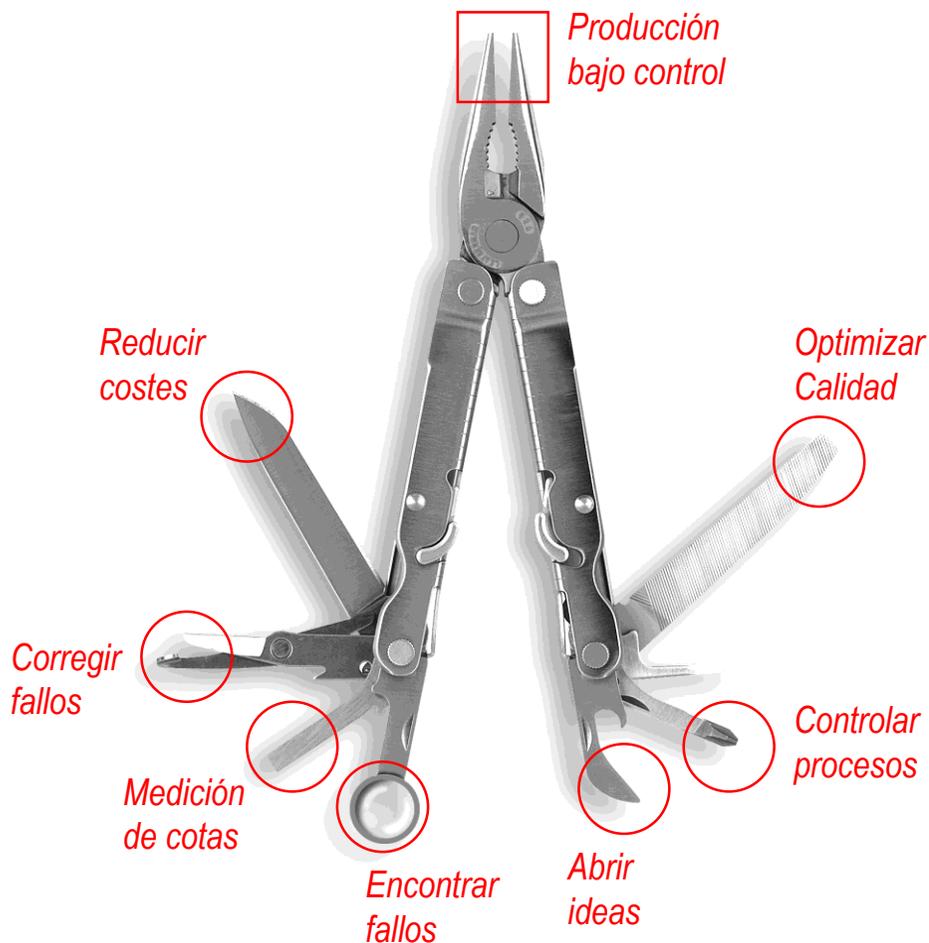Medición de cotas

Encontrar fallos

Abrir ideas

Controlar procesos

DRILCO **PRESENTA**

Planificación de la Calidad con el Sistema CAQ de ASIDataMyte QDA

▶ **QDA 9.3**

GESTION DE LA BASE DE DATOS

QDA

ASIDATAMYTE

• Visión general de los Productos o Piezas

• A partir de ahí, toda la información sobre una pieza, está disponible

• Haciendo doble click en una referencia, nos da la oportunidad de ver un ejemplo del plan de test (vamos a la sección de sus posibilidades y características)

• Lista de Piezas

• Todos los PPAPS y su situación y estado

• Todo lo afín y relacionado con los FMEA

• Todos los APQP

• Todas las órdenes de producción.

• Las acciones definidas y reales, y las que se están aplicando y cómo

ASIDATAMYTE

► **Planes de Control**

APQP

FMEA

PPAP

QDA

ASIDATAMYTE

- Lista de Planes de Control con su situación

ASIDATAMYTE

• Operaciones numeradas, así como las mediciones relacionadas

ASIDATAMYTE

• Definición del Equipo de trabajo

ASIDATAMYTE

• Todos los parámetros disponibles en los planes de control

ASIDATAMYTE

• Acceso directo a la sección del Plan de chequeo del QDA

- Opción de impresión utilizando ficheros *.dot, *.xls y word

- Todas las impresiones se salvan como documentos adjuntos

ASIDATAMYTE

CONTROL PLAN

Page 4 of 23

Prototype	Pre-launch	X	Production	Key Contact/Phone		Date (Orig.)	Date (Rev.)
Control Plan Number 001 — J. Davis /313-555-5555 — 1-26-92 — 2-2-92

Part Number/Latest Change Level 2252121/G 11-2-92 — Core Team — Product Development Team (E01) - See List — Customer Engineering Approval/Date (If Req'd)

Part Name/Description Plastic Injection Molded Grill — Supplier/Plant Approval/Date — Customer Quality Approval/Date (If Req'd)

Supplier/Plant 4-B Grill Co. Plant #3 — Supplier Code 0123 — Other Approval/Date (If Req'd) — Other Approval/Date (If Req'd)

Part/ Process Number	Process Name/ Operation Description	Machine, Device, Jig, Tools For Mfg.	No.	Product	Process	Special Char. Class.	Product/Process Specification/ Tolerance	Evaluation Measurement Technique	Size	Freq.	Control Method	Reaction Plan
3	Plastic Injection Molding	Machine No. 1–5	18	Appearance		*	Free of blemishes	Visual inspection	100%	Continuous	100% inspection	Notify supervisor
				No blemishes			flowlines	1st piece buy–off			Check sheet	Adjust/re-check
							sink marks	1st piece buy–off			Check sheet	Adjust/re-check
		Machine No. 1–5	19	Mounting hole loc.		*	Hole "X" location	Fixture #10	1st piece	buy–off per run	Check sheet	Adjust/re-check
							25 ± 1mm		5 pcs	hr	x̄–R chart	Quarantine and adjust
		Machine No. 1–5	20	Dimension		*	Gap 3 ± .5mm	Fixture #10	1st piece	buy–off per run	Check sheet	Adjust and recheck
		Fixture #10	21	Perimeter fit		*	Gap 3 ± .5mm	Check gap to fixture 4 locations	5 pcs	hr	x̄–R chart	Quarantine and adjust
		Machine No. 1–5	22		Set–up of mold machine		See attached set–up card	Review of set–up card and machine settings		Each set–up	1st Piece buy–off	Adjust and reset machine
											Inspector verifies settings

* Reference Appendix C

EXAMPLES ARE FOR REFERENCE ONLY. REFER TO SPECIFIC CUSTOMER REQUIREMENTS.

Dynamic Control Plan
Operator Copy

Department: / Process: — Operation: / Machine: — Part Name: / Part Number: — Control plan revision date: / Process sheet revision date: — Page: of: / B/P revision date:

Char #	Characteristic Description	Spec	Class	Control Method	Current Controls	Gage desc, master, detail	Reaction Plans

Dynamic Control Plan
Master Copy

Company/Plant: — Department: / Process: — Operation: / Machine: — Station: — Part Name: / Part Number: — Control plan revision date: / Process sheet revision date: — Page: of: / B/P revision date:

Char #	Characteristic Description (Product & Process)	Spec	Type	Imp	Failure Mode	Effects of Failure	SEV	Causes of Failure	OCC	Current Controls	DET	RPN	Recom. Actions	Area Respon. & Date	Actions Taken	SEV	OCC	DET	RPN	Ctrl. Fact.	Class	Control Method	Tool	Gage desc, master, detail	GR&R & Date	Cp/Cpk (target) & Date	Reaction Plans

CONTROL PLAN

Page ___ of ___

| ① Prototype | ② Pre-launch | ⑦ Production | Key Contact/Phone | ⑩ Date (Orig.) | ⑪ Date (Rev.) |

Control Plan Number ② — Key Contact/Phone ⑦

Part Number/Latest Change Level ③ — Core Team ⑧ — Customer Engineering Approval/Date (If Req'd) ⑫

Part Name/Description ④ — Supplier/Plant Approval/Date ⑨ — Customer Quality Approval/Date (If Req'd) ⑬

Supplier/Plant — Supplier Code ⑥ — Other Approval/Date (If Req'd) ⑭ — Other Approval/Date (If Req'd) ⑭

Part/ Process Number ⑮	Process Name/ Operation Description ⑯	Machine, Device, Jig, Tools For Mfg. ⑰	No. ⑱	Product ⑲	Process ⑳	Special Char. Class. ㉑ ㉒	Product/Process Specification/ Tolerance ㉓	Evaluation/ Measurement Technique ㉔	Size ㉕	Frec.	Control Method ㉕	Reaction Plan ㉖

DRILCO

Controlplan

► **APQP**

FMEA

PPAP

QDA

•Listado de los APQP's (Lista de todos los relacionados) con su estado actual

• Dentro de ellos puedes encontrar tópicos y respuestas detalladas

APQP

ASI DATAMYTE

• Revisión de los temas y tópicos

ASIDATAMYTE

- Preguntas de los temas

- Responsabilidades predefinidas

ASIDATAMYTE

• Listado de los APQP y situación

• APQP activos
y su situación,
como historial

ASIDATAMYTE

• Preguntas contestadas, con sus responsables

DRILCO

APQP

ASIDATAMYTE

• Visión Gráfica son con hitos

DRILCO, S.L. ▶ Soluciones de software avanzadas para la Gestión de la Calidad

DRILCO

ASIDATAMYTE

Controlplan

APQP

▶ **FMEA**

PPAP

QDA

FMEA

- Vista del FMEA cambiando de normas VDA, QS 9000, ISO/S 16949 (opcional otras posibilidades)

- R referenciado al FMEA

DRILCO, S.L. ▶ Soluciones de software avanzadas para la Gestión de la Calidad

DRILCO

• Definiendo Acciones

- Después de liberar las acciones, el RPN se calcula de nuevo

- FMEA liberados

- Los cambios se salvan

• Añadir datos de medidas por días, semanas, meses y registrar criterios de busqueda (OP, máquina, usuario, etc.)

ASIDATAMYTE

POTENTIAL
FAILURE MODE AND EFFECTS ANALYSIS SEQUENCE

ASIDATAMYTE

Controlplan

APQP

FMEA

▶ **PPAP**

QDA

• Los pasos QS 9000 y niveles con descripción de qué hacer

• Los pasos
VDA y niveles
con descripción
de qué hacer

• Inicio de creación de un PPAP

• Seleccionar razones para un PPAP

- Pasos a seguir con su estado y situación, fecha y responsable

- A cada paso le puedes añadir y adjuntar documentos

- Toda la información está disponible para cada implicado

- Acceso directo a los valores, Planes de Control, y FMEA del QDA

• Impresiones individuales mediante plantillas word.

ASIDATAMYTE

- Herramienta Cad integrada para crear características desde los dibujos automáticamente.

- Estampación, e impresión como PDF incluido.

SUPPLIER CHECKLIST/APPROVAL for MANAGING CHANGE

Supplier Name _____   Part Name _____   Part Number _____

Mfg. Location Code _____   Vehicle Lines Affected _____   Ford Plants Affected _____

Change Description _____

ANY ITEMS NOT REQUIRED, PLEASE EXPLAIN: Reqd.   Complete   Date   Comments

1. Engineering and Manufacturing Disciplines:
   - Layout/Detail/Assy Drawings
   - Tolerance Stack-Up
   - Installation Drawings
   - Reliability Methods
   - Process Sheets
   - Engineering Specification
   - Material Specification
   - Supplier Component DFMEA
   - Supplier System DFMEA
   - Ford Component DFMEA
   - Ford System DFMEA
   - Process Flow Chart
   - Supplier Component PFMEA
   - Supplier System PFMEA
   - Ford Component PFMEA
   - Ford System PFMEA
   - Ford SDS Update
   - DV/PV/IP Test
   - Vehicle Test
   - Operator Instruction Sheets
   - Tool & Gage Revisions
   - Gage R&R Study
   - Control Plan
   - Production Trial Run
   - Sub-Supplier Affect
   - Service Parts
2. Ford Feasibility Review
   - Ford Design Engineer Approval
   - SREA
   - CR/CR
   - Alert
   - PSW
   - Ford Plant Functional Approval   Use Part Submission Warrant (PSW) under "Customer Use Only"
   - Purchase Order
3. Approvals
   - Engineering Manager: _____   Quality Manager: _____
   - Production Manager: _____   Plant Manager: _____

DaimlerChrysler   **APPEARANCE APPROVAL REPORT**

(form fields for END ITEM NUMBER, COMPONENT PART NUMBER, COMPONENT NAME, SUPPLIER NAME, SUPPLIER PHONE, SUPPLIER CODE, MANUFACTURING LOCATION, APPLICATION VEHICLE, CUSTOMER ENGINEER, DATE)

SURFACE AND TEXTURE EVALUATION

TEXTURE I.D.	TEXTURE SOURCE	TEXTURE LOCATION SHOWN	APPROVALS	CUSTOMER REPRESENTATIVE SIGNATURE AND DATE
			DESIGN STUDIO PRE-TEXTURE SURFACE	
			ENGINEERING PRE-TEXTURE CONCURRENCE	
			MASTERING STUDIO TEXTURE DIMENSION	
			MASTERING STUDIO POST TEXTURE	
			ORNAMENTATION AND GRAPHICS NOT REQ'D ☐ REQ'D ☐	

BASE OR RAW MATERIAL DAIMLERCHRYSLER SPEC. # AND SUPPLIER / SUPPLIER # / LOT #

MATERIAL, COLOR, AND GLOSS EVALUATION

PAINT OR COLORANT DAIMLERCHRYSLER SPEC. # AND SUPPLIER / SUPPLIER # / LOT #

MASTER			REF. MASTER			TRISTIMULUS & GLOSS PART DATA						CUSTOMER COMMENTS	APPROVAL STATUS		CUSTOMER INITIALS / DATE
#	COLOR	TYPE	DATE	DL*	Da*	Db*	DE*	CMC	GLS				A	R	

SUPPLIER APPROVAL SIGNATURE   PHONE

ORNAMENTATION, GRAPHICS AND SURFACE TACTILITY

TYPE OF ORNAMENTATION AND GRAPHICS REQUIRED   CUSTOMER APPROVAL SIGNATURE

COMMENTS   CUSTOMER INITIAL APPROVAL SIGNATURE

SOLID BOXED AREAS FOR CUSTOMER USE ONLY   CUSTOMER FINAL APPROVAL SIGNATURE

January 1, 1998   AIAG-260

DaimlerChrysler **Ford** **GM**   **Production Part Approval**
Performance Test Resu...

SUPPLIER _____   PART NUMBER _____

NAME OF LABORATORY _____   PART NAME _____

REF. NO.	REQUIREMENTS	TEST FREQ.	QTY. TESTED	SUPPLIER TEST RESU...

Ford   **SUPPLIER REQUEST FOR ENGINEERING APPROVAL**   DATE _____ 19 ____

SUPPLIER TO COMPLETE

SUPPLIER NAME AND ADDRESS _____

FORD AND/OR SUPPLIER PART NAME AND PART NUMBER OF ASSEMBLY AND ITS COMPONENTS _____

EMISSION CONTROL CODE NUMBER (SEE FORM 74-107) _____

CONTROL ITEM AFFECTED   YES ☐ NO ☐

...ON OF CHANGE: ☐ DESIGN   ☐ COMPOSITION   ☐ WEIGHT   ☐ PROCESSING

CHANGE: _____

SIGNATURE _____

Ford **GM**   **APPEARANCE APPROVAL REPORT**

PART NUMBER		DRAWING NUMBER	APPLICATION (VEHICLES)
PART NAME		BUYER CODE	E/C LEVEL DATE
SUPPLIER NAME		MANUFACTURING LOCATION	SUPPLIER CODE
REASON FOR SUBMISSION	☐ PART SUBMISSION WARRANT ☐ PRE TEXTURE	☐ SPECIAL SAMPLE ☐ FIRST PRODUCTION SHIPMENT	☐ RE-SUBMISSION ☐ ENGINEERING CHANGE OTHER

APPEARANCE EVALUATION

SUPPLIER SOURCING AND TEXTURE INFORMATION	PRE-TEXTURE EVALUATION	CUSTOMER REPRESENTATIVE SIGNATURE AND DATE
	CORRECT AND PROCEED	
	CORRECT AND RESUBMIT	
	APPROVED TO TEXTURE	

COLOR EVALUATION

COLOR SUFFIX	TRISTIMULUS DATA					MASTER NUMBER	MASTER DATE	MATERIAL TYPE	MATERIAL SOURCE	HUE			VALUE	CHROMA		GLOSS	METALLIC BRILLIANCE	COLOR SHIPPING SUFFIX	PART DISPOSITION
	DL*	Da*	Db*	DE*	CMC					RED	YEL	GRN	BLU	LIGHT	DARK	GRAY	CLEAN	HIGH	LOW	HIGH	LOW		

COMMENTS

SUPPLIER SIGNATURE   PHONE NO.   DATE   CUSTOMER REPRESENTATIVE SIGNATURE   DATE

Sept. 1999 CFG-1002

North American Truck Industry   **Part Submission Warrant**

Part Name _____   Part Number _____

Safety and/or Government Regulation   ☐ Yes   ☐ No   Engineering Drawing Change Level _____ Dated _____

Additional Engineering Changes _____   Dated _____

Shown on Drawing No. _____   Purchase Order No. _____   Weight _____ kg

Checking Aid No. _____   Engineering Change Level _____   Dated _____

SUPPLIER MANUFACTURING INFORMATION   **SUBMISSION INFORMATION**

Supplier Name & Supplier Code _____   ☐ Dimensional ☐ Materials/Functional ☐ Appearance

Customer Name/Division _____

Street Address _____   Buyer/Buyer Code _____

City/State/Postal Code _____   Application _____

Note: Does this part contain any restricted or reportable substances.   ☐ Yes   ☐ No

Are plastic parts identified with appropriate ISO marking codes   ☐ Yes   ☐ No

REASON FOR SUBMISSION
- ☐ Initial Submission
- ☐ Engineering Change(s)
- ☐ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive > than 1 year
- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts Produced at Additional Location
- ☐ Other – please specify

REQUESTED SUBMISSION LEVEL (Check one)
- ☐ Level 1 – Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- ☐ Level 2 – Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 – Warrant with product samples and complete supporting data submitted to customer.
- ☐ Level 4 – Warrant and other requirements as defined by customer.   (Circle) ☐ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
- ☐ Level 5 – Warrant with product samples and complete supporting data reviewed at supplier's manufacturing location.

SUBMISSION RESULTS

The results for ☐ dimensional measurements ☐ material and functional tests ☐ appearance criteria ☐ statistical process package

These results meet all drawing and specification requirements: ☐ Yes   ☐ NO   (If "NO" – Explanation Required)

Mold / Cavity / Production Process _____

DECLARATION

I hereby affirm that the samples represented by this certification are representative of our parts, have been made to the applicable customer drawings and specifications, and are made from the specified materials on regular production tooling with no operations other than the regular production process. I also certify that documented evidence of such compliance is on file and available for review.

EXPLANATION/COMMENTS: _____

Print Name _____   Title _____   Phone No. _____   FAX No. _____

Supplier Authorized Signature _____   Date _____

FOR CUSTOMER USE ONLY (IF APPLICABLE)

Part Warrant Disposition: ☐ Approved   ☐ Rejected   ☐ Interim Approval   Part Functional Approval   ☐ Approved   ☐ Waived

Customer Name _____   Customer Signature _____   Date _____

GM   **INTERIM RECOVERY WORKSHEET (GM 1411)**

SUPPLIER NAME: 1   PART NAME: 6

SUPPLIER CODE: 2   PART #:   7

RESUBMISSION DATE: 3

INTERIM EXPIRE DATE: 4   EWO#:   8

APPLICATION: 5   ECL: 9   DATE: 10
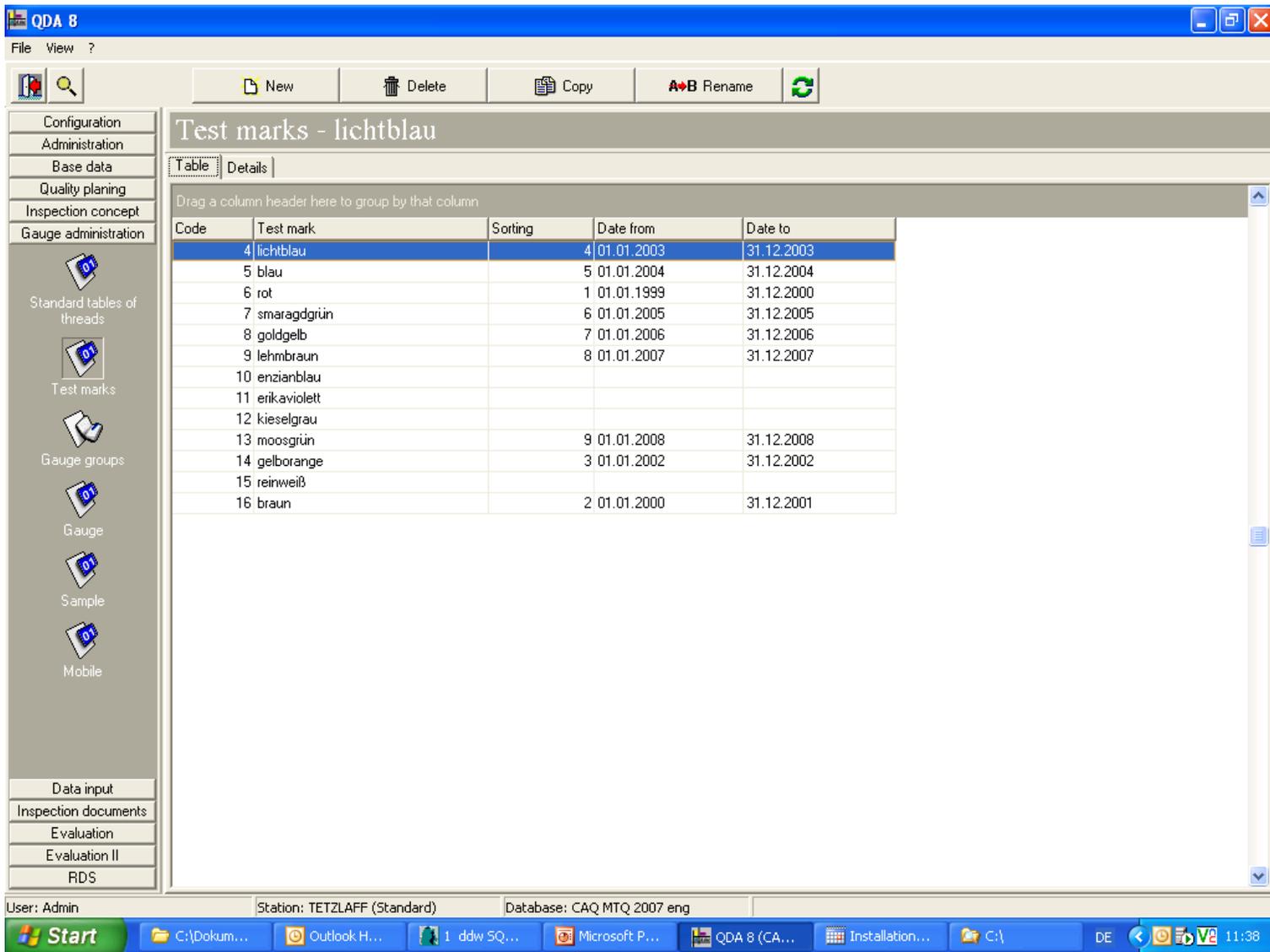
SUBMISSION LEVEL: 11   KG wt: 12

SAMPLE #   13   INSP/SGR   14   ADD. SAMPLE   15   FRQ   16   Interval   17

18 INTERIM CLASS (Type interim class or circle for manual entry)   A   B   C   D   E

19 STATUS: Type or fill in appropriate status (A=Approved, I = Interim, N = Not made).

DIM: _____   APP: _____   LAB: _____   PROCESS: _____   ENG: _____

20 BRIEF REASONS (116 characters max.): _____

21 ISSUES: (List DIM, APP, LAB, Process, tooling, capacity or start-up issues)   **ACTION PLANS** (provide with date of completion) _____

• Definir grupos de Pruebas de Test con un cuadro de fechas

Gestión de los medios para Test

- Intervalos de mantenimiento y servicio que deben ser implementados

Gestión de los medios para Test

- Listado de Herramientas y su situación

• Fácil posibilidad de agrupaciones

• Funciones de clasificación y búsqueda sencillas y flexibles

Gestión de los medios para Test

• Tarjeta de identidad con toda la información y su dibujo, foto o plano

• Historial de mediciones

• Añadir documentos a cada herramienta o instrumento, es factible

ASIDATAMYTE

• Salida y entrada de los medios (Calibraciones, reparaciones, etc...)

• Bloqueo de instrumentos cuando las fechas de calibración han expirado.

• Control de atributos, Pasa/NoPasa

ASIDATAMYTE

• Valores de medidas con los resultados calculados

DRILCO

• Liberación integrada automática, tras realizar las mediciones

- Selección de más de una herramienta, para aplicaciones en carros móviles

- Muy usual en controles de pares de apriete y herramientas de montaje

• Enviar y actualizar los datos en los carros móviles

QDA I-APQP (Integrated Advanced Product Quality Planning, part of QS 9000)
The module supports ongoing project-management for product and quality planning in all phases of the development process. The check list function creates a uniform, product related documentation structure, giving the user an overview of the production process for easier control of the production. All project- and product related information and documents are centrally monitored and managed.

QDA Complaint Management
ASI DATAMYTE's Complaint Management Solution keeps complaints under control with automated workflows and integrated data from other relevant areas. It pulls in ISO standards and FDA mandates, ties in CIP and CAPAs and rolls consolidated and analyzed findings into intuitive-focused reports and decisive actions.

QDA Document Management
QDA Document Management Module is an automated document management system creating a competitive advantage through integration. It facilitates accurate and efficient traceability and assists in compliance with relevant standards and access to released documents through a web portal. Integrates visualizations of process flow charts complying with ISO standards.

QDA FMEA Module
The QDA FMEA Module is compliant to the requirements of the VDA, QS 9000, ISO/S 16949 and supports the process-, system-product- and system-process-FMEA´s. The open designable forms (with Microsoft Office) corresponds the VDA and QS 9000 standards and are included in the solution. The QDA FMEA supports the automatic distribution of the FMEA-actions via e-Mail and monitors defined actions. Changes in a master-FMEA can be referenced automatically into linked FMEA´s .

QDA PPAP
This Module manages and integrates acceptance and approval processes (PPAP, VDA, First Article Inspection). Includes 2D CAD support (Tool: QDA-T-CAD).

QDA Quality Planning
The QDA software module integrates APQP Requirements, Process Flow Chart, Process Failure Modes and Effects Analysis (PFMEA), Control Plans, Production Parts Approval Process (PPAP), GMP, and BMP - to help ensure a logical and consistent approach to manufacturing engineering activities. The Integrated Quality Planning Solution assists in process-based quality management systems and continuous improvement.

Incoming / Outgoing Inspection
With this QDA module, - Incoming and Outgoing Inspections can take place directly in the system or provide an MES / ERP coupling. Testing is performed with statistic and dynamic sampling plans, including Skip-Lot-processes and AQL-Sampling plans. After successful data capturing, usage decisions can be documented for tested "parts".

QDA Gage and Tool Management
ASI DATAMYTE's QDA Gage and Tool Management Solution improves cost control and ensures measurement, tool and process traceability through automated calibration and workflows. It integrates with other ASI DATAMYTE quality software and solutions to meet regulatory requirements.

QDA Data Collection-SPC
ASI DATAMYTE's SPC ensures validation, compliance and traceability and increases profitability by tightening tolerances, ensuring error-proof data collection and driving in-control processes to higher performance levels.

QDA Alarm & Notificiation
The QDA Workflow Manager configures and executes automated notifications and functions in QDA. Examples such as emails, print outs, notifications, complaints and actions can then be opened or created in predefined situations. The escalation function may also be integrated with the QDA Workflow Management and supports the QDA workflow function in the Complaint Management module. Activities may be configured and documented in the QDA log book.

QDA Action Management
The QDA Action Management enables the creation, tracking and possible escalation of actions in QDA. Added to each action is the context of creation, a description, the responsible person as well as the appointment. Actions can assigned to orders, parts, FMEAs, PPAPs, APQPs, check plan or independently and central managed and sent out via email. Actions created may also be integrated with QDA escalation management.

QDA BOM - Bill of Materials
This tool creates a structured arrangement of components, sub-assemblies, and complete assemblies in QDA. Parts are assigned specific information and referencing the bill of materials is greatly simplified. It may be used to check completeness and traceability of a system delivered in components.

QDA ERP Interface
The interface tool enables uni-directional downloading of master data maintained in files or database tables from leading ERP systems into the QDA Software. The interface tool also transfers transaction data such as incoming inspections or production orders into QDA. Following quality data collection in QDA, the usage decision is returned to the ERP system. Any configuration changes to the interface defined with customer input will be charged on a time basis. The interface tool can also be used for integration of MES systems and QDA. In this case a determination must be made as to which system is the lead or primary. We supply interfaces for SAP, BAAN, NAVISON, PsiPenta, InforXA, MAPICS, UB-Soft, Fauser, Coscom, TBS Prosi, ActivPlant and a generic QDA ERP interface.

DRILCO

Av. Somosierra 22, E-6 y 7
E-28703 S. S. de los Reyes (Madrid)
Tel.: 916 591 900 - Fax: 916 530 387
drilco@drilco.net • www.drilco.net