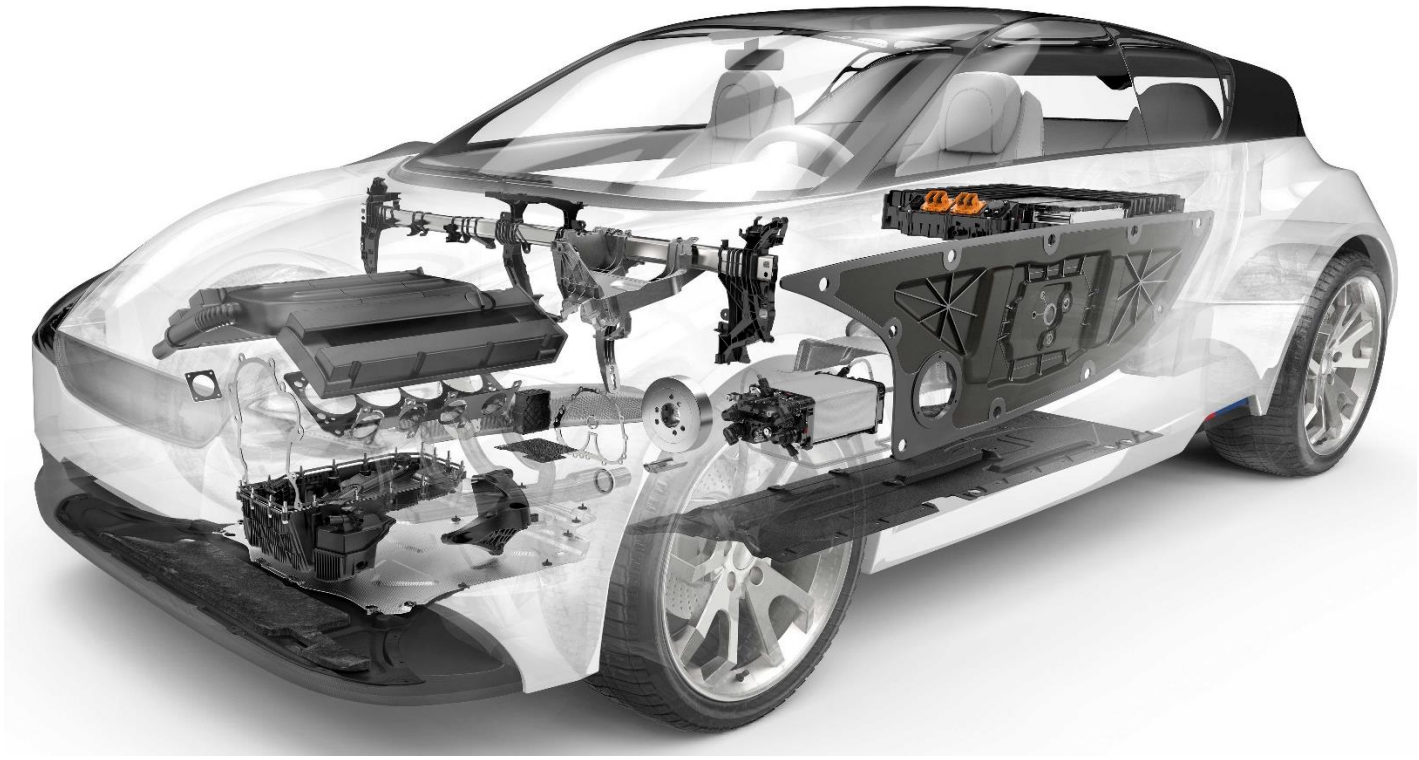
Supplier Guideline

Initial Sampling Procedure
for the ElringKlinger Group worldwide



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Revision index

Number	Date of change	Comments
1	2019.01.01	Creation
2	2019.07.23	Adding table of contents, correction of failures
3	2020.03.04	Correction capability values, delete initial sampling checklist, adding CF CU-QM 128 label cleanpoint delivery, adding ZF QM 128 request of change
4	2020.12.09	Needed change over all documents acc. VDA 2 revison
5	2022.07.14	Adding explanation of CF CU-QM 083 sheet, Sub-Supplier Status
6		
7		

Introduction

With the initial sample procedure, the supplier confirms that he has fully understood the requirements and specifications defined by ElringKlinger and that he can guarantee these under series production conditions.

To ensure a smooth, fast and complete sampling process, the following points must be observed to complete initial sample inspection submission. The following manual has been created to give suppliers of the ElringKlinger group worldwide a guideline how initial sampling documents have to be generated. For each necessary document you will find at least an explanation which information is required to fulfill the standards of the ElringKlinger group worldwide.

ElringKlinger expects a complete and correct filled out initial sampling documentation. Otherwise this can affect your supplier evaluation for the current time period.

To be sure that you use the current and valid documents please visit our ElringKlinger Homepage:
https://www.elringklinger.de/en/company/supply-chain-management/initial-sampling

The trigger matrix for initial sampling can be found in VDA 2. General main reasons for an initial sample procedure are:

1. Supply of a new part or new assembly group
2. Modification to a drawing/specification
3. Production or machine relocation
4. When changing to new or replacing obsolete tools
5. New sub-supplier
6. New or modified production process
7. Interrupt production for more than >1 year
8. Requirement from ElringKlinger

In cases 1. to 2., initial samples are requested by ElringKlinger with an order, deadline and quantity. Where not initiated by ElringKlinger, in cases 4. to 7., the supplier is obliged to advise ElringKlinger of the changes. The extent of the test and the required initial sample inspection report must be agreed with ElringKlinger in advance. If ElringKlinger does not require samples to be submitted, this does not release the supplier from carrying out an initial sample procedure in accordance with this guideline.

Initial Sampling

Depending on the progress in development process, ElringKlinger will order samples according to VDA or AIAG (depending upon on ElringKlinger's customer).

Serial initial samples
Initial samples are products and materials which have been manufactured entirely with serial production equipment under serial productions conditions and which are tested using series test/inspection equipment and found to be OK.

Deviations
Initial samples with deviations from specifications/drawings must be communicated to ElringKlinger in advance. Measurement/test results related to deviant characteristics must be documented in the measurement report and must be clearly assignable to the drawing/specification.
The last page of this guideline is to explain how to proceed with request for deviations.

Other samples according to VDA scheme

Model
A – Samples
B – Samples
C – Samples
D – Samples

Products and materials manufactured in compliance with development drawings, specifications and customer`s requirements which have not been manufactured entirely under production conditions. Other samples in the sense of this guideline include the following products: principle samples, first out of tool FOT samples, prototypes, development samples, inspection samples, manually produced samples and preliminary samples.
The approval of other samples does not at the same time mean approval for volume production and is no reason not to provide an initial test sample report in accordance with this guideline.

Retention periods
The supplier must define and maintain retention periods for documents, records and reference samples according to ElringKlinger Supplier Manual. Minimum requirements must be met.
These regulations do not replace legal requirements.

Sample submission and ElringKlinger decision of approval for production shipment authorization

On receipt of initial sample and submission documents, ElringKlinger reviews documents and initial sample parts. Testing of initial sample parts is at the sole discretion of the company.
ElringKlinger documents the initial sample decision on the initial sample cover sheet, signs this and sends it to the supplier by e-mail. The following decisions are possible:

a) Customer-ready/Ready for series production,
Approval (fully approved)
This means that all requirements are met without any restriction. Approval is issued for full production shipment authorization. This does not release the supplier from being responsible for the quality of the products.

b) Not customer-ready / Not ready for series production. New PPA procedure required,
Approved with conditions, re-sampling required (approved with constraints)
This means that requirements have not been met in full. Deliveries of the product can be made for a limited period of time or quantity in consultation with ElringKlinger. The supplier is required to specify and implement, with evidence, corrective actions within an agreed period of time. A re-approval of the sample procedure must be made before the end of the specified restriction.

c) Not customer-ready / Not ready for series production,
Not approved (rejected)
This means that requirements are not fulfilled. Approval for volume production is not granted. New/subsequent testing is required. The supplier must specify and provide evidence of corrective measures before resubmitting samples.

Initial sampling checklist

Our purchasing department create the initial sampling order, here you get the needed information according which PPAP form you must submit initial samples. Production process approval (PPA) agreement must be done.

ElringKlinger standard PPAP requirements are:

Part **S**ubmission **W**arrant according VDA(for German customers)
Part **S**ubmission **W**arrant according AIAG Level 3 (for all other customers worldwide)

Documentation of VDA and AIAG scope are different at some points. ElringKlinger combine VDA and AIAG scope together and require one extended package of documentation. Just the cover sheet design is different according VDA or AIAG.

Part Submission Warrant according VDA

All yellow fields must be completed.

Cover sheet PPA report (VDA)

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Organization		Reason for report creation	
			Report on production process and product approval (PPA)
			Report on other samples
			Requalification
		Trigger of PPA procedure	
			Sample presentation
Customer (recipient)			New part
			Changes to product
			Changes to production process
			Change to supply chain
			Re-use > 12 months standstill
			Updated PPA documentation

Information about the organization		Information about samples		Information about the customer	
Report no. / Version		Delivery note number		Customer	
Supplier number		Delivery quantity			
Delivery location		Batch number		Order No.PPA samples	
Production location		Sample weight [kg]		Unloading point	
Part Number		Hardware version		Part Number	
Name		Diagnosis status		Name	
Drawing no.		Software version		Drawing no.	
Index / Date		Identification/DUNS		Index / Date	
Special archieving requirements		Hardware approval		Software approval	

Confirmation of organization

It is hereby confirmed that the PPA procedure was carried out in accordance with the agreements made in the PPA agreement and the specifications of VDA Volume 2.

	The IMDS record was created under the MDS ID No.:	

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Customer decision

Customer-ready/Ready for series production		Not customer-ready / Not ready for series production	
PPA procedure towards customer closed		New PPA procedure required	
Update of PPA documentation required			
Report number/version Customer			

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Part Submission Warrant according AIAG

All yellow fields must be completed. Items that are not applicable are entered with “n/a”

DaimlerChrysler Ford GM

Part Submission Warrant

Part Name | Cust. Part Number

Shown on Drawing No. | Org. Part Number

Engineering Change Level | Dated

Additional Engineering Changes | Dated

Safety and/or Government Regulation ☐ Yes ☐ No | Purchase Order No. | Weight (kg)

Checking Aid No. | Checking Aid Engineering Change Level | Dated

ORGANIZATION MANUFACTURING INFORMATION

Organization Name & Supplier/Vendor Code

Street Address

City | Region | Postal Code | Country

CUSTOMER SUBMITTAL INFORMATION

Customer Name/Division

Buyer/Buyer Code

Application

MATERIALS REPORTING

Has customer-required Substances of Concern Information been reported? ☐ Yes ☐ No ☐ n/a

Submitted by IMDS or other customer format:

Are polymeric parts identified with appropriate ISO marking codes? ☐ Yes ☐ No ☐ n/a

REASON FOR SUBMISSION (Check at least one)

- ☐ 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
- ☐ Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts Produced at Additional Location
- ☐ Other - please specify below

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.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at organization'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 warrant are representative of our parts which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of ____ / ____ hours.

I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from the declaration below.

EXPLANATION/COMMENTS:

Is each Customer Tool properly tagged and numbered? ☐ Yes ☐ No ☐ n/a

Organization Authorized Signature | Date

Print Name | Phone No. | Fax No.

Title | E-mail

FOR CUSTOMER USE ONLY (IF APPLICABLE)

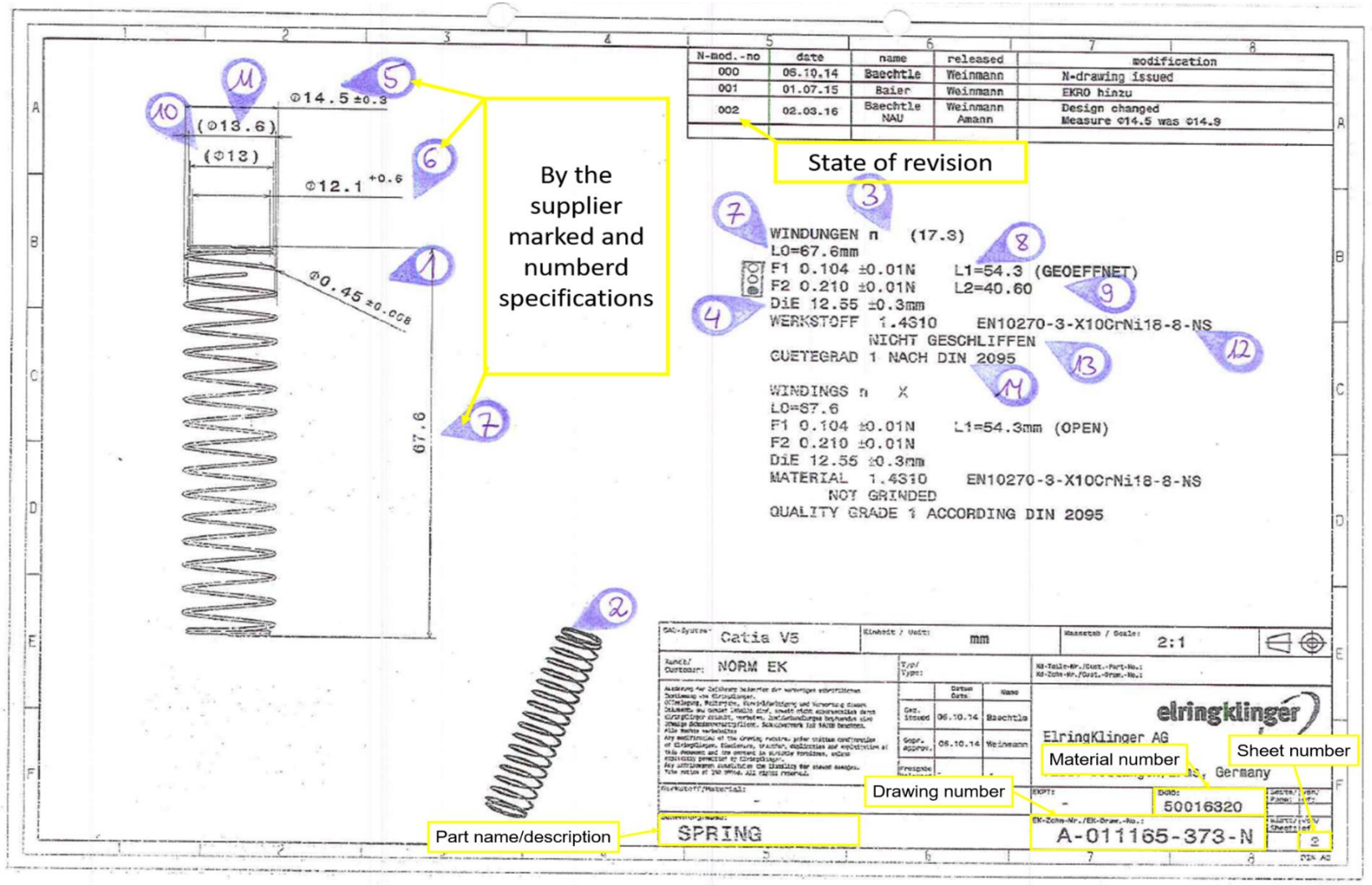
Part Warrant Disposition: ☐ Approved ☐ Rejected ☐ Other

Customer Signature | Date

Print Name | Customer Tracking Number (optional)

Drawing

The full drawing number in that case is “A-011165-373-N-002-002” (the first “002” is the sheet number and the second “002” is the state of revision).
The single dimensions on the drawing must be nummerated “ballooned” and must refer to the measurement report.



Dimensional Results, Product related deliverables, Functional tests

Within the APQP process it is necessary to present the measurement method to ElringKlinger. To make sure that the measurement is comparable to the ElringKlinger measurement method and to get the same measurement results.

Standard measurement scope:

- All existing molds/tools
- All cavities
- 5 parts per cavity

For rubber gaskets measure at least one cavity on all pips and holes.

No range results accepted, only single measurement results acceptable.
Single dimensions on the drawing must be numerated “ballooned” and must refer to the measurement report.

The here shown documents can be used to document test results which have been made with the material.

Material certificates / product specifications / order norms from ElringKlinger accepted and measurement results from the material required.

Material test results and product related deliverables according VDA standard

Product-related deliverables

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Information about the organization		Information about samples		Information about the customer	
Name of organization		Delivery note number		Customer	
Report no. / Version		Delivery quantity			
Delivery location		Batch number		Order no. PPA samples	
Production location		Sample weight [kg]		Unloading point	
Part Number		Hardware version		Part Number	
Name		Diagnosis status		Name	
Drawing number		Software version		Drawing number	
Version / Date		Identification/DUNS		Version / Date	
Part with special archiving requirement					

No.	Requirements/ Specification	Tolerance		Actual values of organization					Specification met		Remark
		-	+	Part 1	Part 2	Part 3	Part 4	Part 5	Yes	No	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											

Confirmation of organization

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Material test results according AIAG

DaimlerChrysler Ford GM

Production Part Approval
Material Test Results

Cavity number:	

ORGANIZATION:		PART NUMBER:	
SUPPLIER/VENDOR CODE:		PART NAME:	
MATERIAL SUPPLIER:		DESIGN RECORD CHANGE LEVEL:	
*CUSTOMER SPECIFIED SUPPLIER/VENDOR CODE:		ENGINEERING CHANGE DOCUMENTS:	
*If source approval is req'd, include the Supplier (Source) & Customer assigned code.		NAME of LABORATORY:	

MATERIAL SPEC. NO. / REV / DATE	SPECIFICATION / LIMITS	TEST DATE	QTY. TESTED	SUPPLIER TEST RESULTS (DATA)	OK	NOT OK

Blanket statements of conformance are unacceptable for any test results.

SIGNATURE	TITLE	DATE

MARCH 2006 CFG-1004

Process capability study, Machine capability study for all SC/CC

③

PCS: 125pcs.; all SC's and cavities: cp/cpk > 1,33
PCS: 125pcs.; all CC's and cavities: cp/cpk > 1,67

MCS: 50pcs.; all SC's and cavities: cm/cmk > 1,67
MCS: 50pcs.; all CC's and cavities: cm/cmk > 2,00

If the capability does not meet the requirements, an 100% inspection is necessary for this dimension.

Test equipment capability, Test equipment list, Gage, Gage Measurement Report

MSA has to be done for all measurement devices.
MSA procedures 1-3 are needed for all SC/CC's dimensions. Pictures from gages and fixtures necessary.

The following sites show how the measurement system and measuring equipment capability has to be tested. Additionally to these documents it is necessary to list the used measuring equipment in a separate document.

Procedure 1

Arbeitsblatt Messsystem - und Messmittelfähigkeitsuntersuchung
work sheet measurement system- and measuring equipment capability study
Verfahren 1
type-1 study

Teilebezeichnung: part description:
Merkmal : characteristic:
Spezifikation : specification:
Toleranz: tolerance:
Messmittelname : measuring equipment name:
Messmittel - Nr. : measuring equipment no.
Messmitteltyp : measuring equipment typ:
Nennmass-Eichnormale: master/nominal value:
Datum : date:
Durchgeführt von : prepared by:

Messwertnr. test result no.	Messwert test result	Messwertnr. test result no.	Messwert test result
1		26	
2		27	
3		28	
4		29	
5		30	
6		31	
7		32	
8		33	
9		34	
10		35	
11		36	
12		37	
13		38	
14		39	
15		40	
16		41	
17		42	
18		43	
19		44	
20		45	
21		46	
22		47	
23		48	
24		49	
25		50	

Mittelwert: average:
Standardabweichung: standard deviation:
Ergebnis result
Fähigkeitsindex cg= capability index cg=
Fähigkeitsindex cgk= capability index cgk=

$cgk = \frac{0{,}1 \times T - |Bil|}{2 \times Sg}$

$cg = \frac{0{,}2 \times T}{4 \times Sg}$

in Ordnung/okay: ≥ 1,33
nicht in Ordnung/not okay: < 1,33

Procedure 2

Arbeitsblatt Messsystem - und Messmittelfähigkeitsuntersuchung

work sheet measurement system- and measuring equipment capability study

Verfahren 2
type-2 study

Teilebezeichnung: part description:		Messmittelname : measuring equipment name:		Datum : date:	
Merkmal : characteristic:		Messmittel - Nr. : measuring equipment no.		Durchgeführt von : prepared by:	
Spezifikation : specification:		Messmitteltyp : measuring equipment typ:			
Toleranz: tolerance:					

Prüfer operator	A:	Name			B:	Name			C:	Name		
Teil part	1.Versuch test 1	2.Versuch test 2	3.Versuch test 3	Spannw. range	1.Versuch test 1	2.Versuch test 2	3.Versuch test 3	Spannw. range	1.Versuch test 1	2.Versuch test 2	3.Versuch test 3	Spannw. range
1				0,00				0,00				0,00
2				0,00				0,00				0,00
3				0,00				0,00				0,00
4				0,00				0,00				0,00
5				0,00				0,00				0,00
6				0,00				0,00				0,00
7				0,00				0,00				0,00
8				0,00				0,00				0,00
9				0,00				0,00				0,00
10				0,00				0,00				0,00
Summe/sum	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
		Spannweite Mittelwert A: Range average A:		0		Spannweite Mittelwert B: Range average B:		0		Spannweite Mittelwert C: Range average C:		0
		Summe sum		0		Summe sum		0		Summe sum		0,00
		Mittelwert A average A		0		Mittelwert B average B		0		Mittelwert C average C		0

Messfehleranalyse / measuring fault analyse:

R = 0

1. Wiederholbarkeit = K1*R = 0

Mittelwert x Diff. max-min = 0

1. Repeatability = K1*R = | average x Diff. max-min =

Hierbei gilt K1 = 0,8862 bei 2 Messversuchen und K1 = 0,5908 bei 3 Messversuchen .
Hereby to apply K1 = 0,8862 by 2 measuring cycles and K1 = 0,5908 by 3 measuring cycles.

% Wiederholbarkeit = 100* Wiederholbarkeit / repeatability
% Repeatability — 6Sigma Prozess oder Toleranz / 6Sigma process or tolerance

2. Nachvollziehbarkeit = K2*Diff. = 0
2. Reproducibility = K2*Diff. =

Hierbei gilt K2 = 0,7071 bei 2 Prüfer und K2 = 0,5231 bei 3 Prüfer.
Hereby to apply K2 = 0,7071 by 2 operators and K2 = 0,5231 by 3 operators.

x Diff. ist die Differenz zwischen dem größten und dem kleinsten x- Wert .
x diff. is the differenz between the largest and the smallest x-value.

% Nachvollziehbarkeit = 100* Nachvollziehbarkeit / reproducibility
% Reproducibility — 6Sigma Prozess oder Toleranz / 6Sigma process or tolerance

3. Wiederholpräzision Wurzel aus (Wiederholbarkeit)²+(Nachvollziehbarkeit)² = 0
3. total variation = root off (repeatability)²+(reproducibility)² =

% Gesamtstreuung = 100* Gesamtstreuung / total variation
% total variation = 6Sigma Prozess oder Toleranz / 6Sigma process or tolerance

4. Streuung von Teil zu Teil = K3*Rp= 0
4. variation part to part= K3=0,3146 bei 10 Teilen on 10 parts

5. Gesamtstreuung = Wurzel aus (Wiederholpräzision)²+(Streuung von Teil zu Teile)² = 0
5. total variation = radical from (repeat precision)²+(variation from part to part)²

Messmittelstreuung in Prozent der Prozessstreuung
Equipment variation in percent of process variation

Wiederholbarkeit
Repeatability

Nachvollziehbarkeit
Reproducibility

Wiederholpräzision
Total variation

Streuung von Teil zu Teil
variation part to part

ndc sollte > 5 sein
ndc should be > 5

Abnahmekriterien allgemeine Richtlinien / acceptable specification:
Gesamtstreuung des Messmittels/ Total variation of measuring equipment

0 - 10 %	In Ordnung / okay
10 - 30%	Grenzlage / limit position für bestimmte Anwendungen zulässig / may be acceptable for some applications
über/over 30 %	Nicht in Ordnung / not okay

Bemerkung / remark:

Procedure 2

Calculation of equipment variation caused by customer requirement GM.

Arbeitsblatt Meßsystem - und Meßmittelfähigkeitsuntersuchung

work sheet measurement system- and measuring equipment capability study

Verfahren 2

type-2 study

Teilebezeichnung: part description:		**Meßmittelname :** measuring equipment name:		**Datum :** date:	
Merkmal : characteristic:		**Meßmittel - Nr. :** measuring equipment no.		**Durchgeführt von :** prepared by:	
Spezifikation : specification:		**Meßmitteltyp :** measuring equipment typ:			
Toleranz: tolerance:					

Prüfer operator	A:	Name			B:	Name			C:	Name		
Teil part	1.Versuch test 1	2.Versuch test 2	3.Versuch test 3	Spannw. range	1.Versuch test 1	2.Versuch test 2	3.Versuch test 3	Spannw. range	1.Versuch test 1	2.Versuch test 2	3.Versuch test 3	Spannw. range
1				0,00				0,00				0,00
2				0,00				0,00				0,00
3				0,00				0,00				0,00
4				0,00				0,00				0,00
5				0,00				0,00				0,00
6				0,00				0,00				0,00
7				0,00				0,00				0,00
8				0,00				0,00				0,00
9				0,00				0,00				0,00
10				0,00				0,00				0,00
Summe sum	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Spannweite Mittelwert A: Range average A:	0	Spannweite Mittelwert B: Range average B:	0	Spannweite Mittelwert C: Range average C:	0
Summe sum	0	Summe sum	0	Summe sum	0,00
Mittelwert A average A	0	Mittelwert B average B	0	Mittelwert C average C	0

R =	0
Mittelwert x Diff. max-min = average x Diff. max-min =	0

Meßfehleranalyse / measuring fault analyse:

1. Wiederholbarkeit = K1*R = 0

1. Repeatability = K1*R =

Hierbei gilt K1 = 0,8862 bei 2 Meßversuchen und K1 = 0,5908 bei 3 Meßversuchen .

Hereby to apply K1 = 0,8862 by 2 measuring cycles and K1 = 0,5908 by 3 measuring cycles.

% Wiederholbarkeit = 100* Wiederholbarkeit / repeatability

% Repeatability 6Sigma Prozess oder Toleranz / 6Sigma process or tolerance

2. Nachvollziehbarkeit = K2*Diff. = 0

2. Reproducibility = K2*Diff. =

Hierbei gilt K2 = 0,7071 bei 2 Prüfer und K2 = 0,5231 bei 3 Prüfer.

Hereby to apply K2 = 0,7071 by 2 operators and K2 = 0,5231 by 3 operators.

x Diff. ist die Differenz zwischen dem größten und dem kleinsten x- Wert .

x diff. is the differenz between the largest and the smallest x-value.

% Nachvollziehbarkeit = 100* Nachvollziehbarkeit / reproducibility

% Reproducibility 6Sigma Prozess oder Toleranz / 6Sigma process or tolerance

3. Gesamtstreuung = Wurzel aus (Wiederholbarkeit)^2+(Nachvollziehbarkeit)^2 = 0

3. total variation = root off (repeatability)^2+(reproducibility)^2 =

% Gesamtstreuung = 100* Gesamtstreuung / total variation

% total variation = 6Sigma Prozess oder Toleranz / 6Sigma process or tolerance

Meßmittelstreuung in Prozent der Prozessstreuung

Equipment variation in percent of process variation

Wiederholbarkeit

Repeatability

Nachvollziehbarkeit

Reproducibility

Gesamtstreuung

Total variation

Abnahmekriterien allgemeine Richtlinien / acceptable specification:

Gesamtstreuung des Meßmittels/Total variation of measuring equipment

0 - 10 %	In Ordnung / okay
10 - 30%	Grenzlage / limit position für bestimmte Anwendungen zulässig / may be acceptable for some applications
über/over 30 %	Nicht in Ordnung / not okay

Bemerkung / remark:

Berechnung der Messmittelstreuung aufgrund Kundenforderung GM.

Calculation of equipement variation caused by customer requirement GM.

Procedure 3

Arbeitsblatt Meßsystem - und Meßmittelfähigkeitsuntersuchung

work sheet measurement system- and measuring equipment capability study

Verfahren 3

type-3 study

Teilebezeichnung:
part description:

Merkmal :
characteristic:

Spezifikation :
specification:

Toleranz:
tolerance:

Messmittelname :
measuring equipment name: balance

Messmittel - Nr. :
measuring equipment no.

Messmitteltyp :
measuring equipment typ:

Nennmass-Eichnormale:
master/nominal value:

Datum :
date:

Durchgeführt von :
prepared by:

Teile-Nr. part no.	Meßzyklus 1 cycle 1	Meßzyklus 2 cycle 2	Range "R"
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

Berechnung und Auswertung
calculation and evaluation

Wiederholbarkeit EV:
Repeatability EV:
% EV:

R & R= EV = K1 x Rquer
%R & R= %EV= EV x 100%
RF

0-10% **In Ordnung (für neue Messmittel)**
okay (for new measuring equipment)

10-30% **Grenzlage**(für vorhandene Messmittel)
limit position (for existing measuring equipment)

über/over **30%** **Nicht in Ordnung**
not okay
not okay

Procedure
Attributive inspection for gages

Arbeitsblatt Messsystem - und Messmittelfähigkeitsuntersuchung

work sheet measurement system- and measuring equipment capability study

Attributive Prüfung mit Lehren (attributiv inspection for gages)

Teile-Nr (EK-part-number)
Lehren-Nr (gage-number)

Teile-Nr. EK-part-no.	Sollwert Passloch nominal value bolt hole: Gemessener Merkmalswert measured values	Sollwert Passstift nominal value bolt: Prüfentscheid aus Messung results	Name: name: Versuch trial 1	Versuch trial 2	Name: name: Versuch trial 1	Versuch trial 2	Bewertung validation
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Summe der Nichtübereinstimmungen: 0
total of no accordances

Ergebnis: Prüfmittel geeignet
result: The measuring equipment is suitable

Wenn das Prüfmittel nicht geeignet für diesen Prozess ist, müssen folgende Maßnahmen eingeleitet werden.
if the measuring equipment is unsuitabled for this process, the following action is needed

- ☐ Einweisung (Schulung) der Prüfer (instruction for the worker)
- ☐ Richtige Handhabung (correct handling)
- ☐ Konstruktionsänderung (design update)
- ☐ alternatives Prüfmittel (Prüfmittelnr./Bezeichnung:_____/_____)(alternative device)
- ☐ Andere Maßnahmen (other action):

_____
_____
_____
_____
_____
_____
_____

Datum/Unterschrift
date/signature

Sub-Supplier Status

If sub-suppliers are used for the sourced part by ElringKlinger, the initial sample approval document of the purchased parts or bulk material of sub-suppliers are requested.

In addition, the supplier has to fill out the overview of all sub-suppliers which are used for each purchased product. This request is needed for the upcoming supply chain law which is valid from 2023.

Unterlieferantenstatus / Sub-Supplier status					elringklinger	Datum / Date
Lieferantenname / Supplier name					ElringKlinger Empfänger Standort / Recipient location	
Lieferantennummer / Supplier number						
Produktionsstandort / Production location						
Lieferstandort / Delivery location						
ElringKlinger Teilenummer / ElringKlinger Part number						
Teilebenennung / Part description						
ElringKlinger Zeichnungsnummer / ElringKlinger Drawing number						
Index Datum / Index Date						

Ref. Nr.: /	Materialnummer Lieferant /	Zeichnungsnummer inkl. Änderungsstand/ Drawing number incl. Change level	Bennenung / Designation	Unterlieferantenname / Sub-Supplier name	Produktionststandort / Production Site	PAPP-Freigabe/ PPAP-release

Technical cleanliness, Corrosion test

A cleanliness test has to be made if it is noted on the drawing or required by ElringKlinger.

This step in the initial sampling documentation has to be carried out for new parts or changes in the manufacturing process. The parts to be tested must be removed from the serial process and must be submitted as a standard production part (not ”pre-conditioned”).

Therefore it is necessary to generate a fading curve and a blank value for the products.

The standards given here have to comply with the performed tests. The institution which carries out the experiments inspections has to be certificated.

The cleanliness report must also contain an detailed description of the test procedure for example extraction method, analysis method, filter type, flushing pressure, test medium, cleaning mechanism, time, standard references, and so on.

Requalification

The extent of requalification of deliveries to ElringKlinger corresponds to the repetition of initial release in terms of dimension, function, cleanliness, reliability and material. Requalification is to be carried out yearly and the proceeded test shall be confirmed to ElringKlinger. Part families can be brought together as agreed with ElringKlinger. Results must be made accessible to ElringKlinger on request.

Product-specific inspections

With regard to product commodity, there are different expectations which have to be met. The list below shows a few general instructions for the different commodities. Regarding to the product there can be more requests than listed in this table. If there are any questions or problems with the instructions, please feel free to contact the corresponding Supplier Quality Engineer.

For all commodities
If requested, DVP documentation has to be included into the initial sampling documentation.

Plastic parts
For welded assemblies pictures of the destroyed welding area have to be included with the initial sampling documentations.

Electrical parts
Pictures from the crimp contact (cross section) have to be included into the initial sampling documentations.

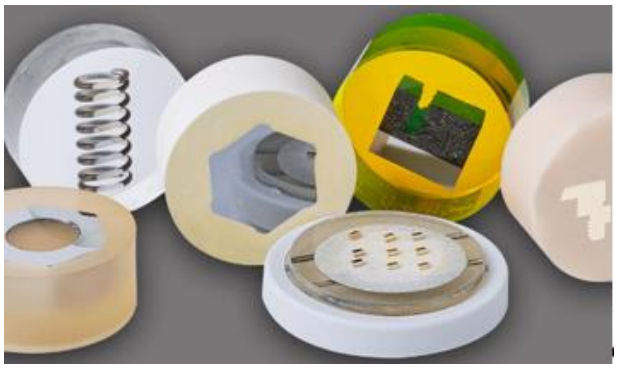
Elastomer and rubber parts
Additional requirements:

1. *Hardness checking*
   - IRHD m [points]
   - SHORE A, if permitted by gasket geometry [DIN EN ISO 868]
2. *Density [g/cm³]*
3. *Compression set [%]*

These additional requirements must also be met for annual requalification.

Every single release criteria must be performed and submitted within the initial sample documentation in order to obtain initial sample approval. Test specimens and their results are to be marked separately, they are to be sent together with the initial sample test report and initial sample components.

1. Hardness
The required test must be carried out on the finished part. In order to obtain stable measurement results, the component to be tested must be embedded in resin.



Values to be determined:
IRHD m [points]
SHORE A [DIN EN ISO 868]

2. Density test

Density is a substance constant that is independent of the dimensions of the test specimen.
Density may e.g. determined e.g. with the help of “Archimedean Principle”.
First, the specimen is weighed in air and finally in ethanol or ethyl alcohol (water is preferred for reasons of simplicity, but due to its high surface tension it more easily leads to measurement errors).

Special density scales then use buoyancy to automatically calculate the density of the material.

No air bubbles must adhere to the test specimen or there must not be any bubbles or cavities in the test specimen as these would affect buoyancy when weighing in water.

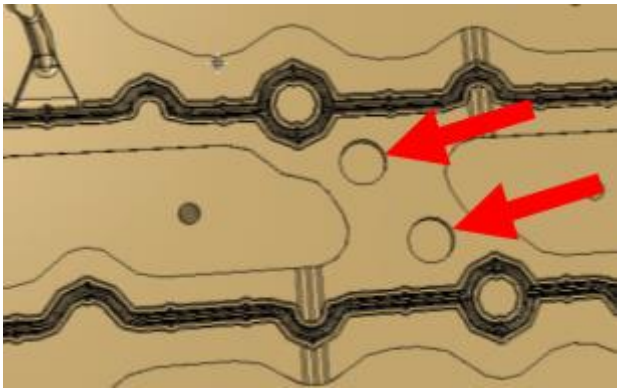
Density must be determined in [g/cm³].

3. Compression set [%] based on ISO 815

Compression set is intended to provide information on the extent to which elastic properties of elastomers are retained after long-term constant deformation at a given temperature.
It is defined as the deformation of a test specimen at a certain time after tension release in relation to the deformation under tension.

Test specimens in injection molding series tool
Three buttons or test specimens are incorporated in the injection mold. This is necessary so that parameter determination can be better validated when the tool is put into operation.
These test specimens cause the worst compression set, i.e. the gasket itself is better than the test specimen.

Tool design
In the design of the tool, three test specimens (type B) with a diameter of
Ø13±0.5mm * 2±0.05mm deep are to be incorporated in the tool. The position should be close to the gasket contour. However, it should have sufficient distance so that during series production, no rubber overflow into this body is possible.



Creation of test specimens
The injection molding machine must be in series production conditions together with the tool.
The employee opens the empty tool and places a piece of raw material over the test specimens as required and closes the mold in automatic mode. The test specimens are removed from the tool after series cycle time.

Determination of compression set
Determination of compression set shall be carried out in accordance with DIN ISO 815-1, test specimen type B.

Measuring principle
To determine the compression set, initial height h0 is measured on a test specimen, then statically deformed by 25% (h1) and stored at a specified temperature.

After a specified test period, the test specimen is removed from the mold in hot condition and after a cooling time of 30 minutes, final thickness h2 is determined (hot removal). Alternatively, the test specimen can be removed after cooling to room temperature and again measured after 30 minutes (cold removal).

Compression set is calculated by following formula:

$$\text{Compression set} = \frac{h0 - h2}{h0 - h1} \; [\,\%\,]$$

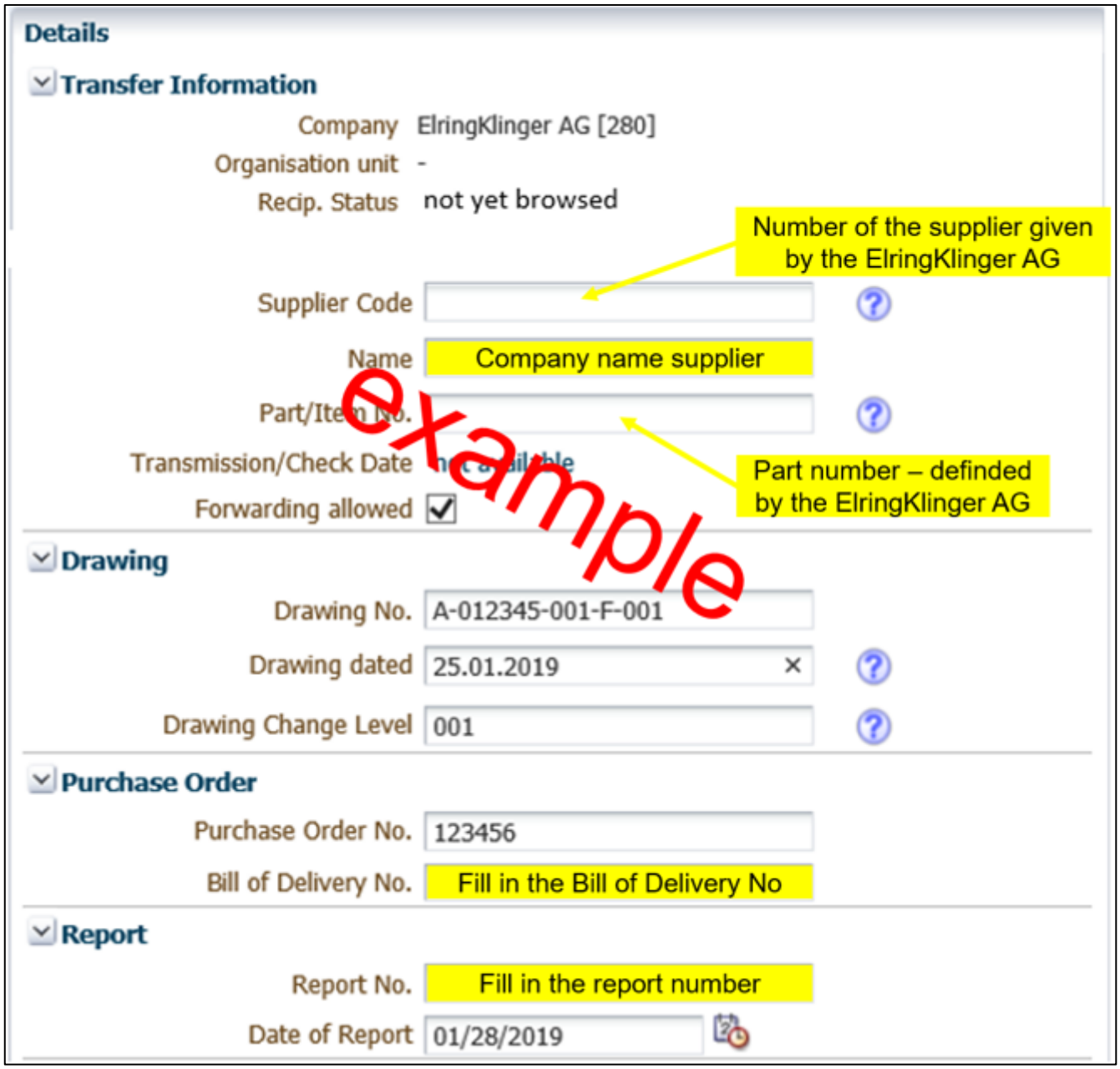
Measurements are carried out on test specimens.
Alternatively, after consultation with ElringKlinger, measurements can also be carried out on gaskets, whereby the values determined here can scatter very widely and may deviate significantly from measurements on standard test specimens.

Detailed description of test procedures with test parameters, definitions of terms as well as test specimen dimensions can be found in the corresponding test standards, whereby the special features of the respective standards must be strictly observed (DIN 53517, DBL 5555.3, P-VW 3307).

Since the result depends very much on the selected test method, it must always be specified in addition to the result. In addition, test temperature and test duration must always be recorded.

IMDS

The picture below shows the IMDS mask, where suppliers have to fill out a part of the relevant product information. Please refer to the picture below for a complete and correct completed IMDS Report.



MDS Report

Substances of assemblies and materials

This report is for internal Automotive industry use only. Distribution to non-Automotive clients is a violation of the Terms of Use, and is not permitted unless a written permission was given by DXC Technology. Parsing is not allowed.

1. Company and Product Name

Number of the ElringKlinger AG

1.1 Supplier Data / Product Identification

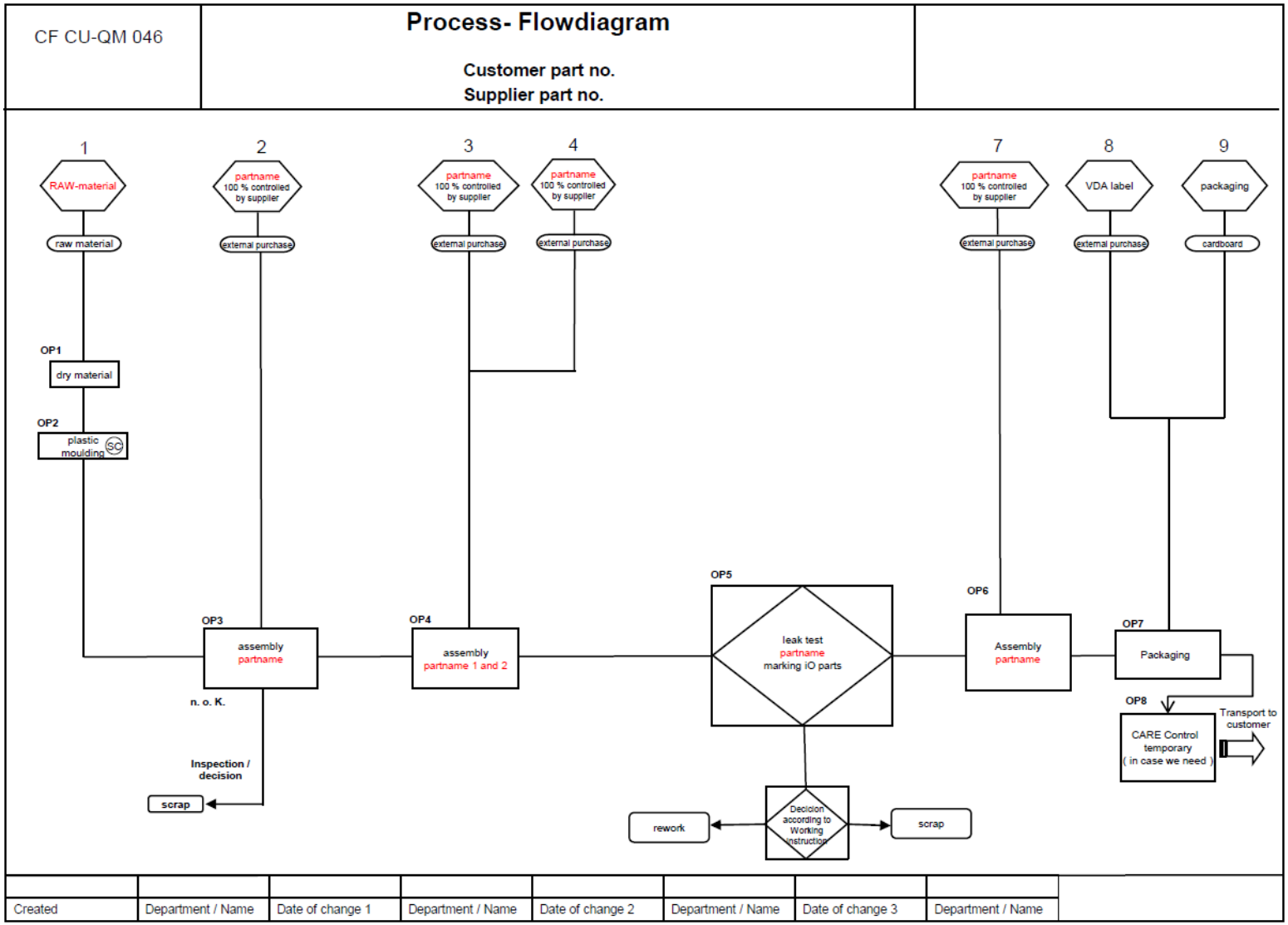
Name [ID]:	[redacted]	Part/Item No.:	50025285
DUNS Number:		Description:	BOLT BUSHING SYSTEM M6X22
Street/Postal Code:			-
Nat./ZipCode/City:			-
Supplier Code:			Projekt ID-38857
Contact Person:			-
- Phone:			No
- Fax No.:		IMDS ID / Version:	[redacted]
- E-Mail Address:	[redacted]	Node ID:	
		MDS Status (Change Date):	Internally released (09/14/2018)
		Recipient Company (Org Unit) [ID]:	ElringKlinger AG [280]
		Recipient Status (Change Date):	accepted (09/18/2018)
		Accepted by:	[redacted]

Description of the part in Engl./German according to the drawing

The IMDS has to contain the number of the drawing, the current status and the date of the latest change

Process Flow

This flow chart must contain all in-house and external (if relevant) process steps according to the Control Plan process steps.



Control Plan according to IATF 16949

This Control Plan must contain all in-house and external (if required) process steps according to the process flow chart.
The control plan includes: Standard serial controls, SC/CC´s serial controls, requalification, cleanliness testing, C.A.R.E. control and so on.
An 100% control also includes part marking (if required).

Control plan

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Control plan type:			Key Contact / Phone			Date (Orig.)			Date (Rev.)				
Control Plan Number													
Part Number/Latest Change Level:			Core Team			Customer Engineering Approval/Date (if Req'd)							
Part Name/Description			Supplier/Plant Approval/Date			Customer Quality Approval Date (if Req'd)							
Supplier/Plant		Supplier Code	Other Approval/Date (If Req'd)			Other Approval/Date (If Req'd)							

			Characteristics				Methods						
Part/	Process Name/	Machine, Device,	No.	Product	Process	Special	Product/Process	Evaluation	Sample		Control Method	Reaction Plan	
Process	Operation Description	Jig, Tools				Char.	Specification/	Measurement	Size	Freq.			
Number		For Mfg.				Class	Tolerance	Technique					
	Product / Dispatch audit						Drawing;						
	(Layout inspection)	measurement device	1	all positions of drawing	-	-	Form ZF QM 43 - D (Requalification / Process Audit / dispatch audit)	measurement device	min. 1 of every prod. Family	1/year	Audit report (initial sample documentation	Depending of the problem	

Control of new launches (start of production, SOP)

C.A.R.E. control (Customer Acceptance Review Evaluation) serves the customer to protect himself from his own mistakes. However, it is not a problem-solving method, this must be carried out intensively in parallel by the customer.

Most used keywords: C.A.R.E. control, Early Production Containment (EPC), Safe Launch Plan

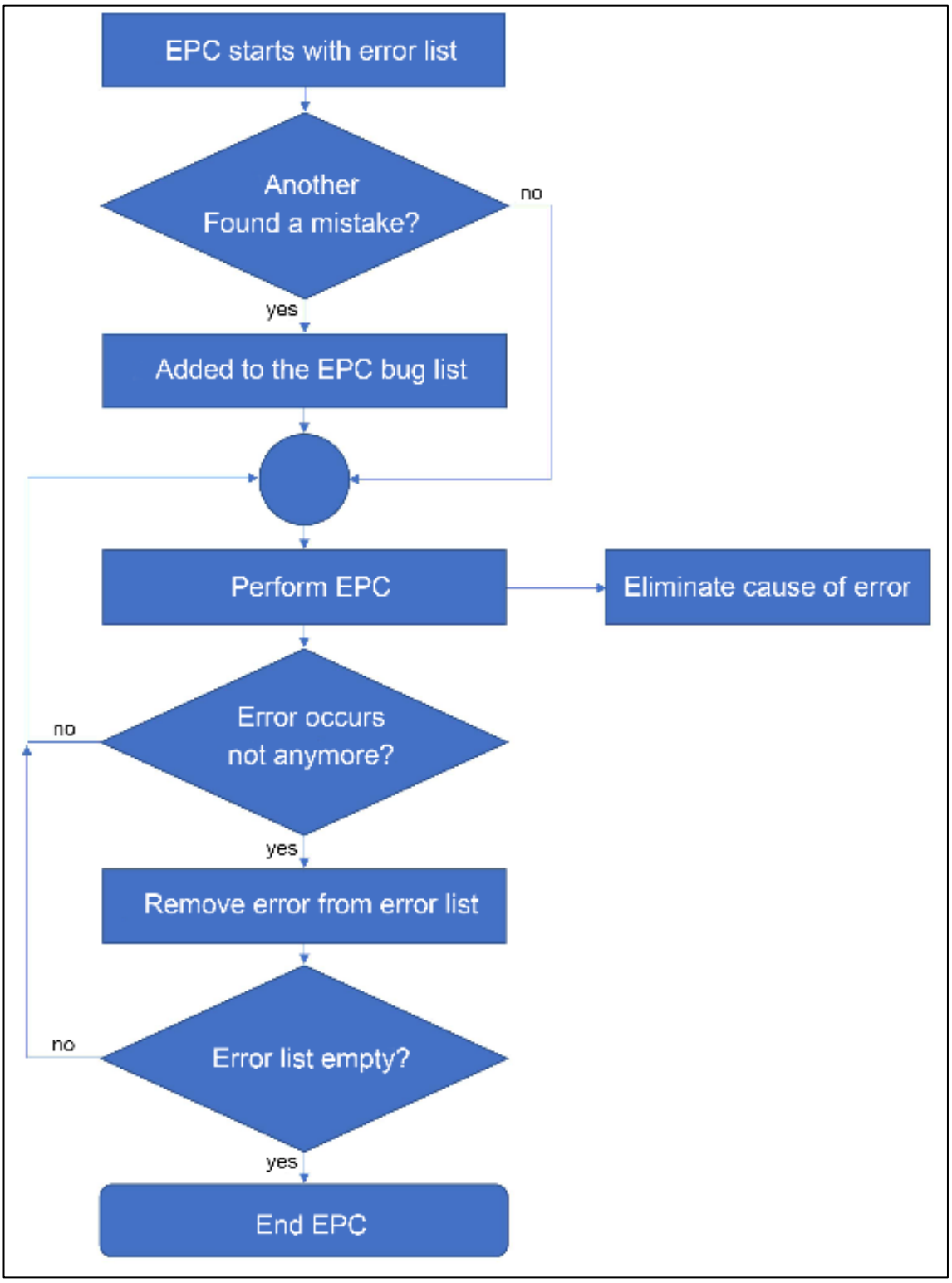
The supplier shall agree upon a Safe Launch Plan like C.A.R.E. control for a minimum of three deliveries after approval of the PPAP. C.A.R.E. control is a control which is carried out on the finished product, usually immediately before shipping. The examiners are thoroughly trained on the fault characteristics, so that all faulty products are sorted out. If new errors occur during the check, they are added to the error list and the quality managers are informed.

During a new start, at least 3 production orders (with representative quantities) are to be checked 100% visually at a separate workstation. Test results, error type and quantity shall be documented in the appropriate form sheets.

If an error no longer occurs, it will continue to be checked up to an agreed time to make sure that this error has really been eliminated. If the error no longer occurs after the expiration of this period, this error is removed from the error collection card.
If there are no more errors and the error collection card is empty, then the C.A.R.E. control is also considered as finished.

The C.A.R.E. control should always be done away from final inspection, etc., so that it does not lead to collusion of the inspectors, e.g. "Xy I do not have to check, since this was already checked in the final inspection" or "Xy I do not have to check because this is controlled in the C.A.R.E. control " comes.

Example of the process flow from EPC (Early Production Containment)



FMEA

It is the minimum requirement for initial sampling to send the FMEA confirmation to ElringKlinger as a proof of creation.

Confirmation existing of the FMEA

elringklinger

Information about the organization				Information about the customer			
Name of organization		Supplier no.		Customer		Part number	
		Delivery location				Part name	
		Production location				Drawing no.	

Hereby we confirm the creation of an		for the above mentioned article

Priority High (H):
High review and action priority. The team must either define an appropriate action to improve the occurrence and/or detection or justify and document why the actions taken are sufficient.

Medium Priority (M):
Medium review and action priority
The team should identify appropriate actions to improve the occurrence and/or detection or, at the discretion of the organization, justify and document why the actions taken are sufficient.

Priority Low (L):
Low review and action priority. The team can identify actions to improve prevention or detection activities.

Quantity high priority (H)	
Quantity middle priority (M)	
Quantity low priority (L)	

No.	Action	Prio	Responsible	Date
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Remarks to the FMEA

Confirmation of organization			
Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

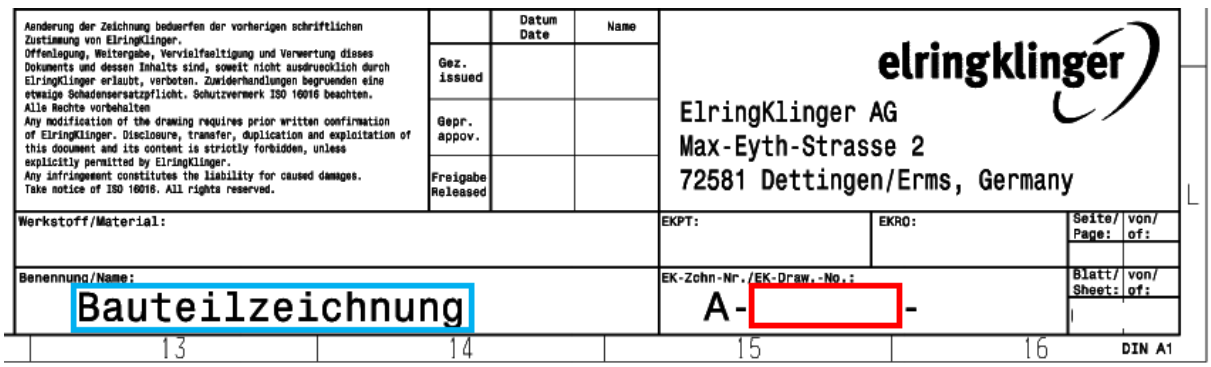
Tool

Documentation of the tool has to contain pictures of the closed and as well as of the open tool (it has to be visible how many cavities the tool contains) and .stp CAD data. Furthermore, this documentation has to contain dimensions and weight of the tool. In addition to that there must be a property labeling on the tool.

Property labeling has to contain the following information:

The information for the label are specified in the drawing from ElringKlinger.

Description of product:
See name of part at drawing (Blue frame).
Description of customer:
Costumer specific number, ElringKlinger AG will not take influence on this number.
EK-Part-No:
Current ElringKlinger part number.
Project-ID:
Is the 6 digit number on the drawing (Red frame).
For older project´s without an A-XXX (without Project ID) drawing please use the old drawing number instead of the project-ID



Example pictures of the closed tool with property labeling

Example pictures of opened two cavity tool.

Tooling overview

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Information about the organization				Information about the customer			
Name of organization		Supplier number		Customer		Part number	
		Delivery location				Part name	
		Tool location				Drawing number	

Tool data	ElringKlinger tool number			
	ElringKlinger tool order number			
	Tool lifetime [shot quantity]			
	Used material for the tool			
	Tool coated or hardened			
	Number of cavities			
	Construction year			
	Tool manufacturer			
	Dimension of the tool	Width		[mm]
		Height		[mm]
		Depth		[mm]
		Weight		[kg]
Machine data	Machine type			
	Machine manufacturer			
	Machine number / Inventory number			
	Machine size			
	Clamping force			[kN]

Further information acc. the tool or machine

Tooling picture

Front view	Inner view tool opened
Property tool tag	Picture from off tool part

Further pictures

e.g. Cavity marking, Date clock, Part marking, ...

Further comments

Confirmation of organization

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Process performance test (Run@rate)

The Process performance test (Run@Rate) require that the supplier has to produce between the production enough parts as the amount of parts which ElringKlinger would need to produce two days in the peak volume a year.

Calculation example:
ElringKlinger demand 150,000 parts/year, ElringKlinger calculates 48 weeks/year with 5 days per week.

➔150,000 / 48	= 3125 parts / week
➔3125 / 5	= 625 parts / day
➔2 day production	= 1250 parts for the process performance test needed (R@R)

The supplier must make this sample production and the internal audit (according to VDA 6.3) before sending the initial sampling records to ElringKlinger.

This document is necessary to document the results of the internal audit which the supplier has to carry out.

Suppliers who fall under the AIAG CQI standard (Continuous Quality Improvement) must send the last internal audit within this initial sample report.

Process performance test (Run@Rate)

elringklinger

Information about the organization				Information about the customer			
Name of organization		Supplier no.		Customer		Part number	
		Delivery location				Part name	
		Prod. location				Drawing no.	

Audit type	

Participants supplier / audited organisation:	Department*	Participants customers / auditor:		Department*
			Lead-Auditor	
			Co-Auditor	

*X stands for distribution of the audit results. Send the result also to CU-4QS and enter ZLIEFQ

Process audit result (VDA 6.3):	Goal >90%
P2 Project management	
P3 Planning the product and process development	
P4 Carrying out the product and process development	
P5 Supplier management	
P6 Process analysis / production	
P7 Customer support / customer satisfaction / service	
P8 Sustainability issues	
P9 Questions regarding information security and data privacy	

CQI audit result:	Passed
AIAG CQI 9 (heat treatment)*	
AIAG CQI 11 (metal coating)*	
AIAG CQI 12 (surface coating)*	
AIAG CQI 15 (welding operation)*	
AIAG CQI 17 (soldering process)*	
AIAG CQI 23 (plastic moulding)*	
AIAG CQI 27 (casting)*	

*add documents as attachment

Overall result

☐ A = 90 - 100% quality capable

☐ B = >=80 - <90%, conditionally quality capable

☐ C = 0 - <80% not quality capable

Repetition date:

Comments on deviations requested

☐ Yes Until:

☐ No

Remarks to the audit result:

Confirmation from the auditor			
Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Capacity Analysis per part or part with more than one project

This document has to be used for initial sampling. There are no alternative documents accepted. ElringKlinger expects 5 working days per week and 48 working weeks per year under normal conditions. The capacity analysis can be made within the Process performance test (Run@Rate) sample production.

Capacity analysis

This analysis should be accomplished for all key processes

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Information about the organization				Information about the customer			
Name of organization		Supplier no.		Customer		Part number	
		Delivery location				Part name	
		Production location				Current drawing no.	

Project-ID | If the part goes in more than one project number please fulfill the second page

You have to fill in only the yellow marked columns.

Operating pattern and machine data:	Process 1	Process 2	Process 3	Process 4	Process 5	Process 6
Process description (e.g. injection moulding, assembly, coating,...)						
Shifts/week (max. 15)						
Hours/shift						
Minutes/shift						
Planned downtime: lunch, breaks (min./shift)						
Total planned production time/shift (minutes)						
Total planned production time/week (minutes)						
Calculated (guaranteed) machine utilization with this product (%)						

Sample production run data:	Process 1	Process 2	Process 3	Process 4	Process 5	Process 6
Total minutes run						
Total breakdown time + time for minor setups and adjustments (minutes)						
Total number of parts made (good and bad)						
Total good parts (first time through only-do not include parts that were re-processed or reworked)						
Total bad parts						
Actual cycle time (sec./part)						
Production rate sample production (parts/8h)						

Other planning data:	Process 1	Process 2	Process 3	Process 4	Process 5	Process 6
Planned cycle for the tool (in seconds)						
Number of cavities / tracks (if not appicable insert "1")						
Cycle time per part						
Projected time per changeover (minutes)						
Projected changeovers per shift						
Projected downtime: changeover time/shift (minutes)						
Projected downtime: (breakdown time + time for minor setups and adjustments)/shift (min)						
Total projected planned downtime/week (min)						

Calculation	Process 1	Process 2	Process 3	Process 4	Process 5	Process 6
Equipment availability						
Performance efficiency						
Quality rate						
OEE						

Capacity analysis	Process 1	Process 2	Process 3	Process 4	Process 5	Process 6
Planned uptime (days/week)						
Planned rate of production (parts/minute)						
Theoretical production capacity per week						
Working weeks per year (max. 48)						
Yearly demand						
Weekly demand						
Weekly parts available for shipment						
Available capacity above / below weekly demand						

Capacity over / under of the needed quantity at the bottleneck process	0%
Capacity has to be at least 20% over the needed demand	

I confirm above mentioned capacity

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

The second page is additional necessary if the part goes in more than one project delivered to ElringKlinger.

Capacity analysis project

elringklinger

This analysis should be accomplished for all key processes

Information about the organization				Information about the customer			
Name of organization		Supplier no.		Customer		Part number	
		Delivery location				Part name	
		Production location				Current drawing no.	

No.	Project-ID	Yearly demand per project	Guaranteed machine utilization with this product (%)
1	0	0	0%
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
Summary		0	0%

Operating pattern and machine data:	Capacity first project	Capacity summary
Process description (e.g. injection moulding, assembly, coating,...)		
Shifts/week (max. 15)		
Hours/shift		
Minutes/shift		
Planned downtime: lunch, breaks (min./shift)		
Total planned production time/shift (minutes)		
Total planned production time/week (minutes)		
Calculated (guaranteed) machine utilization with this product (%)		0
Sample production run data:		
Total minutes run		
Total breakdown time + time for minor setups and adjustments (minutes)		
Total number of parts made (good and bad)		
Total good parts (first time through only-do not include parts that were re-processed or reworked)		
Total bad parts		
Actual cycle time (sec./part)		
Production rate sample production (parts/8h)		
Other planning data:		
Planned cycle for the tool (in seconds)		
Number of cavities / tracks (if not appicable insert "1")		
Cycle time per part		
Projected time per changeover (minutes)		
Projected changeovers per shift		
Projected downtime: changeover time/shift (minutes)		
Projected downtime: (breakdown time + time for minor setups and adjustments)/shift (min)		
Total projected planned downtime/week (min)		
Calculation		
Equipment availability		
Performance efficiency		
Quality rate		
OEE		
Capacity analysis		
Planned uptime (days/week)		
Planned rate of production (parts/minute)		
Theoretical production capacity per week		
Working weeks per year (max. 48)		
Yearly demand		0
Weekly demand		
Weekly parts available for shipment		
Available capacity above / below weekly demand		0

Capacity over / under of the needed quantity at the bottleneck process
Capacity has to be at least 20% over the needed demand

0 Enough capacity

I confirm above mentioned capacity

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Part history

Part history shows all changes of the product. All changes must be registrated for example (drawing change, FMEA change, claim, tool change, process change, e.g.)

Part history

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Information about the organization				Information about the customer			
Name of organization		Supplier number		Customer		Part number	
		Delivery location				Part name	
		Production location					
		Part number					

No.	Description of change	Drawing number	Drawing level	Application: First use	Application: Product change	Application: Production proces	Production date	Approval initial sampling	Remark
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									

Confirmation of organization

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Written self-assessment of serial production maturity of product and process

This assessment is a requirement by VDA and has to be provided from each supplier who delivers to ElringKlinger. Your remarks are necessary if you have yellow or red items.

Self-assessment product

elringklinger

Name		Supplier number		Recipient location	ElringKlinger	Part Number	
		Delivery location				Part description	
		Production location				Drawing number	
		Part Number				Index / Date	

Part with special archiving requirement

Category	Requirements met	Requirements not fully met	Requirements not met	Not applicable	Remark/actions + date (if not OK selected) (5)
Dimension	Dimensionally OK no rework	Dimensionally OK with rework or uncritical values NOK	Dimensionally NOK		
Material	Series material acc. to specification	No series material or other processing customer acceptance granted	No series material specification not met/not verified.		
Function / EMC / ESD	Function fulfilled meets specification	Deviation from specification customer acceptance granted	Function NOK or function not verified specification not met		
Surface / structure color / graining	OK	Does not correspond to series status, customer acceptance granted	Does not correspond to series status customer acceptance not granted		
PPA status of supply chain	Customer-ready (requirements met or deviations accepted after risk analysis)	Customer-ready after risk assessment Updated PPA documentation required	Not customer-ready or not approved yet		
Assembly capability (at customer site)	Capable for assembly with no additional expenditure	Capable for assembly with additional expenditure customer acceptance granted	Not capable for assembly		

Self-assessment of organization | **Entry incorrect, please check**

Confirmation of organization

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

Instruction how to fill in the form:	
(5)	Input mandatory, if other evaluation then "Requirements met"

Self-assessment production process

elringklinger

Name		Supplier number		Recipient location	ElringKlinger	Part Number	
		Delivery location				Part description	
		Production location				Drawing number	
		Part Number				Index / Date	

Part with special archiving requirement

Category	Requirements met	Requirements not fully met	Requirements not met	Not applicable	Remark/actions + date (if not OK selected) (5)
Production location	Production at production location approved by the organization (Production layout set up, linking between production equipment realized)	Production at production location not approved by the organization yet; No negative quality impacts expected in series production	Production not at production location; Negative quality impacts possible		
Tools	Series tool accepted	Series tool / small series tool available, optimization(s) still necessary, but no negative quality impacts expected in series production	Tool not ready for series production negative quality impacts expected in series production		
Logistics *1	According to process sequence	Not according to process sequence but no negative quality impacts expected in series production	Negative quality impacts possible		
Special and agreed characteristics assured	Characteristics assured	Assurance not fully verified additional measures installed customer acceptance granted	Assurance not fully verified		
Test equipment	Completely available / accepted capability verified	Only partially available / accepted suitable substitute test equipment available	Not available / not accepted		
Agreed production quantity	All production facilities accepted (2)	At least one production unit accepted (2)	Production facilities not accepted (2)		
	Production quantity reached / verified	Production quantity permanently reachable with special measures	Production quantity not reachable with special measures		
Human Resources	Required personnel available and trained work and test instructions complete	Only limited personnel available / trained, no negative quality impacts expected (3)	No trained personnel or not enough personnel available negative quality impacts possible (4)		

Self-assessment of organization | **Entry incorrect, please check**

Confirmation of organization

Name		Remark	
Department			
Telephone			
E-Mail			
Date		Signature	

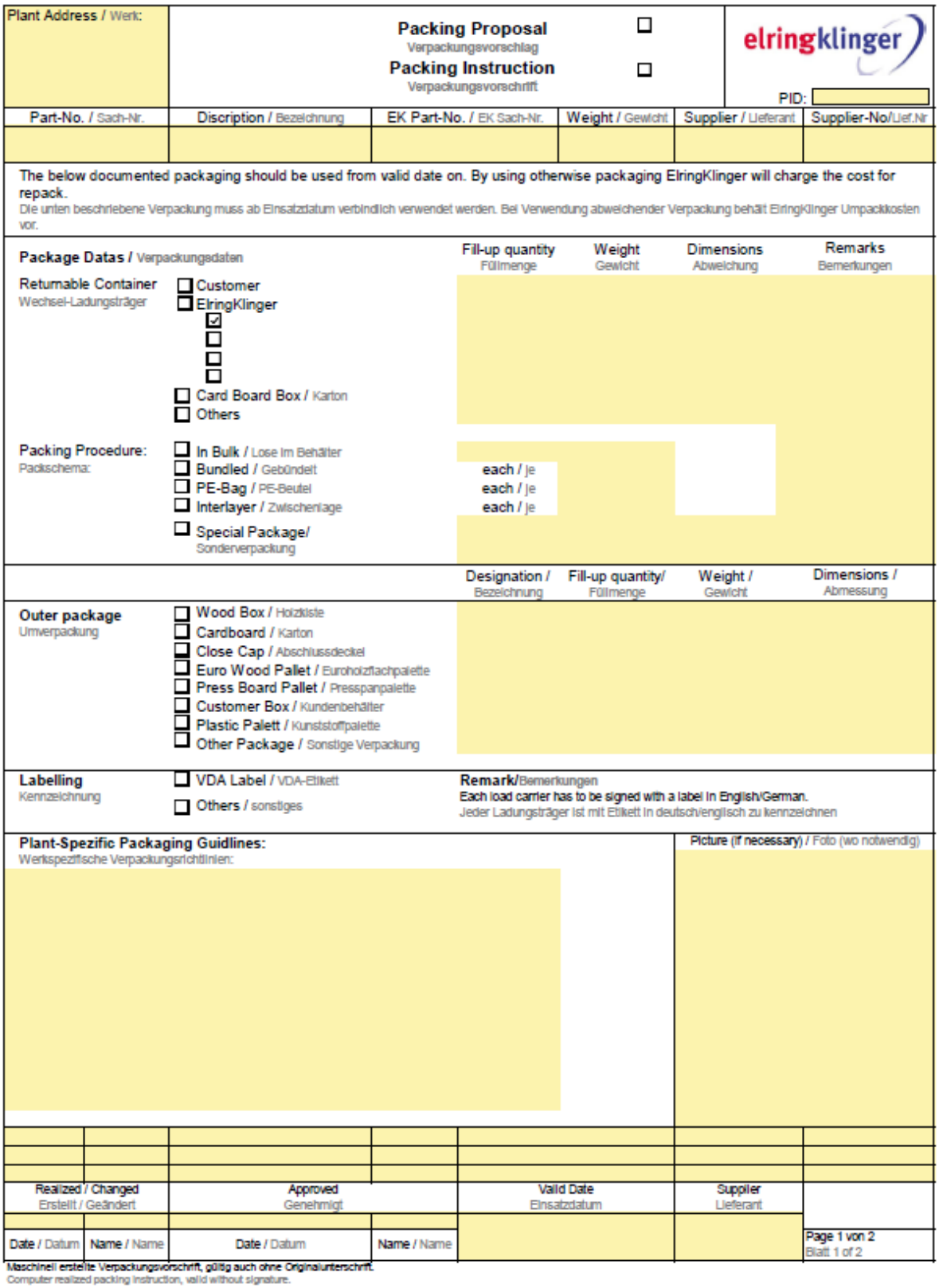
Instruction how to fill in the form:

(1)	Logistics: If applicable evaluate: - towards customer, within the organization, from supplier (e.g. transport, packaging specification created; serial packaging in agreed quantity available, no negative quality impacts to expect)
(2)	Agreed production quantity: Production equipment refers to lines / equipments / machines / tools / jigs / cavities
(3)	Only limited personnel available/qualified, no negative quality impacts expected: - number and qualification still have to be optimized, - work and inspection instructions completely available
(4)	Not enough qualified personnel available: negative quality impacts possible, work and/or inspection instructions not completely available
(5)	Input mandatory, if other evaluation then "Requirements met"

Packaging instruction

It is expected that it is the responsibility of the supplier to create a packaging proposal (please click on “packing proposal”) to ElringKlinger. The packaging instruction has to be made in advance before sending the initial sampling documentation. This is needed if there are some changes before the first delivery, otherwise we cannot provide suitable packaging for the production area.

ElringKlinger checks this proposal internally and creates a final-mandatory packaging instruction.



Plant Address / Werk:

Packing Proposal ☐
Verpackungsvorschlag
Packing Instruction ☐
Verpackungsvorschrift

elringklinger

PID:

Part-No. / Sach-Nr.	Discription / Bezeichnung	EK Part-No. / EK Sach-Nr.	Weight / Gewicht	Supplier / Lieferant	Supplier-No/Lief.Nr

The below documented packaging should be used from valid date on. By using otherwise packaging ElringKlinger will charge the cost for repack.
Die unten beschriebene Verpackung muss ab Einsatzdatum verbindlich verwendet werden. Bei Verwendung abweichender Verpackung behält ElringKlinger Umpackkosten vor.

Package Datas / Verpackungsdaten		Fill-up quantity Füllmenge	Weight Gewicht	Dimensions Abweichung	Remarks Bemerkungen
Returnable Container Wechsel-Ladungsträger	☐ Customer ☐ ElringKlinger ☑ ☐ ☐ ☐ ☐ Card Board Box / Karton ☐ Others				
Packing Procedure: Packschema:	☐ In Bulk / Lose im Behälter ☐ Bundled / Gebündelt ☐ PE-Bag / PE-Beutel ☐ Interlayer / Zwischenlage ☐ Special Package/ Sonderverpackung	each / je each / je each / je			

		Designation / Bezeichnung	Fill-up quantity/ Füllmenge	Weight / Gewicht	Dimensions / Abmessung
Outer package Umverpackung	☐ Wood Box / Holzkiste ☐ Cardboard / Karton ☐ Close Cap / Abschlussdeckel ☐ Euro Wood Pallet / Euroholzflachpalette ☐ Press Board Pallet / Pressspanpalette ☐ Customer Box / Kundenbehälter ☐ Plastic Palett / Kunststoffpalette ☐ Other Package / Sonstige Verpackung				

Labelling Kennzeichnung		Remark/Bemerkungen
	☐ VDA Label / VDA-Etikett ☐ Others / sonstiges	Each load carrier has to be signed with a label in English/German. Jeder Ladungsträger ist mit Etikett in deutsch/englisch zu kennzeichnen

Plant-Spezific Packaging Guidlines:
Werksspezifische Verpackungsrichtlinien:

Picture (if necessary) / Foto (wo notwendig)

Realized / Changed Erstellt / Geändert		Approved Genehmigt		Valid Date Einsatzdatum	Supplier Lieferant	
Date / Datum	Name / Name	Date / Datum	Name / Name			Page 1 von 2 Blatt 1 of 2

Maschinell erstellte Verpackungsvorschrift, gültig auch ohne Originalunterschrift.
Computer realized packing instruction, valid without signature.

Plant Address / Werk:	**Packing Proposal** ☐ Verpackungsvorschlag **Packing Instruction** ☐ Verpackungsvorschrift	elringklinger ID:

Part-No. / Sach-Nr.	Designation / Bezeichnung	EK Part-No. / EK Sach-Nr.	Weight / Gewicht	Supplier / Lieferant	Supplier-No/Lief.Nr

The below documented packaging should be used from valid date on. By using otherwise packaging ElringKlinger will charge the cost for repack.
Die unten beschriebene Verpackung muss ab Einsatzdatum verbindlich verwendet werden. Bei Verwendung abweichender Verpackung behält ElringKlinger Umpackkosten vor.

Pictures (if necessary) / Fotos (wo notwendig)

Realized / Changed Erstellt / Geändert		Approved Genehmigt		Valid Date Einsatzdatum	Supplier Lieferant	
Date / Datum	Name / Name	Date / Datum	Name / Name			Page 2 von 2 Blatt 2 of 2

Customer specific documents (if required)

These step are only necessary if ElringKlinger demands additional information from the supplier.

Pass-through part (Recognizable at the 14. digit part number at the order instead of the 8 digit part number)	Therefore two initial sample documentations are needed. One with the F-drawing and the second with the K-drawing. F-drawing contains all information and part number of ElringKlinger K-drawing contains all information and the customer part number of , ElringKlinger.

Master and product sample

For initial sampling, 5 sample parts (per cavity and tool) are minimum requested. Samples and documentation with delivery note has to be sent to the requested person from Supplier Quality Management of ElringKlinger. Initial samples (packaging) must be clearly and permanently identified. This can be done by using tags, labels, for example. The delivery note must include the words 'Initial sample' and the initial sample order number and part number from ElringKlinger. The exact amount of sample parts are specified in the purchase order.

Sample parts must be separated and numerated according to cavity and tool.

Request for Deviation (RfD)

If it is necessary to generate a Request for Deviation then ElringKlinger has to be informed. This information has to be submitted as soon as it was detected to ElringKlinger.

Datum: *Date:*	**Antrag auf Abweicherlaubnis** *Request for Deviation*	elringklinger

Input

Lieferant: *Supplier:*		Material-Nr.: *Material No.:*	
Lieferanten Nr.: *Supplier No.:*		Material-Bezeichung: *Description:*	
Projekt-Nr.: *Project-No.:*		Zeichnungsnummer: *Drawing No.:*	

Kurzbeschreibung der Abweichung (inkl. Stückzahl und / oder Dauer / Anhang 1 benützen für Bilder):
Brief description of the deviation (including quantity and / or duration / use annex 1 for pictures):

Maßnahmenplan: *Action plan:*	Verantwortlicher: *Responsible:*	Datum Fertigstellung: *Completion date:*
Marking of each box, of first delivery, after process and / or product change, with label CF-CU-QM-18. "Clean point delivery"		

Lieferant (authorisierte Unterschrift): *Supplier (authorized signature):*

Telefon: *Phone:*

Name: *Name:*

Datum: *Date:*

E-Mail: *E-Mail:*

EK behält sich vor, die Kosten für den Bearbeitungs und Dokumentationsaufwand in Rechnung zu stellen. Für etwaige nicht vorhersehbarer funktioneller Einschränkungen der Abweichung behält sich EK vor diese ebenfalls in Rechnung zu stellen.
EK reserves the right to charge back costs associated with this processing or any non-predictable functional restrictions / complaint of the deviation.

ElringKlinger

Anmerkungen und/oder Anweisungen von EK:
Comments and/or instruction of ElringKlinger:

Kundengenehmigung: *Customer approvals:*	IA = Interim approved* A = Approved NA = Not approved	**Name:** *Name:*	**E-Mail:** *E-Mail:*	**Datum:** *Date:*	**Unterschrift:** *Signature:*
Produktingenieur: *Product engineer:*					
Processingenieur: *Process engineer:*					
Qualitätsingenieur Werk: *Quality engineer plant:*					
Sonstige (Einkauf, Montage, usw.): *Other (Buyer, Assembly Plant, etc.):*					
Lieferantenentwicklung: *Supplier Quality Engineer:*					

RfD No: _ _ RfD _
(insert date of release)
jjjjmmdd

* Menge oder Dauer:
* Quantity or Period:

Distribution: Persons above (Customer approvals) + Quality engineer business unit

Request of change (RoC) ③

If it is necessary to generate a Request of change then ElringKlinger has to be informed. This information has to be submitted to ElringKlinger for approval.

Date:		**Request for Change**		elringklinger
Select language	**English**	☐ Product ☐ Process		

Input

Supplier:		Material No.:	
Supplier No.:		Material description:	
Project-No.:		Drawing No.:	
		Affected EK-Plants :	

CHANGE DETAILS :

Change necessary for: ☐ EK-A-Samples ☐ EK-B-Samples ☐ EK-C-Samples ☐ EK-D-Samples ☐ Serial production

Testing data supplied ☐ Yes ☐ No

FMEA or risk assessment supplied ☐ Yes ☐ No

Are special criterias affected ☐ Yes ☐ No

Type of change:

Yes	No		Yes	No	
☐	☐	Product/ Packaging	☐	☐	Production methods, processes* and materials (also at subcontractors)
☐	☐	Subcontractor	☐	☐	Machine change
☐	☐	Testing methods/ equipment	☐	☐	Relocation/set-up of production equipment at the same production site
☐	☐	Relocation/set-up of production site	☐	☐	Others**:

**changes according to trigger matrix for PPF procedure VDA Volume 2 to be observed

*including replacement or changes to molds, tooling, fixtures, support machinery or processes

Detailed Description of the Change (including quantity and if applicable drawing and/ or order norm with changes):

Reason for change:

Planned detailed timetable for the change period:

Start change (planned)	Remarks
FOT Samples with change	
PPAP of the change:	
Planned start of serial production	
Others	

How is quality and capacity guaranteed? (incl. details of all planned safety storage facilities and scrapping; check status with the ElringKlinger dispatcher)

How is traceability gauranteed? Please give information how productions are delineated from each other.

Cost effect

Note: This document must be submitted to ElringKlinger at least 6 months before the introtuction of the proposed change.

Name		Department/ Position	
Phone		E-Mail	
Date:		Supplier (authorized signature)	

Attention: This document is not a written approval of ElringKlinger, neither for the beginning, the preparation nor for the implementation of the modification!
The change can be implemented only after written approval of ElringKlinger.

EK reserves the right to charge back costs associated with this processing

Second page is reserved for ElringKlinger.
The request for change is only approved with “A” or “IA” and signing of the senior supplier quality manager!

ElringKlinger

Request for Change

to be completed by ElringKlinger

elringklinger

Supplier:		Material No.:	
Supplier No.:		Material description:	
Project-No.:		Drawing No.:	
		Affected EK-Plants :	

Comments and/or instruction of EK:

Approval:

IA = Interim approved*
A = Approved
NA = Not approved

		Name	E-Mail	Date:	Signature
Product Engineering:					
Industrial Engineering:					
Program Management Plant (PMP)/ BU Director PM (ex. Standard Parts):					
Purchasing Manager (Plant)/ Commodity Manager (CU):					
Supplier Quality Management (CU): Senior SQM Specialist (SSQMS):					
Other:					

* Quantity or Period:

Distribution: Persons above (Customer approvals) + Quality Engineer Business Unit

Attention: This document is not a written approval of ElringKlinger, neither for the beginning, the preparation nor for the implementation of the modification!
The change can be implemented only after written approval of ElringKlinger.

EK reserves the right to charge back costs associated with this processing

Check label cleanpoint delivery ③

Each delivery unit for the first delivery after claim or process change e.g. has to be marked with the ElringKlinger standard document CF CU-QM 018.

Cleanpoint delivery

elringklinger

Information about the organization				Information about the customer			
Name		Supplier number		Recipient location	ElringKlinger	Part number	
		Delivery location				Part description	
		Production location				Drawing number	
		Part number				Index / Date	

	Claim		Production process change		Other

Claim number	
Remark	
	Example: Process change description or other comments
Batch number	
Delivery note number	

Confirmation of organization			
Name		Remark	
Department			
Telephone			
E-mail			
Date		Signature and company stamp	

CF CU-QM 018