## SCHAEFFLER



## Supplier Evaluation: Calculation Criteria

Attachment 2 of P 1/4242

Version C, 2023-06

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## Supplier Evaluation: Calculation Criteria Overview of the indicators

#### GKZ Q – Quality GKZ L – Logistics GKZ V – VMI 100% Devaluation 100% 100% QKZ – VKZ – Special status NBH LKZ – Quality performance Delivery performance VMI QKZ1 – Volume production defect LKZ1 – 100% VKZ1-VMI 80% 40% Date reliability notifications QKZ2 – Logistics LKZ2 – Quantity reliability defect notifications 40% 20% VMI LKZ3 – Logistics defect noti**fi**cations 20%

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## Supplier Evaluation: Calculation Criteria Overall Quality GKZ Q

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The overall criterion GKZ Q for the supplier evaluation comprises the 1 criteria:

Abbreviation	Criterion	Weighting
QKZ	Quality performance	100%

Technical information/posting rules:

Criteria that are not used for the purposes of evaluation must be set to "0" points / 0 % in the evaluation system (blanking out without an influence on evaluation).

In addition, the following classification rules apply:

 If there is a special status notification NBH (New Business on Hold because of qualitative reasons), will leads this to a devaluation of GKZ Q to 59% and the rating "C"

## Supplier Evaluation: Calculation Criteria

## Criterion Quality performance QKZ

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The criterion of quality performance QKZ comprises the 1 individual criteria in the following overview with a 100 % weightings:

Abbreviati on	Individual criterion	Weighting <sup>2)</sup>	Type(s) of notification <sup>1)</sup>	Coding <sup>1)</sup>
QKZ1 Volume production defect notifications	Volume production	100.%	Volume production defect notifications	P003
	100 %	Defect notifications on tooling	T003	

1) Technical information: Schaeffler internal only

The standard formula for calculating the KPI quality performance QKZ is as follows:

#### QKZ = 1,0 x QKZ1

The quality criteria QKZ1 is determined by evaluating the technically justified quality defect notifications (with status either open or closed) occurring within a defined assessment period.

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Supplier Evaluation: Calculation Criteria

## Volume production defect notifications QKZ1

The KPI of Ratio of quality defect notifications/goods inward items (max. 500)QKZ1 is generated from the ratio between the number of quality defect notifications and the number of goods inwards items (included on the delivery note).

he formula for calculating the KPI QKZ1 is as follows:

QKZ1 = 100 – 1000 x —	Number of volume production defect notifications (cases)
	(factor 2 with detection place K0 und KF)
	50 + Number of goods inwards items in total (max. 500) / 2

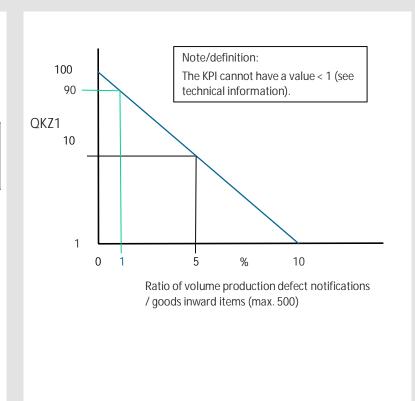
## Technical information/posting rules:

If the calculated value is less than 1, a value of 1 is always assigned in accordance with the definition to QKZ1 for technical reasons. If 10% of deliveries are the subject of concerns, the QKZ1 value is therefore 1 instead of 0.

The degree of severity of the quality defect notification plays a role. In this way, customer complaints caused by the supplier (quality defect notifications with detection location KO = Yard hold or zero kilometers or KF = delivery stop or field failure) are counted in QKZ1 with a factor 2.

In addition, the number of goods inward items is restricted to a maximum of 500 over a period of 6 months.

Reason: Suppliers who make frequent deliveries, such as "Just in Sequence" in small lots have previously appeared better with identical delivery quantities in relation to weekly deliveries.



#### Supplier Evaluation: Calculation Criteria

## Overall Logistics GKZ L / Criterion Delivery performance LKZ

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The delivery performance GKZ L is also regularly evaluated by Schaeffler on the basis of the criteria described below.

The supplier evaluation criterion for delivery performance LKZ comprises 3 individual criteria that have different weightings:

Abbreviation	Individual criterion	Weighting	2)	Type of notification <sup>1)</sup>	Coding <sup>1)</sup>
LKZ1	Date reliability	40 %	40 %	-	
LKZ2	Quantity reliability	40 %	0 %	-	
LKZ3	Logistics defect notifications	20 %	20 %	Logistics defect notifications	L001

1) Technical information: Schaeffler internal only

2) Exception for calibration service providers NI04 (eCl@ss 25149002).

The formula for calculating the KPI delivery performance LKZ is:

LKZ = 0,4 x LKZ1 + 0,4 x LKZ2 + 0,2 x LKZ3

Where individual criteria are not used for evaluation, the weighting of the remaining criteria is adjusted in accordance with the example named in the table above 3), in this case without the adherence to quantities LKZ2:

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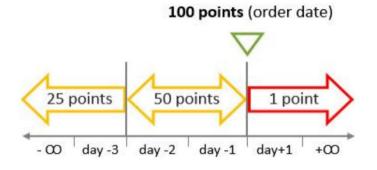
Supplier Evaluation: Calculation Criteria

## Date Reliability LKZ1 / Quantity Reliability LKZ2

The KPIs for date reliability LKZ1 is calculated in accordance with a standardized evaluation scheme.

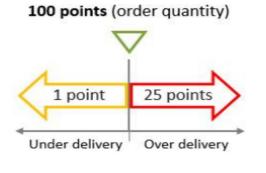
To calculate on-time delivery performance, the delivery date is compared with the target data of the purchasing document on which the delivery is based when the goods receipt is posted.

The evaluations of the individual deliveries within the evaluation period are each consolidated into a KPI for date reliability.



The KPIs for quantity reliability LKZ2 is calculated in accordance with a standardized evaluation scheme.

To calculate quantity delivery performance, the quantity received is compared with the target data of the purchasing document on which the delivery is based when the goods receipt is posted. The evaluations of the individual deliveries within the evaluation period are each consolidated into a KPI for quantity reliability.



## Supplier Evaluation: Calculation Criteria Logistics defect notifications LKZ3

The KPI for logistics defect notifications LKZ3 is calculated on the same basis as QKZ1 using logistics defect notifications occurring within the evaluation period in relation to volume products.

Note: The recording and approval of the cases associated with additional freight costs is carried out in the so-called ERS tool in the relevant plant function for logistics. Within the framework of these activities, a logistics complaint must be created for linkage to supplier evaluation. It is irrespective in this case whether the supplier has given notification of this case himself or it has been identified by Schaeffler.

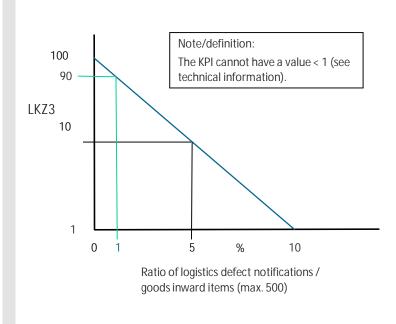
It is also the case that premium freights are made without any disruptive reason (deviation in deadline/quantity) or additional costs, for example by the supplier must be evaluated as a logistics complaint.

The following applies to the calculation of the KPI for logistics defect notifications LKZ3:

 LKZ 3 = 100 - 1000 x
 Number of logistics defect notifications (cases)

 50 + Number of goods inwards items in total (max. 500) / 2

If the calculated value is less than 1, a value of 1 is always assigned in accordance with the definition to LKZ3. If 10 % of deliveries are the subject of logistic complaints, the LKZ3 value is therefore 1 instead of 0.



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Supplier Evaluation: Calculation Criteria

## Overall VMI (Vendor Managed Inventory) GKZ V / Criterion VMI VKZ / VMI VKZ1

# The evaluation of VMI GKZ V is also regularly evaluated by Schaeffler in relation to the performance of its suppliers, on the basis of the evaluation criteria described below, in accordance with defined internal Schaeffler rules (where VMI processing is carried out). Here it is necessary to pay attention to material sourcing, since VMI is agreed at the material level.

he KPI for supplier evaluation for VMI VKZ comprises 2 individual criteria with different weightings:

Abbreviation	Individual criterion	Weighting	Type of notification <sup>1)</sup>	Coding <sup>1)</sup>
VKZ1	VMI	80 %	-	
VKZ2	Logistics defect notifications VMI	20 %	Logistics defect notifications	L001

1) Technical information: Schaeffler internal only

The formula for calculating the KPI for delivery performance VKZ is:

VKZ = 0,8 x VKZ1 + 0,2 x VKZ2

VKZ 1 VMI is determined, on the basis of daily inventory measurements, in comparison with the minimum and maximum limits agreed with our suppliers. Points are deducted if the actual values are above or below the limits.

Depending on the system requirements (minimum and maximum limits) of individual Schaeffler locations, the evaluation method and scheme for calculating the KPI VKZ1 may vary.

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Supplier Evaluation: Calculation Criteria Logistics defect notifications VMI VKZ2

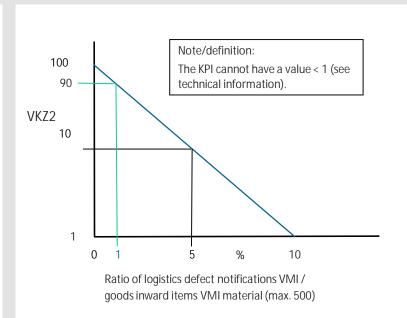
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The KPI for logistics defect notifications VMI VKZ2 is determined on the same basis as QKZ1 using logistics quality defect notifications occurring within the evaluation period in relation to volume products that are identified as VMI materials (material master/scheduling 1/ scheduling characteristic = VI).

The following applies to the calculation of the criterion logistics defect notifications VMI VKZ2:

	Number of logistics defect notifications (cases)	
VKZ2 = 100 – 1000 x	for VMI material	
	50 + Number of goods inwards items for VMI material (Max. 500) / 2	

If the calculated value is less than 1, a value of 1 is always assigned in accordance with the definition to VKZ2. If 10 % of deliveries are the subject of logistics complaints, the VKZ2 value is therefore 1 instead of 0.



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