

## **SUPPLIER PART APPROVAL PROCESS**

# **GENERAL CONDITIONS FOR THE QUALITY OF SUPPLIERS OF TATRAVAGÓNKA, A.S.**

**SPA PROCESS ATTACHMENTS:**

D-08-100/09          SPAP LAUNCH REQUIREMENTS

D-08-105/09          DIMENSIONAL TEST RESULTS

D-08-107/09          ASSEMBLY TEST REPORT

**1. FIELD OF APPLICATION OF THE GENERAL CONDITIONS FOR THE QUALITY OF SUPPLIERS OF TATRAVAGÓNKA**

These general conditions for the quality of suppliers of Tatravagónka, a.s. serve to define the requirements for suppliers of Tatravagónka, a.s. and at the same time they set out the procedures required to ensure the quality of purchased parts.

The suppliers are responsible for the quality of parts / materials supplied. This applies to the entire scope of delivery. At the same time, the supplier is responsible for the existence of an effective quality management system in their organization.

Tatravagónka, a.s. expects the continuous and consistent implementation of prescribed methods and procedures from its suppliers. This will be monitored by Tatravagónka, a.s. as part of the supplier audit.

The suppliers are encouraged to pass on the requirements of these general conditions to the subcontractors.

As per this document, the main goal of the purchasing process of Tatravagónka, a.s. is to ensure a stable quality of products and deliveries at the required dates and price in order to be able to reduce the scope of receiving inspection in Tatravagónka, a.s.

## 2. QUALITY PLANNING BY SUPPLIERS

The supplier undertakes, on their own responsibility, to plan, organize and implement the production process and quality assurance so as to ensure total quality control and management as well as compliance with the product quality assurance requirements.

Systematic quality planning by the supplier is necessary to ensure compliance with the quality level requirements. This section provides an overview of the requirements that Tatravagónka requires from the supplier, the fulfilment of which must be planned, documented and evaluated to an agreed extent.

As part of the systematic planning, goal setting and scheduling with control milestones are expected.

### 2.1 CONTACT PERSONS

Tatravagónka expects the suppliers to appoint the responsible contact persons in the areas of logistics, sales and quality. The aim is to ensure an accurate and timely resolution of all project-related issues.

The designation of contact persons is required at the tendering stage.

### 2.2 “ZERO DEFECT” STRATEGY AND TROUBLESHOOTING

The zero defect strategy is a general strategy and the supplier is expected to subscribe to this strategy. The starting point of this strategy is that no work, technological and/or other procedure specifies a defective output. If an output of any process is as prescribed by the technical and/or other documentation applicable to that process, we consider such output as meeting the quality requirements, i.e. simply, quality. If an output of any process shows a difference between the prescribed condition in terms of the applicable technical and/or other process related documentation and the actual condition, such condition is considered an issue. Troubleshooting refers to such actions and measures that ensure a quality condition is reached, i.e. a condition without defects not considered a normal process condition. The supplier undertakes to solve any problems related to the supplied inputs for Tatravagónka.

### 2.3 QUALITY DOCUMENTATION

At the quality planning stage, the supplier may be required to prepare the following documents:

#### 2.3.1 PROCESS CHART

It describes the steps and sequence of the production process (sequence of manufacturing operations and inspections performed during the production process). The supplier shall determine the form of the chart; however, a clear sequence must be visible.

#### 2.3.2 PROCESS FMEA

The analysis of the possibility and consequence of defects and associated risks is established as an important tool to prevent defects. FMEA structures and describes the steps of the production process in its entirety (material receipt –dispatch).

#### 2.3.3 CONTROL PLAN

Tatravagónka may require the preparation and delivery of a control plan. The control plan defines and describes all control steps in relation to the control characteristics provided by Tatravagónka.

The control plan is considered a response to the full specification and must address each key characteristic, i.e. the characteristic determined by Tatravagónka, additional control characteristics determined by the supplier, and other important characteristics.

If a control characteristic cannot be measured separately but can be determined through another measurable characteristic, then this must also be included in the control plan.

The control plan should cover all areas from incoming to outgoing inspection.

The frequency of measurement and description of sampling as well as the analysis methods (SPC, pre-control, PID), C PK and a non-compliance response plan should exist for all items.

Each control plan must specify:

- controlled (measured) value including tolerance;
- measuring instrument used, measuring method;
- scope of selection;
- inspection frequency;
- indication of processes monitored by SPC;
- identified discrepancy response plan;
- recording method;
- responsible person.

If the Control Plan has been requested, it must be provided to Tatravagónka for review and approval.

### 2.4 EMERGENCY STRATEGY

The supplier is required to develop an appropriate emergency strategy for all outages and accidents so as not to jeopardize the deliveries for Tatravagónka.

### 2.5 PREVENTIVE MAINTENANCE

The suppliers are obliged to develop a system of preventive maintenance of their manufacturing equipment.

The supplier is expected to keep a “Machine Book” which records all regular and extraordinary inspections and repairs of the manufacturing equipment.

### 3. QUALITY ASSURANCE ACTIVITIES FOR MASS PRODUCTION

#### 3.1 ACTIVITIES TO BE PERFORMED

##### 3.1.1 TESTS IN MASS PRODUCTION

The supplier must carry out the appropriate tests and inspections during the mass production deliveries in the volume specified in the control plan so as to be able to achieve the quality level expected by Tatravagónka in relation to the products supplied.

- The supplier is required to comply with the approved control plan for the mass production deliveries.
- The test results must be documented.

##### 3.1.2 QUALITY DATA RECORDKEEPING

The supplier is responsible for arranging, complying with and archiving the documentation related to the permanent control activity. Upon Tatravagónka's request, the supplier shall give access to such documentation to Tatravagónka's representatives as well as allow them to enter the premises where the production takes place. Tatravagónka will announce the date of such visit well in advance.

##### 3.1.3 PART LABELLING - TRACEABILITY

Materials, semi-finished products, parts and finished products shall be clearly labelled and stored in such a way as to avoid any confusion or mixing and to ensure their traceability.

##### 3.1.4 APPROVAL OF EXEMPTIONS

If the supplier finds out, as part of their inspection activity, that a product does not comply with the valid drawing documentation, they are obliged to inform Tatravagónka immediately. The exemption approval for delivery of parts not conforming to the specification can only be granted upon approving an exemption request submitted by the supplier to TVP in writing.

The exemption approval is always and fundamentally limited to a specified number of pieces or a specified supply period.

##### 3.1.5 CALIBRATION OF MEASURING AND TESTING EQUIPMENT

The supplier is required to only use calibrated and verified measuring and testing equipment.

All universal measuring instruments, including electrical and pneumatic instruments, fixed control and measuring jigs, shall be calibrated according to the prepared plan. Calibration intervals depend on the type of measuring instruments and the purpose of use.

The measuring instruments that are not calibrated must not be used. The calibration must be documented and the measuring instrument labelled. The label must clearly indicate the date of next calibration.

#### 3.2 INTERNAL AUDITS

##### System audit

The internal system audit is performed at certain intervals at the initiative of the supplier's management in order to improve its overall quality capability.

##### Process audit

The aim of the internal process audit is to determine whether the procedures and processes actually performed correspond to the templates and requirements. Any deficiencies identified during the process audit must subsequently be defined in the improvement program. The implementation and effectiveness of the corrective actions must be monitored and documented.

##### Product audit

It means verification of a small number of products ready for dispatch with an emphasis on compliance with the prescribed specifications (drawings, technical documentation, packaging regulations, technical standards, legal standards, etc.).

A product is evaluated from the customer's perspective.

Any deficiencies found during the audit must be documented/identified in the improvement plan along with the corrective actions.

#### 3.3 SPECIFIC COMMODITIES

In the case of specific commodities, an individual approach will be used, i.e. the appropriate technical and acceptance conditions will be prepared in cooperation with the supplier's representative. Such conditions shall become binding for the supply quality evaluation for both parties.

#### 3.4 SAMPLING SCHEME INDEXED BY AQL

If a receiving inspection of a given commodity in Tatravagónka is necessary, a binding sampling scheme indexed by AQL for lot-by-lot inspection shall be determined – in accordance with STNEN ISO 2859-1: Sampling procedures for inspection by attributes, part 1.

**3.4.1** Unless otherwise stated, Tatravagónka will use the "normal" inspection regime, i.e. AQL of 1.5 shall be used for the entire inspection range;

**3.4.2** If no non-compliant piece is found during the inspection of a sample from the lot, the lot has passed;

**3.4.3** If the first non-compliant piece is found during the lot inspection, the whole lot is rejected;

**3.4.4** In the case of non-compliance detected in the internal process of Tatravagónka but after a successful AQL approval, the supplier is obliged to accept the already used piece, with the lot will still be considered accepted;

**3.4.5** In the event of non-compliance detected in the inspected lot sample, sorting out by a third party may be agreed on the basis of a mutual agreement between Tatravagónka and the supplier. The costs of actions taken in relation to such non-compliance shall be borne by the supplier.

Lot Acceptability Table–Sampling Scheme for AQL 1.5 –normal inspection

LOT SIZE	SAMPLE SIZE
8	2
15	2
25	3
50	5
90	5
150	8
280	13
500	20
1 200	32
3 200	50
10 000 000 000	80

### 3.5 SUBCONTRACTOR CLASSIFICATION

The supplier is expected to pass on to the subcontractors the same conscientious approach Tatravagónka has to the suppliers. It is recommended that these General Terms and Conditions be transferred to their suppliers.

However, the quality of deliveries to Tatravagónka remains the responsibility of the supplier.

## 4. SUPPLIER'S ACTIVITIES IN RELATION TO COMPLAINTS

- If a qualitative discrepancy is detected in the supply for Tatravagónka, Tatravagónka shall immediately inform the supplier of this fact;
- Sending of the completed "8D report" is considered the binding form of notification;
- The supplier shall immediately take measures to prevent further supply of non-complaint items if they have already been manufactured and/or are ready for delivery to Tatravagónka.
- Delivery of the 8D report shall be confirmed by the supplier in writing within 3 working days;
- The supplier replies to Tatravagónka exclusively in the form of the completed 8D report. The 8D report form with the issue identification header already filled in is sent to the supplier by the appropriate Tatravagónka Purchasing Department employee. In the event of a major issue, the supplier is expected to send the corrective action plan to the Purchasing Department of Tatravagónka within 7 days of receipt of all necessary information and/or defective pieces.

### 4.1 IMMEDIATE MEASURES IN CASE OF NON-COMPLIANCE

The following measures are required from the supplier:

- 4.1.1 Isolate all non-compliant products as well as products suspected of non-compliance in their production process and storage areas;
- 4.1.2 Agree with Tatravagónka on the conditions for sorting out the stock in Tatravagónka. It is preferable to arrange work by a third company at the expense of the supplier;
- 4.1.3 Analyse the cause of non-compliance and adopt immediate/operational corrective measures;
- 4.1.4 Adopt such control and testing measures that ensure the exclusive delivery of compliant products to Tatravagónka. These measures must be maintained by the supplier until the cause of the non-compliance has been eliminated and for the period of the next trial period.

### 4.2 PERMANENT CORRECTIVE MEASURES

Upon completing the non-compliance analysis, the supplier shall adopt such measures as to permanently prevent the occurrence of an identical defect.

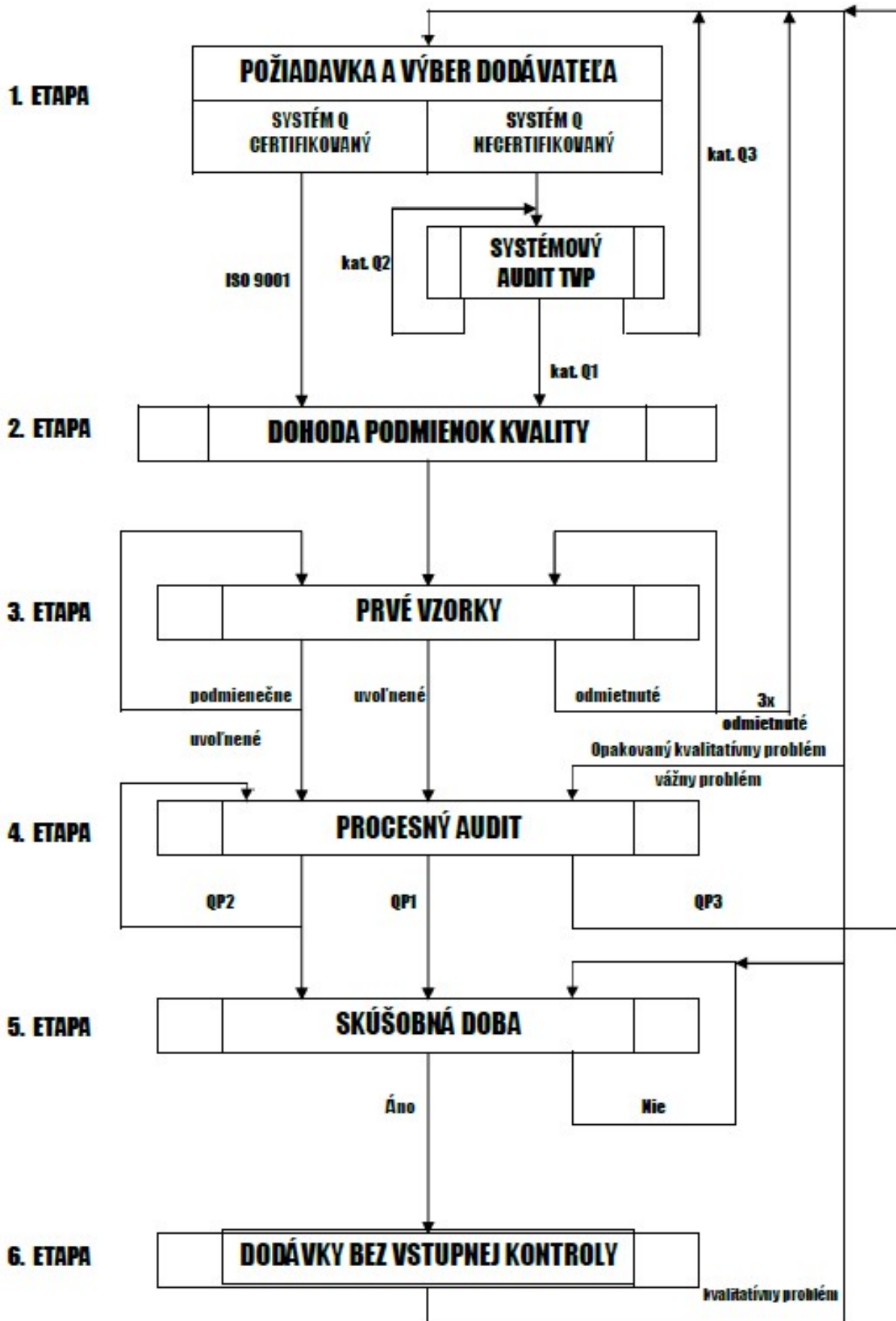
The 8D Report form shall be used to elaborate this corrective action plan and shall contain as a minimum:

- Information on the identification results and the origin of non-compliance;
- Measures to eliminate non-compliance (tool modification, technological change, introduction of Poka Yoke ...);
- Identification of persons and deadlines for each corrective measure.

## 5. SUPPLIER'S RESPONSIBILITIES

- 5.1 The supplier is fully responsible for the quality and safety of the products, materials and services supplied.
- 5.2 The primary responsibility for the purchased parts used in the final product rests with the supplier, or the subcontractor. The supplier is fully responsible for the quality and safety of the products supplied.
- 5.3 Tatravagónka expects the suppliers and subcontractors to create the organizational and technical preconditions for increasing the safety of their products and minimizing the risks of product liability.
- 5.4 All products supplied to Tatravagónka must comply with the current legal standards (e.g. in relation to the environment, electricity and magnetism) applicable in the country of production and sale.

## 6. SUPPLIER QUALITY ASSURANCE FLOW CHART



## 7. SPAP STAGES AND DOCUMENTATION REQUIREMENTS

### I. STAGE

The supplier approval process is launched by filling in the document "Request for SPAP". The request and supplier selection is carried out by the Purchasing Department of Tatravagónka. The Purchasing Department reports the result to a Receiving Inspection representative, who fills in the form. The form shall be completed in duplicate: 1x for Tatravagónka and 1x for the supplier. The form shall indicate the full scope of the documentation. Subsequently, the supplier receives from Tatravagónka the complete documentation necessary for the design and planning of their production process.

### II. STAGE

Based on the product specification, the requirements for testing/condition verification and documentation of the characteristics inspection in the supplier's processes shall be agreed.

### III. STAGE

The first samples will be delivered on the basis of an order issued by the corresponding Tatravagónka Purchasing Department employee.

- The first samples are products and materials produced under mass production conditions and using mass production means;
- The first sample test should give proof that all specified quality requirements, as specified in the drawings and specifications, were met prior to the start of mass production. All characteristics must be verified on the samples.

The first samples are required for:

- New parts;
- Changes to design, specifications, or material (new state of drawing changes);
- Transferring, replacing, refurbishing or adding of a tool;
- Stopping of deliveries due to poor quality or for more than 12 months;
- Changes in part processing.

The supplier is obliged to inform Tatravagónka and start the first sample stage in these cases:

- Changes to manufacturing method or manufacturing process;
- Relocation of production or deployment of new manufacturing equipment;
- Changes to suppliers or subcontractors of products (services);
- Stopping of production for more than 12 months.

The first samples shall be supplied by the supplier together with a complete reference sample test report.

The supplier is responsible for carrying out the sample test. Tatravagónka reserves the right to independent testing.

An assembly test can be carried out in Tatravagónka, of which the "Assembly test record" is made. Participants in the assembly test:

- Tatravagónka Receiving Inspection representative;
- Tatravagónka Purchasing responsible employee (if applicable);
- Quality Management Department (if applicable);
- Process owner in Tatravagónka;
- Depending on the nature/complexity of the installation/assembly, Technology and Construction will also participate.
- Supplier representative (if necessary or required by the supplier)

### DOCUMENTS REQUIRED FROM THE SUPPLIER AT THIS STAGE:

First samples:

- Products and materials are manufactured under the conditions corresponding to mass production and on mass production equipment;
- The number of pieces is agreed in the sample order.

Inspection results:

- Fully completed 'Test results' form showing the results of inspections and measurements;
- All control characteristics marked on the drawings and specifications are checked on the samples:
  - dimensions, material, labelling, functions, appearance, noise, dust, weight, etc.;
  - the individual control characteristics are marked with a serial number that corresponds to their position in the drawing (for drawing parts);
- Samples must be unambiguously labelled in order to guarantee assignment to the individual measured values;
- The supplier is responsible for the accuracy of the completed data; Tatravagónka is not obliged to verify the submitted data.

Drawing documentation for drawing parts:

- The supplier numerically marks all measured and controlled characteristics in the drawing. This numerical designation must match the indication of measurement and inspection results on the "Test results" form.

Material attestation (certificate):

- As part of the sample management, the supplier shall deliver a material attestation-certificate (stating chemical, physical and mechanical properties) that complies with the drawing requirements and specifications.

Quality test results:

- If the property requirements are specified in the drawings or specifications (surface treatment, corrosion resistance, frost resistance, flammability, etc.), the supplier shall provide attestations with the results of the prescribed tests.

The overall release of the reference samples shall be done by Tatravagónka. One of the following decisions will be taken based on the evaluation of the sample test results:

Release status of the first samples	
<b>R – RELEASED</b>	PARTS RELEASED FOR SERIAL DELIVERIES
<b>C – CONDITIONALLY RELEASED</b>	PARTS RELEASED FOR DELIVERIES FOR A SPECIFIED AND LIMITED PERIOD OR OF A SPECIFIED NUMBER OF PIECES. THERE ARE SPECIFIC REQUIREMENTS WHICH THE SUPPLIER MUST COMPLY WITH TO OBTAIN AN 'R' STATUS. A NEW SAMPLING MAY BE REQUIRED.
<b>D - DENIED</b>	PARTS SUPPLY IS NOT ALLOWED. A NEW INSPECTION OF CORRECTED SAMPLES IS NECESSARY.

- The release decision as a result of sample management does not relieve the supplier of responsibility for the quality of the products supplied.
- Incomplete reports and incomplete deliveries of documents automatically lead to the rejection in the sample management process.
- The actually required scope of the documentation depends on the initial conditions confirmed in the document "Request for SPAP".

All required documents to be delivered by the supplier in accordance with the specified requirements in the "Request for SPAP" must be delivered to the Receiving Inspection representative together with the samples.

#### IV. STAGE

##### EXTERNAL AUDIT AT THE SUPPLIER'S SITE

In order to verify the eligibility of the supplier's processes, the authorized quality assurance auditors carry out audits at the suppliers' sites.

- Normally, the process is evaluated under the mass production conditions and therefore, the production of the supplied parts is required at the time of the audit.
- The audit results provide information on the qualitative capabilities of the processes and highlight potential improvements.
- The supplier is expected to develop a corrective measure plan (action plan) for the deviations identified during the audit.
- The audit is valid for 1 year; an increase in qualitative problems may be an incentive for an early repetition of the audit.
- Within the framework of qualitative audits carried out by Tatravagónka at the supplier's site, the supplier undertakes to provide information concerning the organization and quality assurance, safety and environmental protection. Furthermore, it undertakes to answer all quality assurance questions raised during the audit.
- The supplier undertakes to allow Tatravagónka representatives access to determine the degree of product quality assurance.
- Tatravagónka will announce the date of the audit well in advance.

Classification levels of the process and product audit			
	> 90 to < 100 %	Preferred	No action plan is required. The process is formally approved.
	> 70 to < 89 %	Acceptable	An improvement plan is required from the supplier to move it to the preferred group.
	< 70 %	Unacceptable	The supplier is required to immediately adopt a corrective action plan.

A supplier classified as 'Unacceptable' must, within 6 months of receipt of the audit report, implement the improvement programs and corrective measures to obtain the 'Preferred' or 'Acceptable' rating.

The "Unacceptable" rating is not considered to be a perspective for supplying Tatravagónka.


#### V. STAGE – TRIAL PERIOD

The goal is to verify the quality of deliveries and processes of the supplier. The deliveries are subject to a systematic inspection. The first two deliveries are subject to the system-defined tightened inspection. If there is no qualitative incident, the inspection will automatically switch to normal mode, i.e. systemically required inspection



of every 10th delivery. In case of the first non-compliance, even during a normal inspection, a tightened inspection is activated.

#### **VI. STAGE–DELIVERIES WITHOUT RECEIVING INSPECTION**

- Only those suppliers who have completed the previous stages are eligible for this status.
- The parts supplied under this status are released to Tatravagónka without receiving inspection.
- The supplier is required to inform or send records of inspections or tests performed upon request.
- Every qualitative incident leads to an immediate disruption of supply without receiving inspection and re-introduction of Stage 5 - "Trial period".

## 8. SUPPLIER EVALUATION

The evaluation of suppliers is carried out twice a year as of 30 June and 31 December of the relevant year. It is realized through IS SAP by automatic calculation of individual indicators. The following criteria (indicators) are set for the evaluation of suppliers:

- Quality - 50% share of the overall evaluation.
- Delivery - 25% share of the overall evaluation.
- Price - 25% share of the overall evaluation.

### 1. Main and partial criteria for the evaluation of suppliers:

Main Evaluation Criteria	Criterion	Criterion Abbreviated	Partial Criteria	Criteria	Significance	Parameter Maintenance
01	Quality	QUAL.	1	Delivery confusion %	100	Automatic calculation using existing non-standard
02	Delivery	DELIV.	1	Deadline observance	50	Automatic calculation using standard calculation function
			2	Quantity observance	50	Automatic calculation using standard calculation function
03	Price	PRICE	1	Price development	80	Automatic calculation using standard calculation function
			2	Payment term	20	

2. Points for each criterion are as follows:

Evaluation Criteria	Percentage	Grade
Delivery confusion %	0 ≤ 1	100
	1-9.9	50
	>10	0
Deadline observance	+/- 5 days	100
	+/- 6 days	30
	+/- 7 days	30
	+/- 8 days and more	0
Quantity observance	+/- 5%	100
	+/- 5.1-10%	50
	+/- 10.1 and more %	0
	>-5	0
Price development	<0.1-	100
	0	90
	<2	70
	<3	50
	<5	20
	<10	10
	>10.1	0
Payment term	>60	100
	45-59	75
	30-44	50
	0-29	0

The criteria are evaluated automatically in SAP according to the SAP standard (delivery - deadline, quantity, price) or according to the non-standard (quality, payment term). An authorized employee of the purchasing control department processes the evaluation of suppliers within the set deadlines.

3. Overall evaluation result

<b>A – Preferred</b>	≥ 80points
<b>B –Preferred with potential for improvement</b>	60- 79 points
<b>C- Satisfactory</b>	40 - 59 points
<b>D –Unsatisfactory</b>	0-39points

4. Sample letter to suppliers regarding the evaluation:



Kvalitou spájame svet

Vážený obchodný partner,

týmto listom Vám zasielame hodnotenie dodávateľa za obdobie od 09.01.2019 - 01.07.2019.

Hodnotenie dodávateľa Vám bude zasielané 2 krát ročne, a to za obdobia:

01.01. - 30.06.

01.07. - 31.12. v príslušnom roku.

Do 21 dní od doručenia hodnotenia očakávame návrh akčného plánu akým spôsobom zlepšíte celkovú známku v našom hodnotení, pričom najvyšší možný počet dosiahnutých bodov je 100.

Váš tím Tatravagónky sa teší na ďalšiu spoluprácu

Dodávateľ						
Adresa						
Hodnotenie k 01.07.2019						
Kvalita	Dodávka		Cena		Celková známka	Zaradenie dodávateľa
100	52		85		84	A
% znetkovitosti	Dodržanie termínu	Dodržanie množstva	Vývoj ceny	Platobná podmienka		
100	6	97	88	75		

Legenda:

Výsledok	Hodnota známky
A - Preferovaný	≥80
B - Preferovaný s potenciálom zlepšenia	≥60
C - Vyhovujúci	≥40
D - Nevyhovujúci	≤40

The Purchasing Department Controlling Manager evaluates every six months in SAP all the suppliers entering the production process. The purchasing staff sends the evaluation results to the top 100 suppliers by purchase volume.

If no material was supplied by a supplier during the evaluation period, the last evaluation result is displayed.