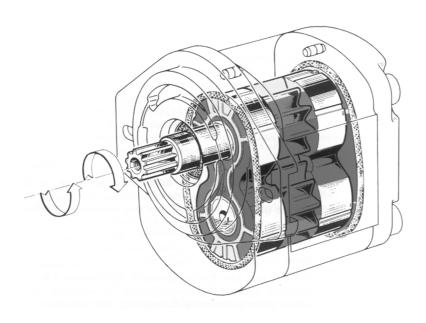




SUPPLIER PURCHASES

Industrial Products – Aviation & Military



JTEKT HPI: 26 rue Condorcet – B.P. 87 – 94432 Chennevières sur Marne – France Tel.: +33 (0)1 49 62 28 00 – Fax: +33 (0)1 45 76 68 40



Copying or use is forbidden without the prior authorisation of $\ensuremath{\mathsf{JTEKT}}$

LETTER OF UNDERTAKING

On behalf of the following company, I acknowledge receipt herewith of the Purchasing, Quality and Logistics Directives, and undertake to work in accordance with these directives.

INFORMATION		
Name of Supplier:		
Name of signatory:		
Place, Date:		
Supplier stamp:		
Supplier signature:		

Once signed, this document must be returned, by post or e-mail to:

Services Achat et Qualité de JTEKT HPI 26 rue Condorcet B.P. 87 94432 – Chennevières sur Marne – France



REVISION

	1		T	T	Т
К	27	Adding of new logo for critical criteria and updates of the purchasing quotation	03/2020	F. HAUSER	JC. ABGRALL
	26	Process and Machine capabilities limits updated			
	6	Certification now mandatory			
1	7	On-board software requirements	05/2018	F.	A MACE
	7	Supplier development through JPS	05/2010	HAUSER	711.702
	8	Cascading requirements			
	9	Note of REACh, ROHS, conflict minerals and undeclared labour in the Quality requirements.			
Н	16	Simplification of NEDEIs	10/2016	F.	JJ.
	20	Updates to deadlines and archive periods	,	HAUSER	PARINAUD
	31	Harmonisation of appendix Creation of regularised NEDEI			
	01	Addition of Aviation part, update to logistical, purchasing		_	
G	All	and quality requirements, monitoring supplier performance, removal of SAM components procurement	05/2016	F. HAUSER	JJ. PARINAUD
F	AII	Appendix on Capabilities added to body of text REACH and ROCH definition added to appendix EI strategy on multi-cavity moulds added to appendix Update to deliverables for NEDEI 5	12/2015	F. HAUSER	JJ. PARINAUD
Е	16 All	NEDEI level 2: was 18 months, now 36 months	09/2015	F. HAUSER	JJ. PARINAUD
D	All	Inclusion of NEDEI No. 5	05/2014	F. HAUSER	JJ. PARINAUD
С	2 22	- Addition of letter of undertaking - appendices: Supplement on Capabilities	07/2013	F. HAUSER	JJ. PARINAUD
В	All	Updates	04/2013	F. HAUSER	JJ. PARINAUD
А	All	First issue	12/2003	F. HAUSER	JJ. PARINAUD
issue	page(s)	subject of the modification	date	edited by	validation



CONTENTS

LET	ER OF UNDERTAKING	2
1.	SUBJECT	6
2.	SCOPE	
3.	PURCHASING POLICY	
4.	GENERAL OBLIGATIONS OF SUPPLIERS	
4.		
4.	Purchasing - Specific requirements	8
4.	Quality	9
4.		
5.	LOGISTICS INSTRUCTIONS	
5.	Shared commitment	
5.	Supply management:	10
	5.2.1 Aim of the supply programme:	10
	5.2.2 Operation of the supply programme:	10
	.2.3 Back-up stock	11
	.24 Calendar:	11
5.	Inventories / Rejects:	11
5.	Packaging/Preparation	11
	.4.1 JTEKT HPI requirements:	11
	.4.2 Standard characteristics:	12
	i.4.3 Specific characteristics:	12
	i.4.4 Identification of packages:	12
5.	Delivery of components	13
	5.5.1 Operating principles:	13
	.5.2 Reception hours	13
5.	Non-compliance procedure:	13
No	n-compliance procedure:	14
	.6.1 Delay in delivery	14
	.6.2 Disputes detected on acceptance	14
6.	SUPPLIER QUALITY ASSURANCE CHARTER	14
6.	Selecting a supplier	15
	i.1.1 Consultation:	15
	i.1.2 Supplier chosen	15
	2. Application of NEDEI	
	B. Products covered by the NEDEI process	
6.		
6.		



6.6	Delivery of EIs	18
6.7	Analysis of the EI dossier	19
6.7.1	Rejected EIs	19
6.7.2	P EI Approved	19
7. PR	RODUCTION LIFE	19
7.1	Production delivery	19
7.1.1	Acceptance of an ordinary delivery	19
7.1.2	Acceptance of a special batch	19
7.2	Traceability	19
7.3	Control of non-compliant product	20
7.3.1	Detection of a non-conformity	20
7.3.2	Corrective action by Supplier	20
7.3.3	Return of non-compliant components	20
7.3.4	Curative actions by Supplier	21
7.3.5	Re-billing	21
8. Su	IPPLIER PERFORMANCE INDICATOR	22
8.1	Logistics performances:	22
Oper	ating principles:	22
Oper	ating mode:	22
8.2	Quality performance	22
8.3	Purchasing performance	22
APPEND	ICES & GLOSSARY	24



1. SUBJECT

This document specifies the Purchasing, Quality and Logistics directives for industrial, aerospace and military suppliers of JTEKT HPI.

2. Scope

This document is contractually binding on our Suppliers.

This guide defines the conduct for supplying products and services for JTEKT HPI.

These rules apply for supply of:

- Raw materials
- Components
- Industrial consumables
- Packaging
- Sub-contracting
- Service provision
- Specific purchases

Note:

Depending on the service provided, we invite the supplier to consult the particular chapter listed in the table of contents where you will find the following information:

- Definition of the service
- Inclusion of suppliers
- Assessment and monitoring of suppliers

By accepting the order, the Supplier undertakes to comply with the clauses specified in this guide.

3. Purchasing policy

In developing relationships, we implement progress plans with our suppliers as necessary in the following areas:

- Quality Policy, with the aim of "Zero faults",
- Logistics Policy, with the aim of "Zero delays",
- Environmental and regulatory policy, with the aim of "Zero prohibited material",
- Production Policy, with the aim of "Zero waste",
- Cost optimisation policy.

Your company must comply with the requirements of the standards (e.g.: EN9100, ISO 9001, ISO TS/16949) in development and production of products.

Development in all these areas, naturally must lead to a structured process of continuing improvement in the various fields concerned.



The nature and reliability of the products purchased directly affects the Quality of our manufacturing, so this process is the keystone to a policy for increasing the quality and competitiveness of our products.

4. GENERAL OBLIGATIONS OF SUPPLIERS

4.1 Purchasing - General Requirements

The Supplier is obliged in its relations with JTEKT HPI to deliver the products in accordance with the technical requirements, as defined by the specifications and clauses given on the purchase order and/or contract.

JTEKT HPI may specify sources of supply. In this case, authorised sources of supply are specified on the orders or the documents covering the terms for awarding the contract.

JTEKT HPI requires its suppliers associated with on-road software or products using onboard software to implement and maintain a process for software quality assurance.

A software development assessment methodology must be applied to assess supplier development processes, giving priority to an approach based on the risks and potential impacts for the client.

JTEKT HPI requires the supplier to retain documented information on its self-assessments of its software development capabilities. Suppliers are strongly recommended to use the following tools:

- SEI- see CMMI (Capability Maturity Model Integration)
- VDA Automotive SPICE® Prozessassessmentmodell.

Supplier development:

JTEKT HPI has chosen the JPS system (from the TOYOTA production system) covering:

- Continuous research into total waste elimination,
- Stock reduction,
- Rationalisation of throughput,
- Zero faults, deploying Poka Yoké as far as possible.

JTEKT HPI can help its suppliers by supporting them in their continuous improvement procedures.

Tools:

JTEKT HPI may supply manufacturing and/or control and test resources for execution of the order. These resources remain the property of JTEKT HPI and are the subject of a contract between JTEKT HPI and the Supplier. The Supplier is required to identify them, maintain them at its own costs and notify the Purchasing Department in writing of any wear or deterioration. The supplier must notify JTEKT of any harm or threat to the Tools in storage at the supplier's premises. JTEKT HPI may then decide to draw up a Tool storage contract with the Supplier (JEU_PI_HA_019).

At JTEKT HPI's request, an inventory of the tools may be drawn up.

Capacity:

For industrial output: the consultation shows the annual quantity of the component during production life. In order to prepare against variations, the Supplier must design installed capacity based on production spread over 5 days a week and include from the start possible variation of 20% more or less of the nominal quantity required.



For aerospace: the consultation or the framework contract shows the annual quantity of the component during production life and a possible variation. The Supplier must design its installed capacity to allow for this constraint from the start of the project.

Price:

The prices mentioned on the open order or contract demonstrate the commitment of both parties. Prices may not be modified or applied to the invoice without prior agreement and negotiation with the purchaser and an amendment made to the open order. Invoices that show unconfirmed price differences will be returned to you for a credit note.

A request for a price increase from the supplier is not applied at once, and is subject to negotiation between the parties. While waiting for the parties to agree on the new price, the supplier undertakes to respond to calls for deliveries either by the supply programme or by a closed order under the same tariff conditions as the current contract. If the supplier stops the supply, it takes responsibility for all the costs incurred by JTEKT HPI as a result.

The JTEKT HPI portal gives you the latest version of the JTEKT HPI general purchase conditions; these general purchase conditions (CGA) govern the relations between JTEKT HPI and the Supplier. The Supplier's acceptance and fulfilment of a JTEKT HPI order implies acceptance of the JTEKT HPI CGA (version F, 12/11/2008).

4.2 Purchasing - Specific requirements

Currency:

JTEKT HPI purchasing is made in Euros, so quotes must use this currency throughout, and the Supplier will support the risk of exchange rate fluctuations, if no "tunnel" is specified on appointment.

Compliance with regulations:

The Supplier is entirely responsible for compliance with the general regulations in all aspects. This includes the employment conditions for workers involved in delivering the service, and also the prohibition on use of hazardous or restricted substances. In particular, the Supplier guarantees that the services provided comply with the REACH (Registration, Evaluation, Authorization of Chemicals) 1907/2006 regulations and the implementing legislation. A guide JEU-TC_GQ8016 (Design for recycling and processing – regulated, prohibited substances – declaration procedures) is available from the JTEKT HPI Technical Center. You are responsible for familiarising yourself with it and applying it.

Origin of components:

In accordance with applicable legislation and with CE Regulation N°1617/2006,("made in"), the Supplier undertakes to provide JTEKT HPI with information about the non-preferential and preferential origin of components supplied to JTEKT HPI.

In particular, the Supplier undertakes to provide JTEKT HPI with a statement of the origin of the component or components, giving their preferential and non-preferential origin:

- Before the first delivery of each newly-referenced item,
- · At any time on request from JTEKT HPI,
- As required, if the origin of one or more components changes.

Document and Supply:

The Supplier will ensure that all the documents it produces for the delivery of its components (invoices, labels, delivery notes, etc.) are consistent with the information declared to JTEKT HPI. The Supplier will be liable for any missing or false declaration.



Cascading requirements:

JTEKT HPI provides its suppliers will the legal and regulatory obligations, as well as particular specifications for products and processes, and requires its suppliers to cascade all the applicable requirements to the rest of the supply chain at the manufacturing point(s) concerned.

4.3 Quality

The Supplier undertakes to:

- Establish and maintain a Quality System suitable for the products involved in the order, and assure JTEKT HPI that the product supplied will comply with the contractual requirements specified in the plan;
- Take a clear position on feasibility of responding to cleanliness requirements;
- Comply with the Supplier Quality Assurance Charter (section 6) as a whole, which states the procedures for qualification of components and management of production life;
- Obtain documents and updates that do not come from JTEKT HPI (Standards, Regulations, etc.);
- Archive and apply standard JTEKT HPI documents sent at the time of consultation or order (specifications);
- Deploy a Quality Assurance procedure to all its sub-contractors and be able to show the results of this procedure on request;
- Undertake to complete the Process Change Request (PCR) or Engineering Change Request (ECR), and obtain written agreement from the Supplier Quality Services (JEU PI PE 02) before any modification affecting product / component, packaging method or Supplier process.
- Give access to its own manufacturing lines and those of its sub-contractors, accompanied as necessary by JTEKT HPI customers (e.g.: Direction Générale de l'Aviation Civile (DGAC), la Direction Générale de l'Armement (DGA), AIRBUS, etc.). JTEKT HPI undertakes to protect the confidentiality of manufacturing processes that may be observed.
- Take responsibility for all costs incurred in the event of faults, sorting, dismantling, reassembly, retouches, replacement, and stoppages by JTEKT HPI or its Customers. These costs will be agreed beforehand between the parties.
- Comply with REACH and the European ROHS directive (Website: ECHA. EUROPA. EU).
 A letter of undertaking must be supplied.
- Comply with undeclared labour regulations. A letter of undertaking must be supplied.
- The supplier undertakes to comply with the DODD-FRANK law and European regulation 2014/0059/COD concerning conflict minerals. A letter of undertaking must be supplied.

4.4 Logistics

The LEAN philosophy is the main driver for JTEKT HPI's continued improvement. It intends to apply this principle to the whole of its Logistics Chain.

The Supplier must work in accordance with JTEKT HPI's instructions and implemented the required organisation to meet the logistics instructions (see section 5) which specifically cover operating management of the industrial process.



Our partnership must operate on the basis of:

"Zero fault", "Zero reminder", "Zero delay"

5. LOGISTICS INSTRUCTIONS

5.1 Shared commitment

JTEKT HPI commitment:

- To monitor its suppliers and enable them to progress
- To establish a real partnership with its suppliers
- To make its suppliers an active component of the JTEKT HPI operation

SUPPLIER commitment:

- To be responsive, alert and efficient
- To be responsible towards the overall performance of the logistics chain
- To undertake to propose continuous improvements

5.2 Supply management:

5.2.1 Aim of the supply programme:

To notify Suppliers as soon as possible of JTEKT HPI's needs for components and materials, so that deliveries comply with requirements: delivery of the correct reference, at the right time, in the quantities specified and compliant with the quality requirements specified.

The quantities stated in calls for delivery comply with the packaging multiples determined by JTEKT HPI and in accordance with the specifications of the packing sheet (JHPI_PI_SM_005).

5.2.2 Operation of the supply programme:

Our needs are expressed as a **rolling** supply programme **over 12 months**.

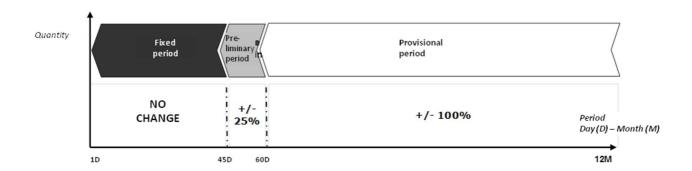
For industrial production and aerospace

The supply programme consists of 3 periods:

- A fixed period of 45* days No modification
- A preliminary period of 15* days Varies +/-25%
- A provisional period for coming days/months, giving future trends 100% modifiable

* calendar (7 days)





NB: During holiday periods, the Supplier must adapt capacity for the previous months to meet JTEKT HPI's needs.

The programme is sent by mail or EDI.

Acknowledgement of receipt must be sent to the JTEKT HPI logistics contact within 3 working days of dispatch of the supply programme. If no response is received within that period, the programme is deemed to be tacitly approved.

NB: The date specified in the supply programme must be respected (delivery on D-day). It matches the date for which the order has to be delivered at our storage facility.

5.2.3 Back-up stock

According to the Supplier's capacity to meet JTEKT HPI's requirements (delivery and quantity), the Supplier is required to maintain, at its own cost, a back-up stock which must be renewed on the FIFO principle.

- JTEKT HPI and the Supplier together define the back-up stock to be established.
- The Supplier is the owner of this stock.
- JTEKT HPI has the right to confirm the presence of this back-up stock at any time.

5.24 Calendar:

JTEKT HPI undertakes to supply its closure dates (holidays, bridge days, inventories, etc.)

The Supplier must also give JTEKT HPI its own calendar.

5.3 Inventories / Rejects:

For Level 1 suppliers, a monthly rejects report (material + machining) must be sent to the usual logistics contact (**JHPI_PI_LO_006**).

For level 2 suppliers whose material is managed by JTEKT HPI, a full quarterly inventory (materials + outstanding + machined) must be sent by e-mail to the usual Logistics contact.

5.4 Packaging/Preparation

5.4.1 JTEKT HPI requirements:

- Package a single reference item per prepared unit (UC)
- Have components as "deliverables" ready for our production lines (box and/or sachet)



Give preference to recyclable packaging as part of an environmental protection policy.

5.4.2 Standard characteristics:

- The handling unit (UM) must:
 - Have a maximum base area of 1200 mm x 800 mm
 - Have a maximum height of 1000 mm
 - Provide appropriate protection for components
 - Avoid any repackaging
- The prepared unit (UC) must weigh a maximum of 15 kg

5.4.3 Specific characteristics:

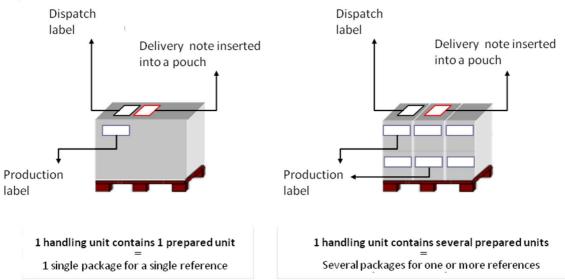
JTEKT HPI must validate the design of all specific containers.

The Supplier is required to respect the most suitable handling / preparation unit to avoid any damage during handling and placing in storage.

When the project is launched, the suitability for maintenance of the prepared units (cleanliness, integrity, etc.) must be defined. Otherwise the supplier will be liable for it.

5.4.4 Identification of packages:

Required identifications below:



- The dispatch label gives the delivery address shown on the supply programmes. It is placed on top of the packaging alongside the delivery note.
- The Production label with barcode, shows at least:
 - JTEKT HPI reference
 - Delivery note no.
 - Quantity
 - Batch No.
 - Manufacturing (or shipping) date
- If packaged as UM = production label type ETI 1



o If packaged as UC = production label type ETI 9 or ETI 1 but suited to packaging type.

It is placed at top left, on the visible surface for checking, on each prepared unit (UC).

- The delivery note must comply with Galia standards and show clearly and legibly:
 - Delivery note no. + date
 - Order no. (purchase order) for JTEKT HPI
 - JTEKT HPI benchmark index
 - Batch No.
 - Quantity supplied per reference

5.5 Delivery of components

5.5.1 Operating principles:

Delivery dates expressed on the supply programme match the **deadlines for delivery** at the delivery location specified.

Deliveries are made according to:

- Transport contracts negotiated
- Transport programmes drawn up
- Times and places for receipt
- Planning of supplies

Before components are received, a delivery note must be sent by e-mail to the usual Logistics contacts.

On unloading, the Reception service:

- checks the packages supplied by the carrier against the packing list shown on the transport receipt
- Marks the date of receipt on the transport receipt, together with signatures (driver/reception service)
- Issues reservations for any problem observed (deterioration, poor packaging, damp, missing packages) on the transport receipt.
- Checks compliance and consistency of delivery note against the supply programme.

5.5.2 Reception hours

Opening hours at our storage facility must be respected.

- From Monday to Friday
- 7.30am to 12.00pm

The JTEKT HPI logistics contact must be informed of any delivery outside this period.

5.6 Non-compliance procedure:



Non-compliance procedure:

5.6.1 Delay in delivery

If there are problems complying with deadlines and/or quantities, the Supplier is required to report these as soon as possible.

The supplier must provide a schedule for catching up, for validation by our Logistics contact.

If there is no agreement, a Logistics Problem Sheet (JHPI_PI_LOG_005) is sent to the Supplier, specifying the disruption to production. To cover administrative costs for dealing with the problem, the Supplier will be billed for a fixed sum of €100 which it undertakes to pay.

NB: The Logistics Problem Sheet triggers regular repeat invoicing for stoppages of production and exceptional transport arrangements to our Customers.

5.6.2 Disputes detected on acceptance

If there is no agreement, a Logistics Problem Sheet (JHPI_PI_LOG_005) is sent to the Supplier, specifying non-compliance with logistics requirements. To cover administrative costs for dealing with the problem, the Supplier will be billed for a fixed sum of €100 which it undertakes to pay.

Examples of non-compliance:

- Early delivery without JTEKT HPI agreement
- Incorrect or missing label / delivery note
- Incorrect quantity per container
- Excess quantity

(non-exhaustive list)

Acceptance disputes are billed pro rata for time lost by JTEKT HPI staff for recounts, sorting, etc.

Early deliveries without prior agreement are rejected and returned at the Supplier's cost, or accepted in exceptional circumstances, with a deferred payment.

6. SUPPLIER QUALITY ASSURANCE CHARTER

JTEKT HPI is committed to a Quality process that aims to meet the demands of the industrial sector to which our Customers belong.

This means that we take steps to achieve our aims and ensure the quality and durability of our customer-supplier relations.

The NEDEI (Niveau Exigence Documentaire des Echantillons Initiaux [Initial Samples Documentary Requirement Level) model is chosen to achieve our objectives, in order to:

- Raise Quality issues before production starts
- Reduce inspection times on reception



- Improve the process for approving parts for acceptance, validation and payment of tools, making it consistent.
- Clarify and share Customer-Supplier responsibilities
- Correct issues of poor Quality quickly and efficiently.

The Supplier process qualification procedure takes place in several stages:

- 1. Plan and contract review
- 2. Issue of Initial Samples submission schedule (or NEDEI)
- 3. Delivery of Initial Samples
- 4. Validation of NEDEI by CAEI (Commission for Acceptance of Initial Samples)

6.1 Selecting a supplier

6.1.1 Consultation:

In the consultation process for a new supplier, Purchasing sends out the following documents:

- Quality self-evaluation questionnaire (JHPI_CHE_PI_SQ_002)
- Feasibility study (JHPI_CHE_PI_SQ_003) or technical reservations (supplier formalities).
- The plan,
- Volumes,
- Packaging sheet (JHPI_PI_SM_005),
- Cleanliness criteria STD 1088 Indus (costing with and without washing),
- Purchasing guide 005,
- Additional specifications,
- Confidentiality undertaking (JEU PI JU 016 D)

For consultation of a supplier already on the panel, Purchasing sends:

- Feasibility study (JHPI_CHE_PI_SQ_003) or technical reservations (supplier formalities).
- The plan,
- Volumes,
- Packaging sheet (JHPI_PI_SM_005),
- Additional specifications

Depending on the Quality of their responses, a short list is offered to a Purchasing Commission and a formal decision made on a sourcing sheet.

The Quality department organises a meeting with short-listed suppliers, Research department and purchasing. This meeting takes different forms: a supplier gathering at the JTEKT HPI production site, or a conference call, or a visit to the supplier's production site.

The selection meeting relies on the documents received. The score received determines the choice of supplier. If it is felt necessary, the supplier may be audited according to the appropriate JTEKT HPI business reference base.

6.1.2 Supplier chosen

The official choice is confirmed by a letter of appointment issued by JHPI.



6.2. Application of NEDEI

Whatever the type of order, an Initial samples documentary requirement level **(NEDEI)** is required in the following cases:

- New reference item.
- Change of production site.
- Change to production tooling or process.
- New sub-contractor or modification of raw material.
- Plan benchmarking
- Restart after a shutdown longer than 36 months.
- At the request of JTEKT HPI following deterioration in Quality performance.

6.3. Products covered by the NEDEI process

There are 5 NEDEI levels:

NEDEI level 1

Catalogue products Parts sold by wholesalers or retailers that do not need a tooling order. These are ironmongery type parts subject to standards: screws, nuts, plugs, nylon wire, cables, O-ring, etc.

NEDEI level 2

All references that have experienced a production shutdown of over 36 months

NEDEI level 3

■ Small production runs: annual quantity < 1000 parts

NEDEI level 4

■ Medium and large production runs: annual quantity >/= 1000 parts

NEDEI level 5

Any parts references critical to **Aviation**, **Space** or **Military** (covered by EN 9100)

6.4 Requirements of NEDEI: WORKBOOK (JHPI_CHE_PI_SQ_003)

NEDEI level 1

- Validation schedule (WORKBOOK JHPI_CHE_PI_SQ_003).
- Pre-production deliveries
- Compliance certificate
- Packaging sheet



NEDEI level 2

- Validation schedule (WORKBOOK JHPI_CHE_PI_SQ_003).
- Delivery of 5 parts/stamp all sizes used to produce the dossier.
- Dimensions control report.
 - 1 part or 1 part / stamp / jig all sizes*
 - 4 parts or 4 parts per stamp / jig on CFs*
- A repeat compliance certificate (WORKBOOK JHPI_CHE_PI_SQ_003).

NEDEI level 3

- Validation schedule (WORKBOOK JHPI_CHE_PI_SQ_003).
- Delivery of 5 parts/stamp all sizes used to produce the dossier.
- Dimensions control report.
 - 1 part or 1 part / stamp / jig all sizes*
 - 4 parts or 4 parts per stamp / jig on CFs*
- Feasibility Analysis
- Plan signed and noted "good to agree"
- Manufacturing flow diagram
- Packaging sheet
- Material certificate
- Monitoring plan or control range, specifying size / resources used / frequency
- Test report and/or compliance certificate for special processes

NEDEI level 4 = **NEDEI level 3** + **following points**

- Process capability studies on CF critical sizes
- Copy of report on process audit carried out by JHPI
- Results of R&R studies on measurement equipment.

Optional or on request:

FMECA Process or Process Risks analysis summary

NEDEI level 5 = **NEDEI active + following points**

References used for the industry sector may also be used to cover the Space/Aviation/Military (SAM) sector. These references are validated through a specific NEDEI (NEDEI 1 to 4). **This NEDEI is known as active.**

Example: a plastic plug is covered by NEDEI 1. Its active NEDEI is NEDEI 1.

- Packaging sheet, "aero" specific.
- Project schedule for systems (20_Gates_AERONAUTIQUE)

^{*} If the stamp number is greater than 5, see the comment in the appendix

^{*} If the stamp number is greater than 5, see the comment in the appendix



Optional or on request:

- Report on Special processes (Welding, TTH, TTS, etc...)
- Test reports
- FMECA Process or Process Risks analysis summary
- FMECA Product or Product Risks analysis summary

6.5 Ordering EIs

The Purchasing Department of JTEKT HPI orders EIs and specifies the NEDEI level required. This level is awarded according to the type of part (see § above) with the help of the Quality department if necessary.

This level is noted in the

WORKBOOK (JHPI_CHE_PI_SQ_003) specifying dates for delivery of EIs and the pre-production run (PS)

Parts delivered before production starts (EI, M Models, Prototype, B1 Models, etc.) must be sent with their documents, separately, for the attention of the EI controller of the JTEKT HPI Quality department, for the first delivery, at the following address:

JTEKT HPI SQCM EI Controller 22 rue Condorcet 94430 Chennevières S/ Marne France

The Supplier will have the option of starting PS at the same time as the EIs, but if the EIs are rejected, costs of modification and re-submission are met by the Supplier.

The EI order for aviation parts will be formalised in a SAM reference.

6.6 Delivery of EIs

This involves producing parts made by the machine tools and production manufacturing process.

It is mandatory to provide an EI for all parts, except NEDEI level 1.

The Supplier will have the option of producing and delivering the pre-production part (PS) at the same time as the EIs. If the EIs are refused, however, costs of modification and resubmission are met by the Supplier. We recommend quarantining at the supplier's premises.

It is **mandatory** for every preparation and handling unit to be identified with:

- a label complying with the GALIA/ODETTE standard
- an "INITIAL SAMPLES" label fixed on one of the side surfaces of the packaging.



Without these labels, the parts will be returned to you.

6.7 Analysis of the EI dossier

The JTEKT HPI Quality Department will carry out a partial or full counter-check of parts and documentation.

After this, the dossier is submitted to the CAEI (Initial Samples Acceptance Commission) formed of the Research Department, Supplier AQF and EI controller to analyse any points of dispute.

After that, a detailed EI report will be sent to the supplier.

6.7.1 Rejected EIs

If EIs are rejected, parts are returned to the Supplier. The latter then makes any corrections needed to overcome discrepancies and submit another NEDEI (partial or complete, as applicable).

Depending on the severity of the fault, the batch of PS parts received may be accepted in exceptional circumstances by a waiver, or rejected.

6.7.2 EI Approved

The Quality department classifies the Supplier's process. The Purchasing department can then pay for the tooling.

7. PRODUCTION LIFE

7.1 Production delivery

7.1.1 Acceptance of an ordinary delivery

The Supplier must undertake and formally confirm the checking of every manufacturing batch, as defined in its Monitoring Plan. Documents are stored at its premises and available on demand. If production includes statistical checking, Capacities must be updated annually on the anniversary of the Initial Samples.

7.1.2 Acceptance of a special batch

If there is a non-conformity, the Supplier and JTEKT HPI may come to an agreement to accept the parts as a waiver. This waiver must be established by the Supplier. The parts are then delivered as an exception in a SPECIAL BATCH. This batch must be clearly identified with a specific label (see WORKBOOK JHPI_CHE_PI_SQ_003) giving the reference, waiver number, index and quantity.

7.2 Traceability

According to standards ISO 9001 and EN 9100, the Supplier must implement a traceability procedure for finding key information on a given product or batch. JTEKT HPI imposes the following minimum criteria:



- The production history (manufacture, assembly, checking, operators, material batch, etc.).
- The documents recording checks performed (checking document, SPC monitoring, results, etc.).
- Materials certificates (links acceptance of the materials batch with the finished product, incorporating all levels of sub-contracting).
- Monitoring calibration of measurement facilities.

Archiving period for these key documents is:

- 1 year, if there are no special characteristics.
- 15 years, if there are special characteristics.
- 20 years for SAM (Space Aeronautics Military) parts.

7.3 Control of non-compliant product

7.3.1 Detection of a non-conformity

When a non-conformity is detected, the Component and Metrology Quality Department (SQCM) issues a Supplier problem sheet (FAF).

There are 4 categories of non-conformity, depending on where they are detected:

- R detected during checks on Reception.
- M detected on JTEKT HPI Assembly lines
- <u>C</u> detected at JTEKT HPI Customer premises
- <u>EI</u> detected during counter-checks on **Initial Samples**

The detection code is followed by a chronological number. This FAF (JHPI_PI_SQ_014) is e-mailed to the Supplier.

7.3.2 Corrective action by Supplier

After being notified of the non-conformity, the Supplier undertakes to put in place all necessary resources, within 24 hours, to prevent interference with JTEKT HPI's production flow, avoid stoppages or any further transport costs.

After discussions between Supplier and JTEKT HPI, the work may involve:

- provision of a taxi for express delivery of a quantity to cover immediate needs.
- use of a specialist company or temporary staffing company for sorting and/or review of stocks at JTEKT HPI. The supplier itself is responsible for training these workers, depending on the complexity of the tasks.

7.3.3 Return of non-compliant components

Any non-compliant components detected are made available to the Supplier. They are accompanied by a Supplier Problem Sheet (JHPI_PI_SQ_014) and Rejection Slip (JHPI_PI_SQ_015).

The Supplier and JTEKT HPI jointly decide on procedures for returning parts, which may be as follows:

Supplier booking a carrier.



- JTEKT HPI booking a carrier on behalf of the Supplier (with costs reimbursed).
- Scrapping after written agreement by the Supplier.

Whenever parts are returned, the Supplier provides a credit note to reimburse JTEKT HPI for the purchase price of these parts.

The maximum period allowed to remove parts is **10 working days** (from issue of the Supplier Problem Sheet (FAF)). If this period is passed without action, JTEKT HPI reserves the right to return the parts at the Supplier's expense.

7.3.4 Curative actions by Supplier

The Supplier undertakes to report on these curative actions through the FAF document within ten working days.

7.3.5 Re-billing

All problems relating to our Quality Directives are the subject of a Supplier problem Sheet. To cover administrative costs for dealing with the problem, the Supplier will be billed for a fixed sum of $\\\in 100$ which it undertakes to pay. The FAF also triggers regular repeat billing, associated with the difficulties experienced by JTEKT HPI, such as stoppages, exceptional transport arrangements for Customers, sorting, re-counts, etc. This Supplier problem Sheet is referenced (JHPI_PI_SQ_014).



8. SUPPLIER PERFORMANCE INDICATOR

At least once a year, suppliers receive a summary of their quality and logistical performance, and purchases for year N-1, and targets for year N.

8.1 Logistics performances:

Objective: Supplier Service level ≥ 98%

Operating principles:

The performance indicator produced by JTEKT HPI takes into account the two criteria:

- Delivery date compliance: Delivery day D (scheduled delivery date / acceptance date).
 No change, earlier or later, is accepted.
- Compliance with quantity required: (quantity required / quantity delivered). Any partial delivery is measured as not delivered.

Operating mode:

The logistics performance is summarised as a letter:

- A (score 98% to 100%)
- B (score 81% to 97%)
- C (score 51% to 80%)
- D (score 0% to 50%)

NB: Letters C and D must always lead to plans for corrective action.

8.2 Quality performance

The quality evaluation is shown as an ABCD classification:

- $A = Good performance (score <math>\leq 6$)
- B = Average performance ($11 \ge \text{score} > 6$)
- C = Poor performance (score > 11)
- D = Consultation suspended for a new project (score >6)

This score out of 20 is formed by combining 4 factors:

- Level of certification:
 - o 0.95 if supplier is certified according to the ISO/TS 16949 reference base
 - o 1: supplier certified using a different reference base
- 1 to 6: quality performance by number of FAFs
- 1 to 3: quality performance in PPM / Objective
- 0 to 10: demerit points calculated on each FAF as a function of detection level (in reception, in production, with customer) and consequences caused (no consequence, needs corrective action, impact on safety) and recurrence.

8.3 Purchasing performance



Purchasing is evaluated on the basis of an ABCD classification, scored out of 20, according to a combination of the following 4 factors:

Scoring criteria	Points	K
COMMERCIAL RELATIONSHIP	0 to 6	
ECONOMIC PERFORMANCE	From -1 to -4	Δ price ≥ + 1%
	0	0% <Δ price < + 1%
	4	-1% < Δ price ≤ 0%
	6	-2% < Δ price ≤ - 1 %
	8	∆ price ≤ - 2%
ISO 9001	0 or 3	
ISO 14001	0 or 3	
Max score	20	

SCORING

	A - EXCELLENT	≥ 15
10 ≤	B - QUALIFIED	< 15
7 ≤	C - MONITORING	< 10
7 <	D - BLACK LIST	Ø



APPENDICES & GLOSSARY

Process FMECA:

Process Failure Mode, Effects and Criticality Analysis

This analysis is used to identify the potential risks in a manufacturing process resulting in non-compliant products or slow-downs

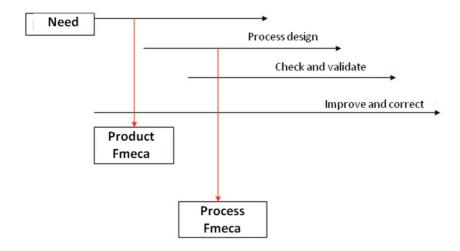
The AQF may request or consult this study, performed upstream by the Supplier (see graph above) and its summary, depending on the complexity of the product.

Product FMECA:

Product Failure Mode, Effects and Criticality Analysis

Objective: To eliminate and/or minimise all potential causes of faults or failures before the product definition is fixed, and if necessary, validate definition of a product against the functional specifications, to ensure its quality.

The AQF may request or consult this study, performed upstream by the Supplier (see graph below) and its summary, depending on the complexity of the product.





Materials analysis:

The Supplier attaches the analysis report to the documents required for EI approval.

Ferrous and non-ferrous materials

The analysis report must give the results of the chemical and metallurgy analysis. If there are JTEKT HPI specifications for the plan, special requirements must be checked.

Rubber

Tests results according to the standard specified in the plan.

Plastics

Provide the supplier's materials certificate (including any colourants or other additives used).

Surface treatment

Analysis report using the specifications given in the plan (thickness of treatment, check on saline atmosphere tolerance, etc.)

Heat treatment

Analysis report, giving hardness, depth of cementation, etc.

Delivery conditions (JHPI_PI_SM_005):

The supplier must ensure that the U.C. (prepared unit) packaging and the U.M. (handling unit) comply with **JHPI_PI_SM_005** specifications or with the GALIA/ODETTE standard. The supplier may put forward proposals.

Process Capacity study: from NEDEI 3 and 4

When the product is affected by special, imperative or function (FC) characteristics, or values required, the Supplier undertakes to identify and monitor these characteristics throughout the production process, according to the following recommendations and to apply the logo (CF) to all documents, work stations and packaging:

For NEDEI 3

The supplier undertakes to implement regular monitoring of measurements concerned, recording values at the rate of 1 part in 10 parts produced being measured.

For NEDEI 4

Capacity studies required must be included with the Initial Samples or delivery of pre-production parts. The Supplier undertakes to update capacities every year and send them to JTEKT HPI on demand.

If an objective is missed (see table below), the Supplier undertakes to set up a suitable monitoring system (e.g.: unit checks, extra monitoring, Poka Yoké principles, etc.) to control its process.

Page 25/31

The monitoring plan must be updated according to the resources involved.



ALL CAPACITIES must comply with the following requirements:

Results of Cp and CpK capacities on a sample of 30 parts

RESULTS Cp and CpK	MONITORING PLAN
> 2.5	Checking a part on production start-up
1.33 < < 2.5	Checking a part on production start-up Slimmed-down check
1 << 1.33	Checking a part on production start-up Strengthened check
<1	Full check

Results of Pp and PpK capacities on a sample of 30 parts

RESULTS Pp and PpK	MONITORING PLAN
> 2.2	Checking a part on production start-up
1.1 < < 2.2	Checking a part on production start-up Slimmed-down check
1 << 1.1	Checking a part on production start-up Strengthened check
< 1	Full check

JTEKT HPI provides a spreadsheet in the Workbook (JHPI_CHE_PI_SQ_003)

Evaluation of measurement systems:

The Supplier must comply with NF EN ISO/CEI 17025 and for each special property or condition-dependent measurement, must provide a capability report (R&R or CNOMO) for the method of checking used.

Instructions and operating modes:

They describe the details for checks and actions which production staff must carry out to ensure compliant production processes.

The Lean philosophy:

Lean thinking relies mainly on the just-in-time principle.

Just-in-time tools are:

cycle time

smoothing

one-piece flow

pulled flow,

fast tool-changes

incorporating logistics into the production plan



Plan:

Correspondence of stamps for special features:

JTEKT HPI requires that special steps must be taken to ensure conformity, traceability and archiving of records associated with the special features noted on the definition drawing:



Safety features: Features that could affect the physical safety of persons if their definition is not respected. We require you to guarantee 0 FAULT / 0 INCIDENT through unit checking or control of the process, with statistical monitoring in production according to the rules described in the section on dimensions.



Regulatory properties: It is mandatory to ensure these are respected for regulations issued by countries or groups of countries (CEE).



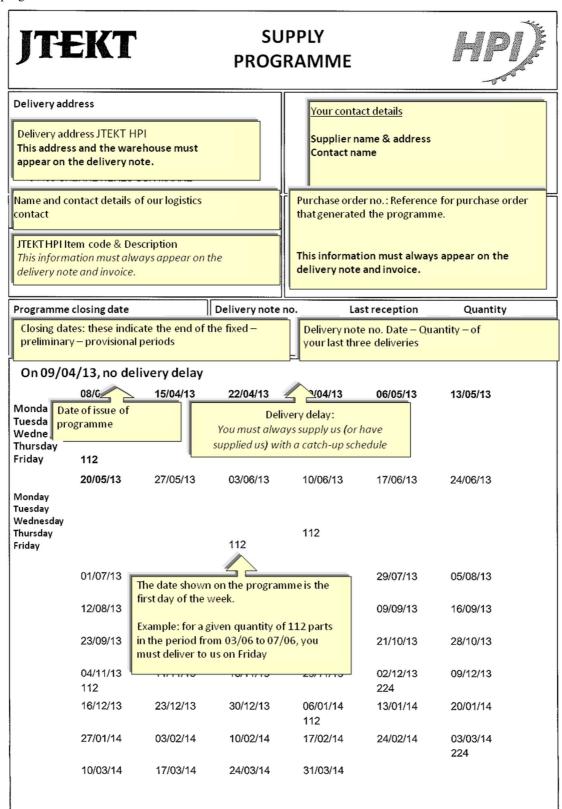


FUNCTIONAL MEASUREMENTS: Properties that could lead to loss of function for the product. In our business, a property is said to be functional (thus critical) when it can lead to a fault or breakdown that prevents the vehicle or product being used. JTEKT HPI requires total control of conformity for all CFs (statistical checks, either 100%, or sampling, etc.).

The stamp must be placed on all documents, workstations, packaging.



Supply programme:



JTEKT HPI S.A.S., Z.I. 26, RUE CONDORCET - B.P. 87, 94432 CHENNEVIERES-SUR-MARNE CEDEX (FRANCE)
TELEPHONE: 01.49.62.28.00 - FAX: 01.45.76.68.40 - N° SIRET 973 201 940 00010 - CODE APE 2812Z - TVA: FR 19 973 201 940



Qualification of supplier manufacturing process:

The Supplier must qualify its manufacturing process through an FIEV audit or similar. This qualification may be validated by JTEKT HPI AQF.

The Supplier must validate its actual capacity according to Purchasing requirements: Annual volume plus 20%.

Supplier rank:

"Cascade" sub-contracting: means that a "level 1" sub-contractor can itself become an order originator for a "level 2" sub-contractor.

The rank of a supplier indicates the number of intermediaries between it and the final customer.

Control relations:

When EIs are presented, **ALL** the properties of the JTEKT HPI plan or the supplier plan validated by JTEKT HPI have to be checked.

Each property is checked on 1 part (1 per stamp / jig) and has to be included in the tolerance range, and must be performed on:

Shape and dimension tolerance.

Surface condition.

Tapping: Diameter of head and threaded plugs: pass or does not pass.

Thread: Diameter of head and threaded rings: pass or does not pass.

Etc.

If there are deviations with respect to the requirements noted on the definition drawing, the Supplier must submit a plan of corrective action for each divergent measurement, and wait for agreement to a waiver and/or modification of the plan from JTEKT HPI.

Test report:

The Supplier performs all the tests specified in the Specifications or the plan.

Results of tests marked on the plan

The Supplier must carry out all the tests specified on the plan associated with the part's performance or functionality. If the supplier does not have the technical resources to do the tests, there are two options available:

Sub-contracting to an accredited laboratory, with a demonstrated involvement with the requirements of standard ISO/CEI 17025 on management of laboratories.

Tests carried out by JTEKT HPI.

The report attached to the EIs must give details of each test, with:

Number of parts tested.

References to documents used to carry out the tests.

Results (Compliant or non-compliant).

Manufacturing overview / Monitoring plan:

The monitoring plan is a tool for checking, analysis and tracking; it gives a summary list of all parameters affecting the process and all significant properties of the product to be controlled in order to guarantee JTEKT HPI requirements. It may include the manufacturing overview.

REACH:

Registration, Evaluation, Authorisation and restriction of CHemicals (REACH) — is a regulation of the European Parliament and the Council of Europe, adopted on 18 December 20061, which modernised European legislation regarding chemical substances, and establishes a unique, integrated system for registration, evaluation and authorisation of chemical substances within the European Union. It aims to improve protection for human health and theenvironment, while maintaining competitiveness and strengthening the spirit of innovation in the European chemical industry. Manufacturers, importers and subsequent users are responsible for ensuring that they manufacture, take to market or use substances that do not harm human health and



the environment. These provisions rely on the precautionary principle. REACH covers all chemical substances, produced or imported, existing or new, from an annual volume of one tonne upwards, so some 30,000 substances (among more than 100,000 used in Europe).

RoHS:

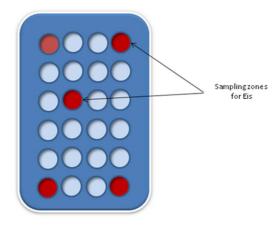
The European directive RoHS (2002/95/CE) aims to limit the use of six hazardous substances. RoHS is the acronym for "Restriction of the use of certain Hazardous Substances in electrical and electronic equipment". It is supplemented by the 2008 directive on waste (Directive 2008/98/CE). Components purchased by JHPI must comply with this directive.

EI on multi-jig processes:

If the process uses several identical tools to carry out the same operation (jig for instance). The supplier must present an EI for each different process.

EI on multi-cavity moulds:

When the number of cavities is 5 or more, the initial samples must be submitted only on the 4 cavities located at the ends, and 1 in the most central part. See illustration below:



REGULARISATION NEDEI



For production run reference over several months, for which neither JHPI or the supplier is able to provide a Quality Assurance dossier and EI validation, JHPI has the right to require regularisation:

- Supply of Parts / stamp all sizes.
- Dimensions control report**
- □1 part or 1 part / stamp / jig all sizes*
- □4 parts or 4 parts per stamp / jig on CFs*
- A repeat compliance certificate (WORKBOOK JHPI_CHE_PI_SQ_003).
- * If the stamp number is greater than 5, see the comment in the appendix, page 29. **Conflict minerals:**

Conflict minerals are those extracted in conflict zones, in conditions that violate human rights, and the profits from which are used to finance armed groups.

The term "conflict minerals" covers columbite-tantalite, also called coltan (mineral from which tantalum is extracted); cassiterite (mineral from which tin is extracted); gold; wolframite (mineral from which tungsten is extracted); or their derivatives; or any other mineral or its derivatives which according to the secretary of State is used to fund conflicts in DRC or a specified country. New rules on declaration apply to these four minerals and their derivatives of tantalum, tin and tungsten.

"Specified country" means DRC and a country bordering DRC, which at the present time includes Angola, Burundi, the Central African Republic, the Republic of Congo, Rwanda, South Sudan, Tanzania, Uganda and Zambia.