

SPIR technical support

Supplier guidelines – Training

This document is aimed to summarize the document ITN01303, please refer to it for further information.

Spir Asset Management Lifecycle Team

Spir Definition

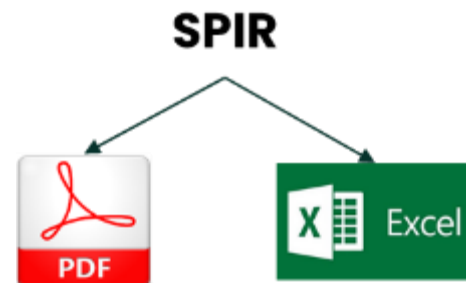
The SPIR is a standard report that Baker Hughes requires to supplier before and not later with material delivery.

SPIR is the acronym of **Spare Parts Interchangeability Report**. SPIR contains all **technical and commercial** information related to **spare parts** (assembly and sub-items).

SPIR must be supplied according rules defined in **ITN01303, the official BH document** which contains all technical details.

Each **SPIR** must be uploaded on iSupplier Portal and must include:

1. **Drawing** describing the scope of supply (sectional, assembly, outline...)
2. **Excel format file** filled with part list with sectional drawing cross reference



ITN01303

It is the technical document where requirements for spare parts of purchased items are defined.

Supplier agreed to prepare SPIR in order to allow BH to have all necessary info to maintain the units of final customers

ITN01303 details what a SPIR means, **how** to prepare and **which spare parts** are required according type of purchased item.

BAKER HUGHES	TITLE REQUIREMENT FOR SPARE PARTS & MAINTENANCE DATA	DOCUMENT CODE ITN01303	REVISION 12
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Approved Drawing-Checked/Fazzi, L., Approved/Gori, M. - Internal DT-'N'

How to supply the Spare parts information

When Spir is received below checklist has to be used to verify completeness:

- Supplier must use the defined Excel Standard format
- The following fields are mandatory:
 - Supplier Name (excel cell C5)
 - Offer # (excel cell C6)
 - Offer validity (excel cell C7)
 - Issue date (excel cell E6)
 - Currency (excel cell E7)
 - Item code (excel cell L5)
 - PO number (excel cell L7)

Baker Hughes, a GE company										Offerta parti di ricambio Spare Parts Quotation	
FORMITORE - Supplier's Name	CODICE NP DEL FORNITORE Supplier code #			PAGAMENTO - Payment			CODICE NP DELL'OGGETTO INTERO FORNITO Nuovo Pignone p/s of the wholly assembled Rem/equipment				
OFFERTA N° - Quotation No.	DATA EMISSIONE - Issue Date			IMBALLAGGIO - Packing			MODELLO DELL'OGGETTO INTERO FORNITO - Model				
VALIDITA' - Quotation Validity	VALUTA - Currency			RESA FRANCO - Delivery Point			ORDINE N.P. (o R.D.O.) - N.P.Order				
CODICE MATERIALE FORNITORE	DESCRIZIONE	DISEGNO D'INSIEME	MARCA SUL DIS.	DISEGNO EHGE PM	MARCA SU EHGE P&I	Q.TA' Install.	Q.TA' Consigli.	Q.T.A' Fornita Quantity supplied with Main Equip.	PREZZO UNITARIO		
Supplier part number	Description	Assembly drawing	Item on ass. p. dw	EHGE P&I drawing	Item on EHGE P&I dw	Installed quantity	Recommended quantity		Unit Price		
1	2	3	4	3.1	4.1	5	6	6.1	7		

All columns from 1 to 15 must be filled. Column 3.1 and 4.1 only in case item has reference with P&I.

Remember:

Assembly drawings must always be attached and the information must match with column 3 and 4 of the excel format.

How to fill the excel Spir format

Column 1: **Supplier P/N** → **Univocity is mandatory (same supplier P/N must indicate the same physical part)**

Column 2: **Item Description** (a detailed and self-explanatory description is required)

Column 3: **Assembly Drawing** (it is the drawing where the spares can be identified)

Column 4: Item on ass.y drw (it is the **reference item on assembly drawing**)

Column 5: **Installed quantity** (it is installed quantity on each equipment)

Column 6: **Recommended quantity** (it is suggested quantity for each equipment)

Column 7: **Unit Price** (it is unit price for each spare part)

Column 8: **Delivery weeks** (it is delivery week for each spare part)

Column 9: **Manufacturer's name** (it is the name of equipment original manufacturer)

Column 10: **Manufacturer's P/N** (it is the P/N of equipment original manufacturer)

Maintenance Plan Section (See chart 6)

Column 11: Operational Spares

Column 12: Frequency Interval

Column 13: Critical Spare

Column 14: Min Q.ty Supplied

Column 15: **Main items serial number** (it is the serial number of main equipment the spare part is referred to).

How to fill the excel Spir format (Maintenance Plan)

Column 11: **Operational Spares**

- It is the quantity suggested for Normal Operation activity when a replacement after specific time period can not be planned.
- They are spare parts without a defined life-cycle, to be kept at stock to grant availability
- When populated it must be equals to Column 6 - Recommended Qty

It is alternative to Column 12

Column 12: **Frequency Interval**

- It is the expected # of running hours before the item needs to be replaced (based on 8000 hrs/year)

It is alternative to Column 11

Column 13: **Critical Spare**

It is a flag related to spare part criticality and its value can be:

O = Obsolescence Risk ... the part can become obsolete shortly

S = Shut down Risk ... the part is strictly necessary to assure operation continuity

B = Both above reasons

Column 14: **Min Q.ty Supplied**

It is the minimum quantity to be supplied (to be filled if different from 1)

Which parts are to be filled in the Spir

ITN01303 defines the guideline to supply spare parts list according to type of purchased auxiliary item:

- Dedicated sections are shown in the document to detail the minimum list of spares to be provided
- P&I diagrams is reference document for each main item that include instruments in scope of supply

3.8. Gear box

3.8.1. SPIR Form containing, as a minimum, the components listed below:

- Gear Set
- All Couplings (if any)
- Bearing Set
- Seal Set

All Instrumentation listed in the P&I (Limit Switch, Thermocouple, Vibration sensor, etc)

3.8.2. Technical documentation:
As per Para 2

	CODICE MATERIALE FORNITORE		DISEGNO D'INSIEME	MARCA SUL DIS.	Q. TA' Install.	Q. TA' Consig.
			Assembly drawing	Item on ass. y. drw.	Installed quantity	Recommended quantity
	1	2	3	4	5	6
1	02KA219	Complete Gearset	02T297	A100-200	1	1
2	02D204	Bearing	02T297	B110	1	1
3	02D204	Bearing	02T297	B120	1	1
4	08023	Thrust Bearing	02T297	B150	1	1
5	025744	Assembly Bearing	02T297	B210	1	1
6	025745	Bearing	02T297	B220	1	1
7	03AH606	Oil Seal	02T297	K110	1	1
8	03AH602	Oil Seal	02T297	K210	1	1
9	08T165/05	Temperature probes	02T297	121-213-223-151	12	12
10	3301	Vibration probes	02T297	23-214-217-224-2	13	13
11	3301	Proximity sensors	02T297	L481	13	13
12	3301	Extension cable	02T297	L480	13	13
13	3304	Accelerometer	02T297	L195-295	2	2
14	3304	Extension cable	02T297	L194-294	2	2

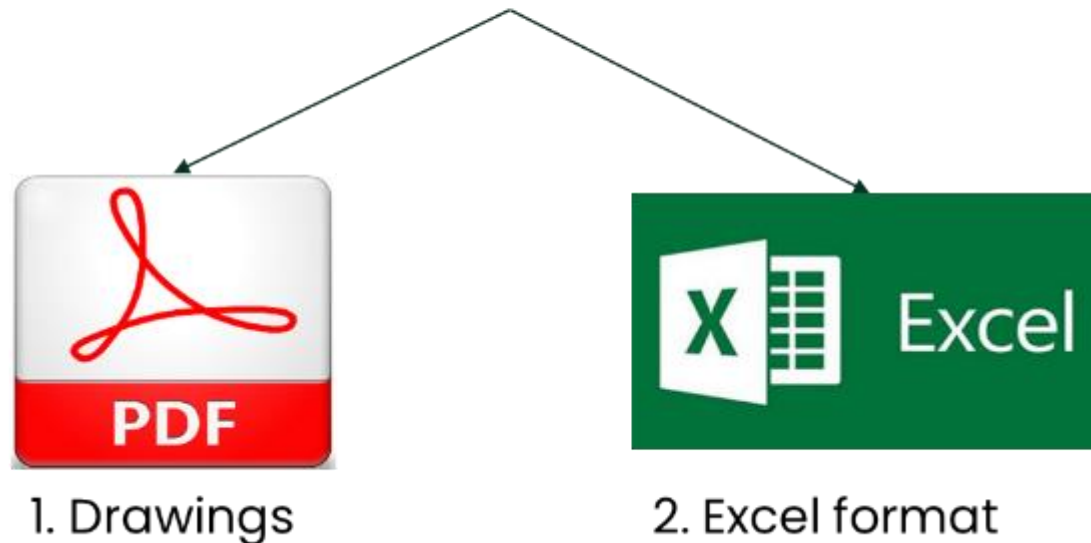
Typical error

Remember SPIR is composed by:

1. Drawings
2. Excel format

→ Upload together excel format and pdf drawings

SPIR



Typical error

- Missing Drawing (column 3) and Balloon Number (column 4)



Baker Hughes		Nuovo Pignone <small>Firenze</small>		Offerta parti di ricambio			Spare Parts Quotation							
FORMITORE - Supplier's Name	SUPPLIER 1	CODICE MP DEL FORNITORE - Supplier code #	123456	PAGAMENTO - Payment	12344	CODICE MP DELL'OGGETTO INTERO FORNITO - Whole Pignone sps of the whole assembled item/assembly	SKO1234567	FREQUENZE DI MANUTENZIONE - Spare parts availability 2000h/anno						
OFFERTA N° - Quotation No.	SPR QUOTE 1	DATA EMISSIONE - Issue Date	24/3/2010	IMBALLAGGIO - Packing	INCASSO	MODELLO - DELL'OGGETTO INTERO FORNITO - Model	SKD 100	PULIZIAZIONE PLAN - Spare parts availability 2000h/anno						
VALIDITA' - Quotation Validity	31/12/2010	VALUTA - Currency	EURO	RELAZIONO - Delivery Point	FOR	GRUPPO S.P. (S.R.L.) - S.P. Code	0000000	Operational Spares	Frequency Interval	Critical Spares	MANUTENZIONE PLAN			
CODICE INTERO FORNITORE	DESCRIZIONE	DESCRIZIONE	MARCA DEL RIC.	N. TAV. Aut. Ric.	N. TAV. Cont. Ric.	PREZZO UNITARIO	CODICE	CATEGORIA	CODICE INTERO CATEGORIA	N. di FIDUCIA in	N. di FIDUCIA in	N. di FIDUCIA in	MAN. S. T. FORNITORE	Multi-Use material code
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	SUP1 A1	MOTOR ASS.Y		2	1	1500	6	SUPPLIER 2	SUP2 A1	1	0	1	SN M1	
2	SUP1 A2	SET OF BEARING FOR MOTOR		2	1	200	4	SUPPLIER 2	SUP2 A2	1	40000	1	SN M1	
3	SUP1 A3	PUMP ASS.Y		2	1	3000	6	SUPPLIER 3	SUP3 A1	1	0	1	SN F1	
4	SUP1 A4	SET OF BEARING FOR PUMP		2	1	200	4	SUPPLIER 3	SUP3 A2	1	40000	1	SN F1	
5	SUP1 A5	SET OF GASKETS FOR PUMP		2	1	200	4	SUPPLIER 3	SUP3 A3	1	1	1	SN F1	
6	SUP1 A6	MECHANICAL SEAL		2	1	100	4	SUPPLIER 3	SUP3 A4	1	30000	1	SN F1	
7	SUP1 A7	FILTER ASS.Y		2	1	1500	4	SUPPLIER 4	SUP4 A1	1	1	1	SN F1	
8	SUP1 A8	FILTER CARTRIDGE		2	1	200	2	SUPPLIER 4	SUP4 A2	1	10000	1	SN F1	
9	SUP1 A9	SET OF GASKETS FOR FILTER		2	1	200	2	SUPPLIER 4	SUP4 A3	1	10000	1	SN F1	
10	SUP1 A10	SET OF GASKETS FOR SKD		1	1	100	2	SUPPLIER 5	SUP5 A1	1	40000	1	1	



Baker Hughes		Nuovo Pignone <small>Firenze</small>		Offerta parti di ricambio			Spare Parts Quotation							
FORMITORE - Supplier's Name	SUPPLIER 1	CODICE MP DEL FORNITORE - Supplier code #	123456	PAGAMENTO - Payment	12344	CODICE MP DELL'OGGETTO INTERO FORNITO - Whole Pignone sps of the whole assembled item/assembly	SKO1234567	FREQUENZE DI MANUTENZIONE - Spare parts availability 2000h/anno						
OFFERTA N° - Quotation No.	SPR QUOTE 1	DATA EMISSIONE - Issue Date	24/3/2010	IMBALLAGGIO - Packing	INCASSO	MODELLO - DELL'OGGETTO INTERO FORNITO - Model	SKD 100	PULIZIAZIONE PLAN - Spare parts availability 2000h/anno						
VALIDITA' - Quotation Validity	31/12/2010	VALUTA - Currency	EURO	RELAZIONO - Delivery Point	FOR	GRUPPO S.P. (S.R.L.) - S.P. Code	0000000	Operational Spares	Frequency Interval	Critical Spares	MANUTENZIONE PLAN			
CODICE INTERO FORNITORE	DESCRIZIONE	DESCRIZIONE	MARCA DEL RIC.	N. TAV. Aut. Ric.	N. TAV. Cont. Ric.	PREZZO UNITARIO	CODICE	CATEGORIA	CODICE INTERO CATEGORIA	N. di FIDUCIA in	N. di FIDUCIA in	N. di FIDUCIA in	MAN. S. T. FORNITORE	Multi-Use material code
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	SUP1 A1	MOTOR ASS.Y	MOTOR 1	ALL	2	1	1500	6	SUPPLIER 2	SUP2 A1	1	0	1	SN M1
2	SUP1 A2	SET OF BEARING FOR MOTOR	MOTOR 1	D1-D2	2	1	200	4	SUPPLIER 2	SUP2 A2	1	40000	1	SN M1
3	SUP1 A3	PUMP ASS.Y	PUMP 1	ALL	2	1	3000	6	SUPPLIER 3	SUP3 A1	1	0	1	SN F1
4	SUP1 A4	SET OF BEARING FOR PUMP	PUMP 1	D1-D2	2	1	200	4	SUPPLIER 3	SUP3 A2	1	40000	1	SN F1
5	SUP1 A5	SET OF GASKETS FOR PUMP	PUMP 1	G1-G2-G3-G4	2	1	200	4	SUPPLIER 3	SUP3 A3	1	1	1	SN F1
6	SUP1 A6	MECHANICAL SEAL	PUMP 1	M	2	1	100	4	SUPPLIER 3	SUP3 A4	1	30000	1	SN F1
7	SUP1 A7	FILTER ASS.Y	FILTER 1	ALL	2	1	1500	4	SUPPLIER 4	SUP4 A1	1	1	1	SN F1
8	SUP1 A8	FILTER CARTRIDGE	FILTER 1	C	2	1	200	2	SUPPLIER 4	SUP4 A2	1	10000	1	SN F1
9	SUP1 A9	SET OF GASKETS FOR FILTER	FILTER 1	G1-G2-G3	2	1	200	2	SUPPLIER 4	SUP4 A3	1	10000	1	SN F1
10	SUP1 A10	SET OF GASKETS FOR SKD	SKD ASSY	L0-L2-L3-L4	1	1	100	2	SUPPLIER 5	SUP5 A1	1	40000	1	1

Typical error

Missing / Wrong NP Code in excel SPIR header



Spare Parts Quotation						
CODICE NP DELL'OGGETTO INTERO FORNITO Newspaper figure of the whole assembled spare equipment						
MODELLO DELL'OGGETTO INTERO FORNITO: Model						
ORDINE N.P. (o R.D.O.) - N.P. Order	PO XXXXXXXX	Operational Spares	Frequency Interval	Critical Spares		
CONSEGNA Delivery week	COSTRUTTORE Manufacturer's name	CODICE MATERIALE COSTRUTTORE Material Manufacturer part number	to be filled in with supported quantity	to be filled in with n. Hours (h)	to be filled in with n. Hours (h)	MIN. Q. TA FORNIBILE MIN. Q. TV SUPPLIED
14	MANUFACTURER 1	COOP 1	1	XXXX	K	1
15	MANUFACTURER 2	COOP 2	1	XXXX	K	1

MISSING NP CODE



Spare Parts Quotation						
CODICE NP DELL'OGGETTO INTERO FORNITO Newspaper figure of the whole assembled spare equipment		SKO1234567				
MODELLO DELL'OGGETTO INTERO FORNITO: Model						
ORDINE N.P. (o R.D.O.) - N.P. Order	PO XXXXXXXX	Operational Spares	Frequency Interval	Critical Spares		
CONSEGNA Delivery week	COSTRUTTORE Manufacturer's name	CODICE MATERIALE COSTRUTTORE Material Manufacturer part number	to be filled in with supported quantity	to be filled in with n. Hours (h)	to be filled in with n. Hours (h)	MIN. Q. TA FORNIBILE MIN. Q. TV SUPPLIED
14	MANUFACTURER 1	COOP 1	1	XXXX	K	1
15	MANUFACTURER 2	COOP 2	1	XXXX	K	1

SKO1234567 NOT purchased with PO XXXXXXXX



Spare Parts Quotation						
CODICE NP DELL'OGGETTO INTERO FORNITO Newspaper figure of the whole assembled spare equipment		SKO1234567				
MODELLO DELL'OGGETTO INTERO FORNITO: Model						
ORDINE N.P. (o R.D.O.) - N.P. Order	PO XXXXXXXX	Operational Spares	Frequency Interval	Critical Spares		
CONSEGNA Delivery week	COSTRUTTORE Manufacturer's name	CODICE MATERIALE COSTRUTTORE Material Manufacturer part number	to be filled in with supported quantity	to be filled in with n. Hours (h)	to be filled in with n. Hours (h)	MIN. Q. TA FORNIBILE MIN. Q. TV SUPPLIED
14	MANUFACTURER 1	COOP 1	1	XXXX	K	1
15	MANUFACTURER 2	COOP 2	1	XXXX	K	1

SKO1234567 purchased with PO XXXXXXXX

Typical error

Missing Main item Spares – Sub supplier quotation



Baker Hughes		Nuovo Pignone Firenze		Offerta parti di ricambio			Spare Par		
FORNITORE - Supplier's Name	SUPPLIER CODE	CODICE NP DEL FORNITORE Supplier code #	XXXX	PAGAMENTO - Payment			CODICE NP DELL'OGGETTO INTERO FORNITO Nuovo Pignone NP of the whole assembled item/equipment		8KO1234567
OFFERTA N° - Offer's No	0 P P P X X X X	DATA EMISSIONE - Issue Date		IMBALLAGGIO - Packing			MODELLO DELL'OGGETTO INTERO FORNITO - Model		
VALIDITA' - Quotation Validity	31 03 2018	VALUTA - Currency	EUR						
CODICE MATERIALE FORNITORE	DESCRIZIONE	DESEGNO D'INSIEME	MARCA SUL DIS	Q. TA' Usate	Q. TA' Consigli	PREZZO UNITARIO	CONSEGNA	COSTRUTTORE	CODICE MATERIALE COSTRUTTORE
OSDP 1	CENTRIFUGO PUMP	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 1	OSDP 1
OSDP 2	ELECTRIC MOTOR AC	DRAWING X	SAVINA 2	1	1	222	18	MANUFACTURER 2	OSDP 2
OSDP 3	ELECTRIC MOTOR AC	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 3
OSDP 4	RFPI INDICATOR	DRAWING X	SAVINA 2	1	1	222	12	MANUFACTURER 2	OSDP 4
OSDP 5	RFPI TRANSMITTER	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 5
OSDP 6	RFPI	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 6
OSDP 7	TRIPPLATE VALVE	DRAWING X	SAVINA 2	1	1	222	18	MANUFACTURER 4	OSDP 7
OSDP 8	TRIPPLATE	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 8
OSDP 9	TRIPPLATE VALVE	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 9
OSDP 10	RFPI VALVE	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 10

Missing Bearing



Baker Hughes		Nuovo Pignone Firenze		Offerta parti di ricambio			Spare Par		
FORNITORE - Supplier's Name	SUPPLIER CODE	CODICE NP DEL FORNITORE Supplier code #	XXXX	PAGAMENTO - Payment			CODICE NP DELL'OGGETTO INTERO FORNITO Nuovo Pignone NP of the whole assembled item/equipment		8KO1234567
OFFERTA N° - Offer's No	0 P P P X X X X	DATA EMISSIONE - Issue Date		IMBALLAGGIO - Packing			MODELLO DELL'OGGETTO INTERO FORNITO - Model		
VALIDITA' - Quotation Validity	31 03 2018	VALUTA - Currency	EUR						
CODICE MATERIALE FORNITORE	DESCRIZIONE	DESEGNO D'INSIEME	MARCA SUL DIS	Q. TA' Usate	Q. TA' Consigli	PREZZO UNITARIO	CONSEGNA	COSTRUTTORE	CODICE MATERIALE COSTRUTTORE
OSDP 1	CENTRIFUGO PUMP	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 1	OSDP 1
OSDP 2	ELECTRIC MOTOR AC	DRAWING X	SAVINA 2	1	1	222	18	MANUFACTURER 2	OSDP 2
OSDP 3	ELECTRIC MOTOR AC	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 3
OSDP 4	RFPI INDICATOR	DRAWING X	SAVINA 2	1	1	222	12	MANUFACTURER 2	OSDP 4
OSDP 5	RFPI TRANSMITTER	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 5
OSDP 6	RFPI	DRAWING X	SAVINA 2	1	1	222	14	MANUFACTURER 2	OSDP 6
OSDP 7	TRIPPLATE VALVE	DRAWING X	SAVINA 2	1	1	222	18	MANUFACTURER 4	OSDP 7

Motor AC filed

Supplier SPIR Pillars

- **OTD:** SPIR must be delivered with Material Delivery
- **Completeness/Quality:** SPIR accepted only if 100% completed and compliant to ITN01303
- 1 NP Code + PO line with 09N = 1 SPIR
- **SPIR recipient:** iSupplier Portal <https://Oscar.bakerhughes.com>

In case of clarification the SPIR BH Supplier Service would help you acost.serm@bakerhughes.com

Baker Hughes 