Subcontracting Process in SAP

SAP Knowledge Hub

SUBCONTRACTING PROCESS

What is subcontracting process?

In subcontracting process, when a company outsources parts of its manufacturing to subcontracting vendor. It's being processed by subcontracting vendor, convert it to semi-finished or finished material and deliver back to the company.

Example with subcontracting process Scenario:-

Customer order 100 numbers of knuckle joint. Company is giving 100 knuckle joint parts to subcontractor vendor for assembly of knuckle joint.
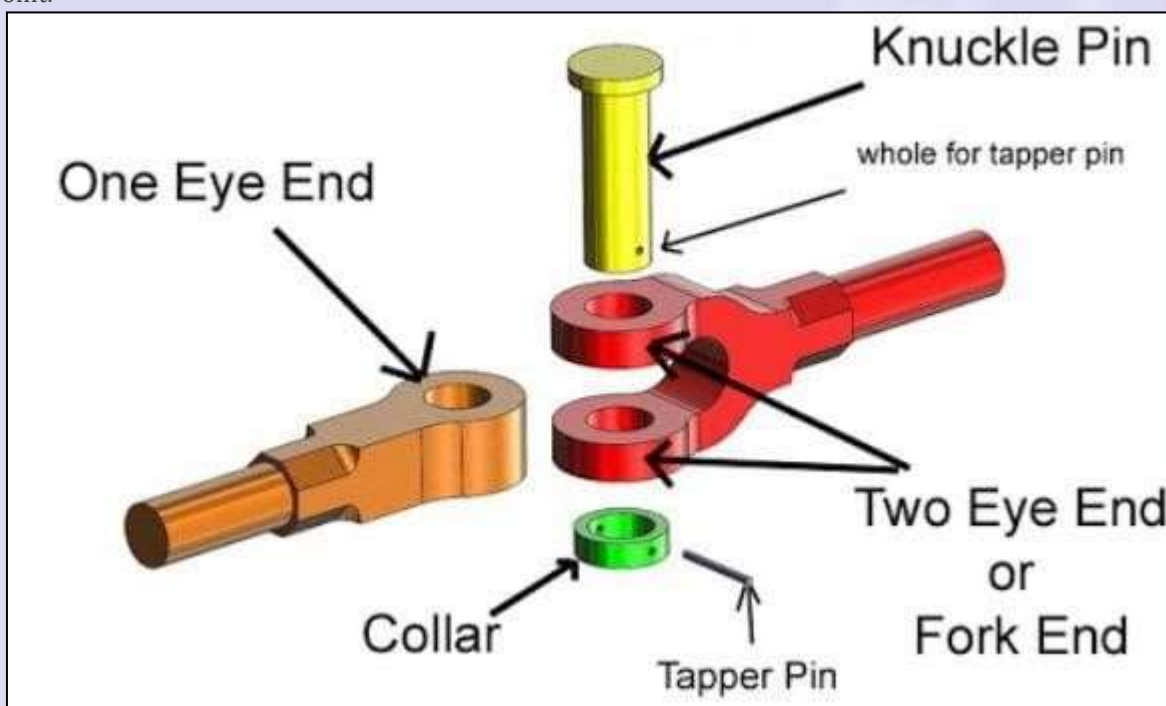
Parts of knuckle joint:-

1. One eye end
2. Two eye end
3. Knuckle pin
4. Collar
5. Taper pin

Bill of material:-

Sl No.	PARTS	QUANTITY	MATERIAL	PRICE
1	One eye end	1	SS	450/-
2	Two eye end	1	SS	750/-
3	Knuckle pin	1	SS	200/-

| 4 | Collar | 1 | SS | 80/- |
| 5 | Taper pin | 1 | SS | 20/- |

Detail of Scenario :-

100 numbers Knuckle joint Parts produced in a company is outsourced to subcontractor for assembly. The subcontractor will assemble all the parts of knuckle joint and return it to the company. The company will pay only service charges to the vendor.

Procedure of subcontracting process in SAP:-

1.Create material:-

Create parent material and child material of knuckle joint using material creation Tcode MM01.

Parent Material -270856 - knuckle joint

Child Material 1- 9449570431 - One eye end

Child Material 2- 9449570439- Two eye end

Child Material 3- 9449570446- Knuckle pin

Child Material 4- 9449570447- Collar

Child Material 5- 9449570448- Taper pin

Created material list in SAP with price details:-

Material	Plant	Val. Type	Description	Last Change	MTyp	Matl Group	B.	PGr	ABC	Typ	ValCl	Pr.	Price	Crcy	/	Created by
270856	0190		Knuckle joint	03.11.2022	ZNIK	00101	EA	001				7920	S	1,500.00	EUR	1	NEWMM92
9449570431	0190		One eye end	03.11.2022	HALB	00101	EA	001				7900	V	450.00	EUR	1	NEWMM92
9449570439	0190		Two eye end		HALB	00101	EA	001				7900	V	750.00	EUR	1	NEWMM92
9449570446	0190		Knuckle pin		HALB	00101	EA	001				7900	V	200.00	EUR	1	NEWMM92
9449570447	0190		Collar		HALB	00101	EA	001				7900	V	80.00	EUR	1	NEWMM92
9449570448	0190		Taper pin		HALB	00101	EA	001				7900	V	20.00	EUR	1	NEWMM92

2.Create vendor:-

Create vendor for subcontracting process using Tcode XK01.

Vendor -7000000372

3.Create Bill of material :-

Create Bill of material for knuckle joint which includes quantity of parts required for knuckle joint assembly and these detail used while creating purchase order. Tcode used to create BOM is CS01.

Material	270856	Knuckle joint
Plant	0190	Galaxy Musicals US Plant
Alternative BOM	1	

Material | Document | General

Item	ICt	Component	Component description	Quantity	Un	Asm	Sls	Valid From	Valid to
☐ 0010	L	9449570431	One eye end	1	EA	☐	☐	03.11.2022	31.12.9999
☐ 0020	L	9449570439	Two eye end	1	EA	☐	☐	03.11.2022	31.12.9999
☐ 0030	L	9449570446	Knuckle pin	1	EA	☐	☐	03.11.2022	31.12.9999
☐ 0040	L	9449570447	Collar	1	EA	☐	☐	03.11.2022	31.12.9999
☐ 0050	L	9449570448	Taper pin	1	EA	☐	☐	03.11.2022	31.12.9999

## 4.Create purchase info record :-

Here we create subcontracting PIR for a parent material that is Knuckle joint. This subcontracting PIR includes service charges for Subcontractor vendor. In this scenario service charges is INR 250/- for one assembly of knuckle joint. PIR is created using Tcode ME11.

Purchasing info record number - 898555110


```
Vendor      7000000372 Caliper engineering and lab pvt ltd

   Material              Material Short Text           Info Rec.              De
    P.Org InfoCat        Plnt PGp Plan Time    Minimum Qty   Un  Var
      Price Origin    Net Price  Currency    Qty   Un  Document    Item          QDp

    000000000000270856 Knuckle joint                       898555110
☐   1000   Subcontracti 0190 001  5  Days                    0  EA
      Condition        250.0000       INR         1 EA  Net                   31.12.9999
      Pur. Order       250.0000       INR         1 EA  4500027205 00010  03.11.2022
```

5.create purchase order :-

Here we create purchase order for Knuckle joint parent material. This parent material includes all child parts. In this PO price included is the service charges for subcontracting process. The service charge for each assembly of knuckle joint is INR 250/- hence total value of PO for 100 numbers knuckle joint assembly is INR 25000/- . PO creation is done using Tcode ME21N.
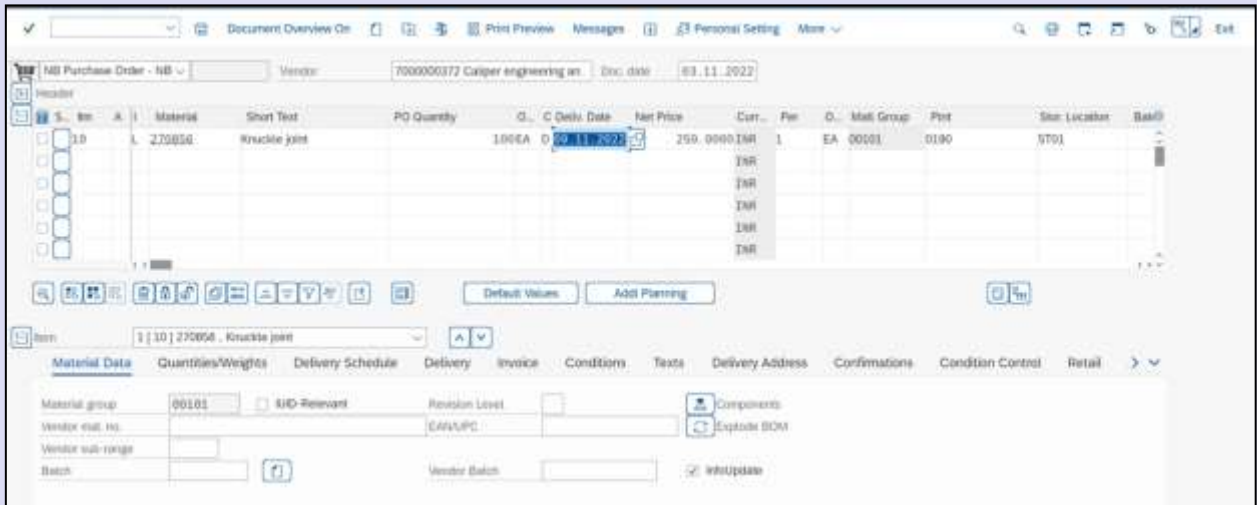
Purchase Order number 4500027205

In this step we are issuing knuckle joint child material to the vendor to complete assembly process. 100 numbers of knuckle joint parts is issued to the subcontracting vendor and through this process we are keeping record of issuing material. Issuing material is done through Tcode ME2O. Before issue of a material :-

After issue of material

Vendor   7000000372 Caliper engineering and lab pvt ltd Mangalore

Material	Plnt Short Text	Batch	Reqt/Receipt qty	SC Stock Available SC Stock
9449570431	0190 One eye end			100 EA
⊞ Requirements via SC Orders			100 EA —	0 EA
9449570439	0190 Two eye end			100 EA
⊞ Requirements via SC Orders			100 EA —	0 EA
9449570446	0190 Knuckle pin			100 EA
⊞ Requirements via SC Orders			100 EA —	0 EA
9449570447	0190 Collar			100 EA
⊞ Requirements via SC Orders			100 EA —	0 EA
9449570448	0190 Taper pin			100 EA
⊞ Requirements via SC Orders			100 EA —	0 EA

Supplied child material quantity in warehouse:-

Material SLoc SL	Material Description Unrestricted Unit Total Value Crcy	Plnt Name 1 Transit/Transf. Total Value	In Quality Insp. Total Value	Restricted-Use Total Value	Blocked Total Value	Returns Total Value
9449570431	One eye end	0190 Galaxy Musicals US Plant				
ST01	0 EA	0	0	0	0	0
	0.00 EUR	0.00	0.00	0.00	0.00	0.00
9449570439	Two eye end	0190 Galaxy Musicals US Plant				
ST01	0 EA	0	0	0	0	0
	0.00 EUR	0.00	0.00	0.00	0.00	0.00
9449570446	Knuckle pin	0190 Galaxy Musicals US Plant				
ST01	0 EA	0	0	0	0	0
	0.00 EUR	0.00	0.00	0.00	0.00	0.00
9449570447	Collar	0190 Galaxy Musicals US Plant				
ST01	0 EA	0	0	0	0	0
	0.00 EUR	0.00	0.00	0.00	0.00	0.00
9449570448	Taper pin	0190 Galaxy Musicals US Plant				
ST01	0 EA	0	0	0	0	0
	0.00 EUR	0.00	0.00	0.00	0.00	0.00
* Total						
	0.00 EUR	0.00	0.00	0.00	0.00	0.00

Stock of knuckle joint parts shown in Tcode MMBE (list of warehouse stocks) after issuing to vendor :-

Client/Company Code/Plant/Storage Location/Batch/Special Stock	Unrestricted use
∨ ☁ Full	
∨ 🏢 1000 IDES AG	
∨ 🏬 0190 Galaxy Musicals US Plant	
Stock Provided to Vendor	100.000

The parent material will be in on-order stock because material is being processed:-

7.Receiving material from vendor :-

In this step after the assembly of knuckle joint is completed parts are received from the vendor. While receiving material good receipt is done for documentation purpose and for payment.GR is done using Tcode MIGO.

Movement types involved while receiving a goods are:-

101- 100 numbers Assembled Knuckle joint(parent material) is received through 101 movement type.

543-100 numbers Knuckle joint parts(child material) consumed for assembly is show through movement type 543

Material document number 9899000802

s

After receiving knuckle joint (parent material) stock is added to warehouse:-

Accounting details :-

1.BSX-For finished product with the value of BOM components + subcontract services.

2.VRX-for subcontract services GR/IR clearing account

3.BSV-for finished product-change in stock account (used in subcontracting process to balance out the factory/subcontractor output)

4.FRL-for subcontract services of offset GR/IR clearing account.

5.BSX-for BOM component inventory posting.

6.GBB-for subcontract services-consumption of BOM components provided to subcontractor.

Co.	Item	PK	S(	Account	D/ Ac	TTy	Trs	Description	Amount Curr.	Amount in LC	BusA	Profit Center	Segment
1000	1	86		300000	S	S	BSX	Inventory - Raw Mate	150,000.0000 INR	150,000.00			
	2	96		4000002	H	S	WRX	GR/IR Account	25,000.0000- INR	25,000.00-			
	3	91		400000	H	S	BSV	Consumptn, raw mat.1	150,000.0000- INR	150,000.00-	9900	1402	SERV
	4	86		400020	S	S	FRL	Raw mat. consum	25,000.0000 INR	25,000.00	9900	1402	SERV

Data Entry View

Document Number	100000797	Company Code	1000	Fiscal Year	2022
Document Date	04.11.2022	Posting Date	04.11.2022	Period	11
Reference		Cross-Comp.No.			
Currency	EUR	Texts exist	☐	Ledger Group	

Co.	Item	PK	BC	Account	D/	Ac	TTy	Trs	Description	Amount	Curr.	Amount in LC	BusA	Profit Center	Segment
1000	1	96		300000	H	S		BSX	Inventory - Raw Mate	45,000.00-	EUR	45,000.00-			
	2	81		232000	S	S		GBB	Losses - material pr	45,000.00	EUR	45,000.00	9900	1402	SERV
	3	96		300000	H	S		BSX	Inventory - Raw Mate	75,000.00-	EUR	75,000.00-			
	4	81		232000	S	S		GBB	Losses - material pr	75,000.00	EUR	75,000.00	9900	1402	SERV
	5	96		300000	H	S		BSX	Inventory - Raw Mate	20,000.00-	EUR	20,000.00-			
	6	81		232000	S	S		GBB	Losses - material pr	20,000.00	EUR	20,000.00	9900	1402	SERV
	7	96		300000	H	S		BSX	Inventory - Raw Mate	8,000.00-	EUR	8,000.00-			
	8	81		232000	S	S		GBB	Losses - material pr	8,000.00	EUR	8,000.00	9900	1402	SERV
	9	96		300000	H	S		BSX	Inventory - Raw Mate	2,000.00-	EUR	2,000.00-			
	10	81		232000	S	S		GBB	Losses - material pr	2,000.00	EUR	2,000.00	9900	1402	SERV

7.Invoice verification:-

In this process invoice verification is done for service charges to be paid for subcontractor vendor. Invoice verification is done using Tcode MIRO.