Return Goods Authorization Process

When a customer decides to return product, a ‘Return Goods Authorization’ (RGA) is issued to the customer. The customer includes the RGA number provided on all shipping documents so that when the return is received at the receiving dock it can be easily identified and matched to the RGA previously issued. In order to have this process function properly, the steps are as follows:

1. The customer invoice is retrieved from SAP B1 and pulled up on the screen. This document is used to select the item sold that is being returned by the customer. In some instances the invoice will not be known. In these cases, the RGA needs to be manually entered in the sales quote screen. If the invoice is found, either update the ‘Flag as RGA’ to have all items returned, or highlight the item being returned. Then click on the Create RGA button. This creates an RGA within the sales quote form.
2. The sales quote is now the ‘RGA’. The customer is issued the RGA number.
3. The customer returns the product and includes the RGA number for reference.
4. The product is checked to see that it meets return ‘protocol’.
5. A credit memo is issued to the customer and the product is returned to inventory (either as saleable product or as quarantined product). Note: in some plants the CFO will insist on the process first including a customer return screen. Then accounting will create the actual credit memo. This process is included in this Boyum add-on. The user would need to inactivate the credit memo link and activate the customer return link in its place.
6. If the customer is promised a replacement product, then this product is shipped and invoiced.
7. If the customer has been told the product will be repaired, then a repair process is initiated, to be followed by shipment and invoicing for the repair.

This process is outlined in Figure 1.1.

Since SAP B1 does not have a transaction that is the equivalent of an ‘RGA’, Mascidon has used Boyum to develop a process whereby a Sales Quotation is utilized to track the RGA. The process is as follows:

1. The original sales order for the customer is retrieved and SAP B1’s drill down function is used to get display the invoice on the screen.
   a. The user highlights the invoice line item being returned and clicks a button ‘Create RGA’.
   b. If the full invoice is being returned (all items), then the user changes the flag ‘Flag as RGA’ on the invoice to ‘Y’.
   c. An RGA Sales Quote for this item(s) is created. The new sales quote / RGA is the RGA number.
   d. The sales quote type is flagged as an ‘RGA’ quote type.
   e. The part(s) being returned are pulled from the invoice and placed on this RGA quote.
   f. The sales quote / RGA references the invoice on which the part was billed to the customer. This can be accessed by double clicking.
The customer service person then modifies the information on the RGA Sales Quote:

i. Is part under warranty? If so, who is supporting the warranty?
ii. Date of the RGA.
iii. Who is the customer contact requesting the RGA.
iv. Whether the freight charges are to be reimbursed, and which freight charges?
The freight charges to return the part, and the freight charges to re-ship a replacement part are the issues which must be dealt with.
v. Tells the customer the RGA number to include with any shipping papers.
vi. Change the warehouse to the quarantine warehouse if that is the normal policy.

2. The customer returns the product and includes the RGA number for reference – or the receiving clerk needs to look up outstanding RGA numbers for this customer to find the return being made (not preferred).
   a. The RGA number is used to pull up the sale quote with the details of the return.
b. The customer service personnel notes the date received from the customer.
c. Upon analysis, the RGA sales quote is updated with the anticipated repair parts / parts costs and labor required to repair the part. A function is provided whereby all of the component parts of the returned part are displayed and the customer service person can select which of these need to be repaired. Have a BOM lookup. Need to place an exploded view of all components of an item. Allow user to enter the item and then do the lookup. Allow the user to pull in the items from the bom to be used in the repair.
d. The parts to be used in the repair can be included on the RGA sales quote form. There is a flag at the item level to indicate the parts that are repair parts.
e. The inspection date and person are noted on the RGA sales quote.

3. A ‘Receive Goods’ button on the RGA sales quote is clicked to create the AR credit memo to be issued to the customer.
   a. This returns the product to inventory – into the same warehouse as identified on the RGA Sales Quote.
   b. The customer gets credited with the original sales amount.
   c. The repair parts on the RGA Sales Quote are not copied to the credit memo.

4. If the customer is promised a replacement product, then this product is shipped and invoiced.
5. If the customer has been told the product will be repaired, then a repair process is initiated, to be followed by shipment and invoicing for the repair.

The keys to this process are twofold:

1. The RGA is tracked internally within SAP B1.
2. Data is copied from document to document without error.
Example 1: Normal Return of a Single Item

![Figure 1.2 A/R Invoice Screen Initiating the RGA Process](image1)

For the invoice shown in Figure 1.2, the Flag as RGA has not been set as ‘Y’. Therefore when the Create RGA button is clicked, only the highlighted item 491610 will be on the RGA. This is shown in Figure 1.3.

![Figure 1.3 Sales Quotation Screen when Used for RGA Process](image2)

The ‘Flag as RGA’ indicator is automatically set to RGA. If manually entering an RGA, you must set this flag. At that point the next RGA number is automatically assigned by the system. The ‘RGA Invoice’ is the invoice number that the part was originally sold to the customer under (see Figure 1.2 – the invoice number is the one referenced in Figure 1.3). This provides a link to the invoice. If the RGA is on the screen and access to the invoice is required, simply double click on the invoice number. Note: when a single line item is being returned the quantity on the RGA always defaults to 1.
In the grid detail information by item, the warranty flag and with whom the warranty resides are available for use if this is a part that is under warranty. The inspection date and inspected by columns are filled out when the part is returned and inspected. This information is not required but available to further define the return. If text is required, open up the ‘Type’ on the RGA form items and add lines of text.

Let’s assume at this point that it is a simple return of a single line item. The customer has been supplied with the RGA number and returns the product. The receiving clerk now has the shipping papers from the trucker with the RGA number on it. They enter the sales quote / RGA number and find the document. Let’s further assume that the return is correct and the goods will be returned to stock. The receiving clerk clicks on the Receive Goods button on the RGA form. This results in a credit memo being created. Refer to figure 1.4 for the results of this function.

![Figure 1.4 Credit Memo Created From RGA](image)

At this point, if the customer is simply returning product, the process is complete.

If the customer needed a replacement part, the shipping department can pull up the RGA and use the Copy To function to copy the RGA contents to a Delivery Order. The product can then be shipped and invoiced using normal SAP B1 functions. Since the customer received credit for the return, the invoice of the new product would be the normal process.
Example 2: Complete Return of Invoiced Product

In this example, we assume that the customer simply wants to return the full quantity of all items invoiced originally. The RGA process still needs to be followed in its entirety.

![Figure 1.5 Invoice to be Returned by Customer in Full](image1)

Prior to clicking on the Create RGA button, the user must set the ‘Flag as RGA’ to Y. Then they click the button and the RGA sales quote shown in Figure 1.6 is shown.

![Figure 1.6 RGA Created for Full Return](image2)

As before, the references to the invoice are maintained. In this example, all of the items have been included in the return, and their quantities remained the same as on the invoice. The next step is to await the return of the product by the customer. When this occurs, the receiving clerk pulls up the RGA form for this customer return and clicks on the Receive Goods button. This creates the credit memo shown in Figure 1.7.
Note: In some businesses, the accounting department does not want the receiving clerk to create credit memos. The processes could easily be altered to create a Customer Return within SAP B1 in place of the credit memo. In those instances, the accounting department would then be responsible for creating the actual credit memo.

Example 3 – Return when Item is to be Repaired

This example is more complicated because there are more steps involved. Since repairs usually involve only a single item being returned, let’s assume we have issued an RGA as shown in Figure 1.3 and repeated in Figure 1.8.

After the clerk has entered the RGA for the customer, the analysis of the problem begins. The customer may be a neophyte and not know the problem or they may be an expert and know the problem and explain it via email or over the phone. For our purposes it does not matter how the information is
obtained. At this point we have an RGA entered in SAP. The part is received from the customer, but we
do not want to inventory the item because we are simply going to tear the part down, replace some
parts, put it back together and then send the repaired part to the customer along with an invoice for the
parts and labor for the repair.

The first step to take is that the person speaking with the customer may understand the parts well, and
the customer explains the problem, so that the likely failure part(s) is known. In this instance, the user
would add the anticipated repair parts to the RGA and flag these items as ‘Repair’ parts.

The next step is to determine whether or not this item is under warranty. If it is under warranty, then
the user can flag the item as requiring a warranty repair and can indicate the company responsible for
the warranty.

Figure 1.9 shows both the repair part and warranty entries.

Figure 1.9 Repair Part designation and Warranty Flags

Referring back to the process diagram in Figure 1.1, after providing the RGA number to the customer,
the next step in this process is to create a sales order for this customer. Since we do not want to
inventory every repair item received from a customer, a generic part ‘REPAIR’ is utilized. It must be a
stock item in the SAP inventory. There is also another inventory part set up ‘LABOR’, with an item type
of Labor. This should have a cost / hour in the standard cost. Referring to Figure 1.9, the ‘Repair SO’ is
clicked to create a repair sales order. The result is shown in Figure 1.10.

The reference link to the RGA used to create the sales order is maintained. The item on the sales order
is ‘REPAIR’. The warranty flag has accompanied the document. Also, note that only the item that is not
a repair item has been brought over and that the item is shown in the field ‘Outgoing’ item.

The next step in the repair process is to create a production order to record the parts and labor involved
in the repair. This is done by clicking on the ‘Repair PDO’ button. See Figure 1.11 for the results.
With the production order for repair operational, the next step is to add the parts from the assembly that need repair. The sales order has the item being sent back by the customer in the Item Out field. From the Item No. field, press Shift – F2 to display a list of all components of this item (assuming a BOM exists). This is shown in Figure 1.12.

Clicking on the choose button at this point would bring in the items highlighted to the production order – as shown in Figure 1.13.
At this point the production order can be released to the floor for normal processing. The personnel assigned to work on it would record time against the production order and also add more repair parts as they continued with the repair.

Eventually the PDO will be completed and closed out. At that time the cost of the repair is known. The original sales order can then be used to create a delivery order for the customer repair. The paperwork needs to incorporate the user field 'Item Out' so that the part being returned to the customer is known.