Young International Freight Forwarder of the Year
Award 2000

Processing a shipment to Australia

Written by Heike Hurst
Date of birth: 01.03.77.

Company: Danzas GmbH, Ludwig-Winter-Str. 8, 77767 Appenweier
Position: Junior Manager in the International Land Transport Department

Dissertation prepared on 24.04.00.

Name of the forwarding association:
Verband Badischer Spediteure eV
Rheinparkstr. 2, D-68163 Mannheim
Contents

1. Terms of reference
   1.1 Data to be defined by the writer

2. Proposals for shipping the consignment

3. Proposals for transporting machinery and materials for test run
   3.1 Packing
      3.1.1 Defining and packing dangerous goods
   3.2 Choice of sea port
   3.3 On-carriage to sea port and container loading
      3.3.1 Marking the goods
   3.4 Ocean transport
      3.4.1 Export documents for the machine
      3.4.2 Export documents for the dangerous goods
      3.4.3 Shipping costs
   3.5 Packing regulations for exports to Australia
   3.6 Insurance/liability

4. Proposal for transporting accessories and spare parts
   4.1 Packaging and on-carriage to airport
   4.2 Air freight charges
   4.3 Air freight marking regulations

5. Customs procedures

6. Australian import duties

Appendices

1 Fax to consignor regarding shipment by air freight
2 Stowage categories when shipping dangerous goods
3 Packing regulations when shipping dangerous goods
4 Regulations regarding separation when shipping dangerous goods
5 Instructions in the event of an accident with glycidaldehyde
6 Instructions in the event of an accident with cyclohexane
7 Instructions in the event of an accident with butylmercaptane
8 Instructions in the event of an accident with nitrocellulose solution
9 ADR warning label, class 3
10 ADR warning label, class 6.1
11 IMO warning label, class 3
12 IMO warning label, glass 6
13 "Marine pollutant" warning label
Introduction and overview

My name is Heike Hurst. I was born in Oberkirch in Germany on 1 March 1977. I took my "Abitur" at the Hans-Furler-Gymnasium in Oberkirch in 1996 and then started training as a forwarding agent at the Appenweier branch office of Spedition Schenker-BTL (D) AG. During this period, I spent 3 months from September to November 1998 in Great Britain working for the British subsidiary, Schenker International NEC, at the National Exhibition Centre in Birmingham, where we dealt with the full range of exhibition logistics for national and international exhibitions. At the end of my final examinations in July 1999, I was employed by Schenker-BTL in Appenweier in its national and international land transport department. I left Schenker on 01.04.00. and now work for Danzas GmbH in its European transport division at Appenweier.

The following dissertation relates to all the processes involved in handling a shipment to Australia. The goods being shipped are a machine and chemicals classed as dangerous goods. Because the various components of the shipment were to be finished at different times, the consignment must be separated to enable the shipment to be processed economically. At the same time the aspects of importance to the principal must be noted when choosing the carrier (speed or cost effectiveness). By selecting two carriers, aircraft and ship, both the time frame and financial aspect can be maintained at an acceptable level. The dissertation also deals with the documents to be processed along the transport chain which are required to ensure that the shipment runs smoothly. In addition to the normal transport procedures, account is to be taken of the special handling needed for the dangerous goods.

Thanks

I would like to thank the following people who have helped me in my research:-

Patrick Schmidt, Schenker-BTL, D-77767 Appenweier
Sabine Heidt, Schenker-BTL, D-77767 Appenweier
Matthias Kempt, Schenker International, 78098 Freiburg
Thomas Zimmermann, Danzas GmbH, 77767 Appenweier
Uwe Stadler, lecturer at the business school in 77694 Kehl
Mr Maudanz, river police in Mannheim
Mr Kavuncu, Schenker-BTL, Tamm
Junge insurance company in Hamburg
1. Terms of reference/Subject matter

Transporting machinery with accessories and spare parts from one factory in your country to an overseas destination (eg Europe/Middle East/Far East/North or South America/or Africa).

A Shipping the machine

The machine is packed in a wooden case with the following dimensions:-

- 350cm long x 260cm wide x 220cm high
- gross weight: 5600 kg

B Shipping the accessories and spare parts

Packed in a case and cardboard boxes (partly on pallets):-

- Dimensions of the case: 160 x 120 x 100 cm (LxWxH)
- Gross weight 550kg

- Remaining material in cardboard boxes: gross weight 1650 kg

The accessories and spares were shipped at a later date because of technical problems at the manufacturer's works. This material had to be sent in the quickest possible way to ensure that the machinery was ready to operate on time. The extra costs incurred for this had to be discussed with the consignor as it could possibly incur a penalty if the plant was late in being put into operation as a result of the delay.

C Sending materials for test runs

Special (IMO class 3) chemicals had to be delivered in addition to the machine and accessories/spares as they were needed for test runs/testing before the plant was commissioned.

What precautions/regulations had to be observed?

What types of transport would you use for:-

- item A
- item B
- item C?

Mention all the shipping and customs documents required for each consignment to guarantee that they were delivered to the country of destination, including customs clearance, without any problems being encountered.
1.1 Data to be defined by the writer

Place of departure: 71634 Ludwigsburg
Destination: Melbourne, Australia

The inland destination was chosen as the machine is used in the chemical industry which is mainly in the Melbourne area in Australia.

The terms of delivery (prepayment of freight) were defined as DDP (delivery duty paid) (information from Mr John Nicholls); the consignor has to deliver the consignment prepaid for importation to the named destination unloaded on the means of transportation used for the arrival of the goods. The seller had to bear all costs and risks for transporting the goods up to that point, including, where applicable, any customs duty payable for importing said consignment into the country of destination.

This concept includes responsibility for and the risk inherent in settling the customs formalities as well as payment of the formalities, duties, taxes and other charges.

Full description of the machine:-

Pipe laminating machine for spinning glassfibre pipes for use in the chemical industry (information provided by Mr John Nicholls).

Details of packages:-

1. Machine (packed in a wooden case)
   Dimensions: 350 x 260 x 220 cm
   Gross weight: 5600 kg
   According to Mr John Nicholls the machine must not be tilted

2. Accessories and spare parts for the machine
   1 case measuring 160 x 120 x 100 cm
   Gross weight: 550 kg
   66 cardboard boxes (30 x 45 x 30 cm each)
   Gross weight: 1650 kg

3. Materials for test runs
   1 200 litre drum 224 kg, 90cm high
   Diameter 60cm
   (tetrahydrobenzene)

   1 20 litre drum 26 kg, 35 cm high
   Diameter 11cm
   (tertiary butyl mercaptan)
6 x 5 litres cans, each 5.75 kg = 1 carton
(cellulose nitrate solution)

30 prepacked sprays = 1 carton, 10 kg
(glycidaldehyde)

2. Proposals for shipping the consignment

Two carriers can be used to ship to the overseas destination: ocean and air-freight. Airfreight is comparatively very expensive as it is normally used for smaller, very urgent and high-quality consignments. It is therefore recommended that the relevant consignment is sent by sea in view of its size and weight. This must of course be in line with the customer's interests but is certainly more cost-effective than airfreighting.

However the consignment has to be split as the spare parts will not be finished on time. I therefore recommend that the machine and chemicals for the test runs, which can be ready on time, are sent by sea. The spares will be sent on by air at a later date so that the consignment reaches its destination complete and on time. The consignor has been made aware of this by fax (see appendix 1).

3. Proposals for transporting the machine and materials for the test runs

Attention must be drawn to the following to ensure that the two parts of the consignment are carried without any hitches:

Conventional or container loading is possible. As the frequency at which container ships sail is significantly higher than that of conventional cargo vessels, container loading is recommended. Speed and safety on trans-shipment are points in favour of this type of loading. The sailing lists for Rotterdam or Hamburg show that only a few companies offer conventional cargo to Melbourne:

(eg Wallenius-Wilhelmsen Line ⇒ 5 sailings per month
P&O Nedlloyd ⇒ weekly sailings)

The container ships sail much more frequently.

3.1 Packing

The machine is packed in a wooden case. As the materials for the test runs are dangerous goods, special features must be observed when packing:
First of all the hazard class, UN number and packing group must be determined for each of the dangerous goods.

### 3.1.1 Defining and packing the dangerous goods

**Tetrahydrobenzene** can only be found indirectly in the materials listed as dangerous goods. This substance belongs to hazard class 3 (liquid, flammable substance) and for carriage by road it is designated as number 3 letter b, whilst for ocean transport it comes under class 3.1. From the description given in the IMDG code this product is stowage category E.

A detailed description of the substance is found on page 3114 of the IMDG code.

The various stowage categories are explained in detail in appendix 2.

**UN No.** 2256  
**Packing group according to IMDG** II

**Tertiary butyl mercaptan**

<table>
<thead>
<tr>
<th>ADR class</th>
<th>Ocean transport class 3.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN no</td>
<td>2347</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>IMDG code page 0122</td>
</tr>
</tbody>
</table>

**Cellulose nitrate solution**

<table>
<thead>
<tr>
<th>ADR class</th>
<th>Ocean transport class 3.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN no</td>
<td>2059</td>
</tr>
<tr>
<td>Packing group</td>
<td>I/II</td>
</tr>
<tr>
<td></td>
<td>IMDG code page 3138-2</td>
</tr>
</tbody>
</table>

**Glycidaldehyde**

<table>
<thead>
<tr>
<th>ADR class</th>
<th>Ocean transport class 3.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN no</td>
<td>2622</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>IMDG code page 3349</td>
</tr>
</tbody>
</table>

The packaging for the individual substances must be UN tested. For the nitrocellulose solution either the carton must be tested as the outer packaging or the individual cans. For the glycidaldehyde either the carton is to be tested as the outer packaging or the individual sprays. The types of packaging permitted for class 3 dangerous goods are explained in appendix 3.

As all the substances mentioned are class 3 dangerous goods and there is no ban on combined cargo within this class (see appendix 4 for separation regulations), all hazardous substances can be packed in a wooden case for simplicity sake to prevent any small packages from going astray. A Sirex
certificate is needed for this case (see 3.5 for further details). Testing to UN guidelines is not applicable as the case is only considered as a repackaging/loading aid.

According to the size of the dangerous goods label, the case must comply with the internal retaining capacity of 100 x 120 cm. The case can be packed on an EW/industrial pallet.

3.2 Choosing the sea port

There are several possibilities when choosing the sea port. In addition to shipping via a German port such as Hamburg, Bremen or Bremerhaven, it is also possible to load at one of the "west ports"/ARA ports (Amsterdam, Rotterdam and Antwerp). The freight rates for all ports between Hamburg and Bordeaux are equally as high (range); other criteria such as on-carriage arrangements, frequency of sailing, shipping line are decisive when selecting the sea port. I chose Hamburg as the port of dispatch (shortest distance) for our consignment.

3.3 On-carriage to sea port and container loading

It is not possible to ship the machine in a normal 20 foot ISO container as it is 260cm wide. It was therefore delivered to the sea port as a LCL (less than container load) consignment, i.e. the goods were just stuffed there. Stowage in the hinterland is not recommended as a flat container is seldom immediately available at a container terminal in the hinterland.

On-carriage to the port is by road; shipping on inland waterways would only be appropriate for bulkier and heavier consignments. The customer has a rail link so on-carriage by rail would also be possible. The machine could be loaded without any problem onto a wagon 3.1m wide, but as this is uncertain, on-carriage will be by lorry.

Advantages of on-carriage by lorry:-

- speed
- flexibility
- direct connection

The following possibilities are available for on-carriage as the machine which is 2.60m in width cannot be loaded onto a conventional lorry with interchangeable bodies or a semi-trailer:-

1. Tilt articulated vehicle with Edscha cover
   The side would have to be taken out and an upright removed. The machine could then be loaded sideways or from the top.
2. Transported on an open vehicle/low loader
   The machine can be loaded without any problem from the top or side; converting or changing the vehicle would not apply.

On both types of loading care must be taken to ensure the load is adequately secured. In each case tensioning belts are needed for tying down and, depending upon the machine’s make-up, it would possibly have to be wedged on the floor of the vehicle.

Because of the machine’s width, a wide load permit would be needed in each case to ensure carriage went without a hitch. The maximum permitted width for road haulage is currently 2.55m.

These permits can be obtained for single or regular journeys and can be bought from the relevant State administrative office. A permit for a single journey costs approximately DM 60; the application should be made several days before the date of transport.

Only the usual freight documents for national domestic traffic is required for on-carriage by lorry:-

A consignment or delivery note is recommended as the accompanying document for the machine.

The guidelines contained in the regulations governing dangerous goods by road (GGVS) must be observed for the on-carriage of the dangerous goods by lorry. These stipulate the following accompanying documents:-

- consignment note with an exact description of the goods
- consignor’s declaration to ADR marginal number 2002 (9)
- driver training certificate to rule 10 315
- special approval certificate (ADR certificate) to rule 10 282
- safety instructions (for whole consignment in English and German) to rule 10 385

The forwarder obtains the safety instructions and consignor’s declaration from the consignor (safety instructions for the dangerous goods to be transported enclosed as appendices 5 to 8).

The following must also be observed with regard to the lorry:-

The boundary quantities for the dangerous goods can be established using rule 10 011. If the number of points is greater than 1000, as in the case, the lorry must display orange warning signs in a visible place on the outside (back and front).
3.3.1. Marking the goods

There are no particular marking obligations for transporting the machine by road although there are for the dangerous goods. Each package must have on the outside the UN number for the packaging test, the name of the material and the corresponding hazard label. For class 3 materials the hazardous label is a red adhesive label with a black flame (appendix 9). Glycidaldehyde must also have a toxic substance label as it exhibits the corresponding properties (appendix 10).

The wooden case containing all the goods must again have all the marks on the outside. The load must be adequately secured within the case so that none of the individual consignments can be damaged. The consignment will be handed over to a shipping agent in Hamburg for it to look after stuffing the goods.

Because of its size, the machine cannot be loaded flush with the edges of the flat container. Attention should be paid when stowing as to whether the machine can be loaded jutting out on one side or whether it has to be fixed centrally on the container on account of internal localised loading. This point has an effect on the height of the sea freight as account will be taken of the neighbouring batch(es) of containers in view of the machine's width.

Because of its width, the machine will probably be stowed relatively further up on deck due to the "missing batches" which may occur. As, depending upon stowage categories, the dangerous goods must be partially loaded on deck it is possible to pack the case on the flat container. Insurance allows deck loading. When loading on deck, care must be taken to ensure the packaging is secure and weather-proof as the consignment faces between 4 and 5 weeks sailing time and is exposed to extreme changes in weather. It is recommended that the dangerous goods in the cartons are also packed in oiled paper to prevent water damage.

3.4 Ocean transport

The GGVSee forms the legal basis when shipping dangerous goods. This stipulates that the dangerous goods may only be carried by sea if all the provisions of the IMDG Code (International Marine Dangerous Goods Code) are observed. Attention must also be paid to labelling the individual packages in accordance with GGVSee and to marking the case.

The labels differ in their appearance from those used in road haulage. The dangerous goods labels complying with the IMDG guidelines are attached as appendices 11 and 12.
Care must also be taken with butyl mercaptan to ensure that it is marked with a special label as it is a marine pollutant (appendix 13). All the provisions relevant for ocean transport are listed in detail in the IMDG code.

3.4.1 Export documents for the machine

Export declaration

Two copies of the commercial invoice in English; this must not be certified but duly signed and include the following information:

1. Name and address of the seller
2. Name and address of the buyer
3. Name of the ship on which the goods are to be shipped to Australia
5. Marks, numbers, quantity and type of packages
6. Description of the goods with indication of quantity, quality and other details available.
   It should be noted that general terms such as machinery is not sufficient for the machines; a precise description must be given. Machines and electronic components must be listed and invoiced separately.
7. Selling price
   The unit price and total price of the goods, quoting the terms of delivery.
   The FOB price is to be given in particular.
8. Labour costs incurred for packing the goods into the outside packages
9. Value of the outside packages. Containers are not considered to be outside packaging.
   The information mentioned under 8 and 9 must be inserted separately although they are recognised as being part of the FOB value and are to be included in same.
10. Licence or patent fees if applicable
11. Cost of freight and insurance for transporting the goods to Australia
   These CIF costs must be indicated even if the goods are sold on a FOB basis.
12. Details of all arrangements of any kind resulting in a change or possible change in the selling price.

The original commercial invoice must have a handwritten signature.

Packing declaration (on FCL consignments this is prepared in the hinterland by the consignor/loader whilst for LCL consignments this document is drawn up at the port by the stowage firm)

Packing list
Sirex certificate

Certificates of origin are not required

Bills of lading must not be certified; bills of lading to order are permitted - a notify address is required.

Importing into Australia is relaxed to a large extent; there are import quotas for certain goods. Where licences are required, the goods must have arrived at the port of destination before the licence expires. This is generally valid for 12 months. There are no restrictions on importing machines into Australia. Should an import licence or approval for the importation of these goods be necessary, these documents would have to dealt with by the buyer in advance of the purchase contract.

3.4.2 Export documents for the dangerous goods

An IMO declaration is necessary when exporting dangerous goods to Australia, in addition to the standard documents required, as mentioned under 3.4.1 above. This declaration is a form to be completed by the consignor in a similar way to the consignor's declaration.

This form can be widened into the transit document by entering additional information. The following details are required for this:-

consignor

consignee

container packing certificate

technical name, classes and UN number for the individual substances

precise description of the individual packages

gross volume of packages

EMS (emergency schedule) number. The emergency measures can be found in an emergency by looking this number up in a book.

MFAG (medical first aid guide). This number is used for finding out the first aid measures quickly.

Generally the last two numbers given above have already been recorded by the seller on the IMO declaration.
The IMO declaration must be signed by both the consignor and any person loading the dangerous goods into the container.

### 3.4.3 Shipping costs

A quotation from an international forwarder for shipping the goods looks as follows:

Freight ex 71634 Ludwigsburg to free arrival port of Hamburg

- DM 1,000 for the machine and case with the dangerous goods

The following costs are due for port handling:

- Dock dues DM 45.60/ton of freight
- Zapp costs DM 25.00/BL (handled via DAKOSY system)
- Export customs clearance DM 25.00/consignment
- Packing in container DM 90.00/consignment
- Terminal handling charges DM 298/container
- Dangerous goods surcharge US$ 10/m³

Ocean freight to free arrival port of Melbourne

- based on 1 x 20 flat container US$ 2800.00
- +6.2% CAF and BAF (currency and bunker adjustment factor) US$ 173.60

Sailing time is generally 31 to 35 days.

The price is more favourable for outsider shipment, as they can generally offer less frequent sailing dates, in addition to which it takes a bit longer.

The different times come about because the outsider’s vessel unloads in Singapore and the containers are fed from there whilst the conference line’s vessel sails to Australia without transshipment.

### 3.5 Packing regulations for exports to Australia

The following regulations on packaging must be observed for shipments to Australia:

1. Hay and straw
   - The use of hay and straw for packing is banned by order of the Australian Ministry of Health; there is no special permit from the director of
quarantine. Account must be taken of this when stuffing the cases for securing the load.

2. Wooden packaging including pallets
Every kind of wooden packaging (both inner and outer) is subject to inspection by the quarantine authorities at the time of importation and in the event of an attack by insects being discovered it can be fumigated or rejected at the cost of the importer. It is therefore recommended to treat the wood against Sirex wasps (Sirex or other wood-boring insects) in Germany and attach a relative Sirex certificate to the export documents. All relevant cases, hutches, pallets, etc, must in this case have an inscription "treated against Sirex". The methods used to treat the wood are laid down in the Australian quarantine requirements which are available for inspection from the Chamber of Commerce. Only these methods are recognised.

The wooden packaging provisions are also important when loading in containers. Care should be taken to ensure that the wood used to fasten the packages in the container (wedges, slats, etc) has been treated by these methods. Sirex certificates can be obtained for a fee in Germany from the office responsible for the control of plant pests and diseases. The applicant must produce to this office a certificate from the firm decontaminating or fumigating the wood or package. Certificates are only accepted from firms recognised by said office for carrying out the methods of treatment specified by the Australian import authorities. The Sirex certificate must be sent with a packing declaration from the exporter to the customer in Australia so that it is available when the consignment arrives or for customs clearance.

As these regulations are very tightly controlled it is recommended that they are strictly observed to avoid delays or fines.

As already mentioned, care should be taken when packing the dangerous goods to ensure that the packaging has been tested to UN guidelines.

3.6 Insurance/liability

Door-to door insurance with full cover (WPA) is recommended for this transport. The premiums are geared to the value of the goods and risk. Where the value of the goods is assumed to be about DM 500,000 the premium will come to 3.5-4/1000. The basis used to calculate the premium is generally the value of the goods + freight charges + 10% profit margin. There is also a surcharge of 0.3/1000 for war and strikes.

When properly packed, the insurance [company] is liable for partial and total loss, damage, etc. Any damage which may occur must be reported to the goods in
4. **Proposal for transporting accessories and spare parts**

This part of the consignment is being sent by airfreight because of the time factor. Transportation could be handled in the following way:

4.1 **Packing and on-carriage to airport**

The 66 cardboard boxes are packed on pallets to reduce the number of units shipped. Due to the volume it is recommended stowing on EW pallets (each 100 x 120cm) as relatively little space is lost and 8 cardboard boxes can be loaded per layer. A total height of 160cm should not be exceeded when packing these pallets as otherwise there could be problems when loading into the aircraft (cargo hatches).

The cardboard boxes can be packed on two EW pallets (33 boxes per pallet). These 3 cargo units (2 pallets and the case) are collected in Ludwigsburg and taken to the airport in Stuttgart or Frankfurt/Main by groupage lorry. As consignments for Australia are fed to Frankfurt (road feeder service), a direct groupage lorry to Frankfurt is recommended (more cost-effective than the airlines’ road transport). The consignment is packed at the airport with other groupage consignments onto special air freight pallets (unit load devices) and then loaded into the aircraft.

4.2 **Air freight charges**

The customer is charged using TACT.

As it is possible, with difficulty, to pack an ULD at the consignor’s premises, the ULD rates given in the tariff for the ULD 5b cannot be charged. This ULD type would in fact be ideal for our consignment but as the ULDs cannot be moved by the type of stacker used for loading in a normal forwarding depot, this is not recommended. The ULD rates may only be charged however when the packed ULD is delivered as an unit. Another rate must therefore be used.

A so-called Q rate (quantity rate) can apply. A Q 800 rate is given for this consignment in the TACT applicable from April 2000. Our airfreight is calculated as follows: the case and cartons are charged by actual weight (volume weight is lower).

This comes to: 2200 kg x 5.07 EUR/kg = 11154 EUR multiplied by 1.95583 this gives a DM price of DM 21,815.33.
The following ancillary costs are added to this under point 8.3 of TACT rules:

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Cost in EUR/kg</th>
<th>Total in EUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>General handling charges</td>
<td>0.08</td>
<td>176</td>
</tr>
<tr>
<td>Issuing AWB</td>
<td>10</td>
<td>19.56</td>
</tr>
</tbody>
</table>

DM 344.23

DM 22,179.12

Account may also have to be taken of a fuel surcharge.

The total does not relate to the airline’s return account amount as the forwarder receives a more favourable rate. The difference between the two amounts is the forwarder’s profit.

The accompanying documents for the consignment are the same as those for ocean freight and can be seen in point 3.4.1. A Sirex certificate is required for the pallets and case.

4.3 Air freight marking regulations

The usual markings are adequate but each package must be marked clearly under the marks and number with the name of the destination airport in letters at least 35cm high. Packages weighing more than 2 tons must have details of the exact weight in a conspicuous place. Dangerous goods are to be marked according to the provisions of marine law.

5. Customs procedures

For ocean freight:

The consignor/its forwarding agent takes the commercial invoice and export declaration to the competent customs office of exportation, where the documents are checked if the goods are valued at more than DM 6,000. Copy 1 and 2 of the declaration are kept. Should a preference document be required for Australian customs import clearance, the consignor must provide a supplier’s declaration which certifies that the goods originate from the EU. An EUR.1 form is to be completed with the help of the supplier’s declaration. Both these documents must be presented at the customs office where the EUR.1 is stamped. Stamped copy 3 of the export declaration accompanies the consignment in the sea port. The customs office of exportation confirms the physical departure of the goods from the customs area by affixing an official stamp on the back giving the relevant details. This copy is returned to the person making the declaration and must be forwarded to the declarant for say proof of delivery exempt from turnover tax. The preference document is sent to the receiving forwarding agent in Australia together with the commercial invoice, etc.
There are two possible courses of action when the consignment arrives at the port of Melbourne:

A customs document (transit document) is issued at the port with the help of the documents from the receiving forwarding agent. The goods can then be transported to the place of destination under customs seal and must be cleared there by the relevant customs office.

The goods can be cleared at the port for home use and can be transported to the consignee without customs seal.

Customs clearance for airfreight is the same as for ocean freight. An airway bill is issued instead of a bill of lading.

Tariff classification of the goods is important for customs clearance.

The machine comes under the following tariff heading:

Statistical number 84752100
Precise description Machine for making optical fibres or their early form

The accessories and spare parts come under tariff heading:

Statistical number 84759000
Description Parts for the above machine

Tariff classification of dangerous goods:

<table>
<thead>
<tr>
<th>Description</th>
<th>Statistical number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycidaldehyde</td>
<td>29 12 1900</td>
</tr>
<tr>
<td>Cyclohexane</td>
<td>29 02 1110</td>
</tr>
<tr>
<td>Butyl mercaptan</td>
<td>27 11 1400</td>
</tr>
<tr>
<td>Nitrocellulose solution</td>
<td>39 12 2019</td>
</tr>
</tbody>
</table>

6. **Australian import duties**

1. **Customs duty**

   The rate of duty on this machine is 5% of the dutiable value. In Australia the dutiable value on imports is the FOB value.

2. **22% sales tax**

   This is calculated as follows:

   FOB value
The importer produces an import declaration and gives this to its customs office which then calculates the import duties. The goods may be imported when the imported has paid these.

**Conclusion**

This dissertation deals with the complete processing of a shipment to Australia. A theoretical concept of the whole process must first be developed when planning the shipment. Things such as loading possibilities, pre-determined deadlines, handling of dangerous goods, special characteristics of the goods, etc, must be clarified during this planning process. The information gleaned determines the next course of action. The smooth running of the whole project should always be the central theme when planning the shipment. Consideration should always be given theoretically to whether the individual steps and precautions to be taken will merge together without any problems and no difficulties can come to light. This relates to both the practical side of the shipment such as loading, stowing, etc and the theoretical aspect which is responsible for the documents being processed smoothly. In this respect consideration must be given above all to the customs documents so as to avoid any problems during export and import. A start can be made on the practical handling of the shipment once the theoretical concept has been defined. A schedule is recommended to take account of on-carriage, transshipment and journey time so that all parts of the consignment arrived at their destination at the same time.

**Bibliography**

Jahrbuch für Export- und Versandleiter; K.O. Storck Verlag, 2000

Bischof, Meister, Pyell, Roj, Stadler, Wagner; Speditionsbetriebslehre; Stam-Verlag/1998

Foreign trade division of the Hamburg Chamber of Commerce; Konsulats- und Mustervorschriften; 33rd edition, June 1999

Federal Statistics Office; Warenzeichnis für Außenhandelsstatistik, 2000; Metzler/Poeschel, 1999

German version of IMDG Code; Storck-Verlag
Port of Hamburg; Shipping list; internet
Kühn/Birett; Gefahrgutschlüssel; ecomed
Schenker-BTL (D) AG; Der Gefahrgutbeauftragte; Ridder, 06/99
Hapag-Lloyd, Hamburg; Container Packaging; 1998
Diercke Weltaltas; Deutscher Taschenbuchverlag und Westermann
TACT April 2000