

SECTION H - EXPORTER'S DECLARATION

I hereby declare that.....*JFE Steel Corporation*.....(company) did, during the period of investigation export the goods under consideration and have completed the attached questionnaire and, having made due inquiry, certify that the information contained in this submission is complete and correct to the best of my knowledge and belief.



partly
I hereby declare that.....(company) did not, during the period of investigation, export the goods under consideration and therefore have not completed the attached questionnaire.

Name : Takeshi ESUMI.....

Signature : *T. Esumi*.....

Position in Company:

Staff Deputy General Manager, Export Planning & Coordination Sec.
Sales Coordination & Operation Dept.
JFE Steel Corporation.....

Date : *25 July 2012*.....

SECTION I - CHECKLIST

This section is an aid to ensure that you have completed all sections of this questionnaire.

Section	Please tick if you have responded to all questions
Section A – general information	<input checked="" type="checkbox"/>
Section B – export price	<input checked="" type="checkbox"/>
Section C – like goods	<input checked="" type="checkbox"/>
Section D – domestic price	<input type="checkbox"/>
Section E – fair comparison	<input type="checkbox"/>
Section F – exports to third countries	<input type="checkbox"/>
Section G – costing information	<input type="checkbox"/>
Section H – declaration	<input checked="" type="checkbox"/>

partly responded

partly responded

Electronic Data	Please tick if you have provided spreadsheet
Income statement	<input type="checkbox"/>
Turnover – sales summary	<input type="checkbox"/>
Australian sales – list of sales to Australia	<input checked="" type="checkbox"/>
Domestic sales – list of all domestic sales of like goods	<input type="checkbox"/>
Third country – third country sales	<input type="checkbox"/>
Production – production figures	<input type="checkbox"/>
Domestic costs – costs of goods sold domestically	<input type="checkbox"/>
Australian costs – costs of goods sold to Australia	<input type="checkbox"/>



International Trade Remedies Branch

Exporter Questionnaire

Product: Hot rolled coil steel

From: Japan, the Republic of Korea, Malaysia
and Taiwan

Investigation period: 1 April 2011 to 31 March 2012

Response due by: 25 July 2012

Investigation case manager: Lydia Cooke

Phone: +61 2 6245 5434

Fax: +61 2 6275 6990

E-mail: itrops1@customs.gov.au

Australian Customs and Border Protection website:

www.customs.gov.au

**Return completed
questionnaire to:** International Trade Remedies Branch
Australian Customs and Border
Protection Service
5 Constitution Avenue
Canberra ACT 2601
AUSTRALIA

Attention: Director Operations 1

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GOODS UNDER CONSIDERATION

The goods under consideration (the goods) i.e. the goods exported to Australia, allegedly at dumped prices, is hot rolled coil. The applicant provided further details as follows:

General description

The application specifies that:

Hot rolled coil (including in sheet form), a flat rolled product of iron or non-alloy steel, not clad, plated or coated (other than oil coated).

Goods excluded from this application are hot rolled products that have patterns in relief (known as checker plate) and plate products.¹

Hot Rolled Coil ("HRC") is supplied in a range of thicknesses, all of which are covered by this application.

¹ Application for the publication of a dumping duty notice for Hot Rolled Coil exported from Japan, the Republic of Korea, Malaysia and Taiwan (Application), page 10.

INSTRUCTIONS

Why you have been asked to fill out this questionnaire?

Customs and Border Protection is responsible for investigating the allegation that hot rolled coil has been exported to Australia from the Republic of Korea (Korea), Taiwan, Japan and Malaysia at dumped prices and is causing, or are threatening to cause, material injury to an Australian industry producing like goods.

Customs and Border Protection will use the information you provide to determine normal values and export prices over the investigation period. This information will determine whether hot rolled coil is dumped. You may make separate submissions concerning any other matter, for example injury.

Customs and Border Protection investigation will be carried out under the provisions of the Part XVB of the *Customs Act 1901*.

What happens if you do not respond to this questionnaire?

You do not have to complete the questionnaire. However, if you do not respond, Customs and Border Protection may be required to rely on information supplied by other parties (possibly information supplied by the Australian industry).

If you do not provide all of the information sought, or if you do not allow Customs and Border Protection to verify the information, we may deem that you did not cooperate with the investigation. In that case we may assess a dumping margin for your company based upon normal values that may be the highest determined in your country during the investigation period.

It is in your interest, therefore, to provide a complete submission.

Due date for response

Manufacturers and exporters are requested to respond to this questionnaire and return it to Customs and Border Protection within the time specified on the cover page. There is a statutory time limit imposed for the investigation. Customs and Border Protection may not be able to consider submissions received after the due date.

If you cannot lodge your submission by the due date please advise the investigation case manager as soon as possible.

Confidential and non-confidential submissions²

You are required to lodge one confidential and two non-confidential versions of your submission by the due date. Please ensure that *each page* of information you provide is clearly marked either "IN-CONFIDENCE" or "NON-CONFIDENTIAL".

All information provided to Customs and Border Protection in-confidence will be treated accordingly. The non-confidential version of your submission will be placed on the public record.

Please note, Australia's anti-dumping and countervailing legislation requires that to the extent that information given to Customs and Border Protection is claimed to be confidential or whose publication would adversely affect a business or commercial interest, the person giving the information must ensure that a summary of that information contains sufficient detail to allow a reasonable understanding of the substance of the information, but does not breach confidentiality nor adversely affect those interests.

The legislation allows that a person is not required to provide a summary for the public record if Customs and Border Protection can be satisfied that no such summary can be given that would allow a reasonable understanding of the substance of the information. However, such a summary would add considerably to an interested party's understanding of information contained in a document.

As provided for in Australia's anti-dumping and countervailing legislation, all submissions are required to have a bracketed explanation of deleted or blacked out information for the non-confidential version of the submission. Note that if such an explanation is not provided, Customs and Border Protection may disregard the information in the submission. An example of a statement to accompany deleted/blacked out text is:

[explanation of cost allocation through the divisions].

If, for some reason, you cannot produce a non-confidential summary, please contact the investigation case manager.

Exporter's declaration

At section H, you are required to make a declaration that the information contained in your submission is complete and correct. Alternatively, if you did not export the goods during the investigation period, you may make a declaration to that effect. You must return a signed declaration with your response to the questionnaire.

Verification of the information that you supply

Customs and Border Protection will seek to verify the information provided in your submission. The purpose of the visit is to verify the information submitted in

² The term "submissions" also refers to questionnaire responses.

response to this questionnaire. It is not meant to be a chance for you to provide new or additional information. Customs and Border Protection expects your response to the questionnaire to be complete and accurate.

Verification visits may take several days. We will want to examine in detail your company's records in respect of the goods and will ask for copies of documents relating to the manufacture and sale of the goods. We will need to consult with your staff, particularly your financial controller (or accountant) and your domestic and export sales people. We may also need to see your factory, in which case we will need to consult with your operational managers.

After gathering the information we will prepare a report of the visit. We will provide you with a draft of the report and provide you with an opportunity to review the report for accuracy. We will also ask you to prepare a non-confidential copy of the report for the public record.

If you do not manufacture the goods

You may export but not produce or manufacture the goods (for example, you are a trading company, broker, or vendor dealing in the goods).

In such cases it is important that you forward a copy of this questionnaire to the relevant manufacturers **immediately**. You should also inform the investigation case officer of the contact details for these manufacturers.

You should complete those sections of the questionnaire that you are reasonably able to complete. If, for example, you are unable to supply details of production costs, you should clearly explain why the section does not apply to your company.

If you do not export the goods

Depending on the arrangement for sale of the goods to Australia through an intermediary, Customs and Border Protection will have to determine who the exporter of the goods is for the purpose of this investigation.

In any case, information (such as cost of production data) supplied by the manufacturer will be relevant to establishing the normal value of the goods. In the absence of verified information, Customs and Border Protection may use other available information. This information may result in a decision less favourable to your company.

Outline of information required by this questionnaire

Section	Explanation
Section A	General information relating to your company including financial reports.
Section B	A complete list of your company's exports to Australia over the investigation period.
Section C	A list of goods sold on the domestic market of the country of export (like goods) that may be compared to the goods.
Section D	A detailed list of all of your company's sales of like goods in your domestic market.
Section E	Information to allow a fair comparison between export and domestic prices.
Section F	Information in relation to your company's exports of like goods to countries other

	than Australia.
Section G	Costs to make and sell, for exports to Australia and for the domestic market.
Section H	Your declaration.
Section I	A checklist.
Appendix 1	A glossary of terms used in this questionnaire

Some general instructions for preparing your response

- When answering the questionnaire please carefully read all instructions. Customs and Border Protection requires a response to *all* sections of this questionnaire. Please provide an explanation if a question is not relevant to your situation.
- Answer questions in the order presented in the questionnaire. Please ensure that information submitted conforms to the requested format and is clearly labelled. Please repeat the question to which you are responding and place your answer below it.
- Identify source documents and advise where they are kept. During on-site verification you should be prepared to substantiate all the information you have submitted. Every part of the response should be traceable to company documents that are used in the ordinary course of business.
- We recommend that you retain all work sheets used in answering the questionnaire, in particular those linking the information supplied with management and accounting records. This will help us to verify the information.
- Clearly identify all units of measurement and currencies used. Apply the same measurement consistently throughout your response to the questionnaire.

Instructions on providing electronic data

- It is important that information is submitted in electronic format.
- Electronic data should be emailed or submitted on a CD-ROM, in IBM/MS-DOS format, or another operating system whose disk format is compatible with this MS-DOS version.
- The data must be created as spreadsheet files, preferably in Microsoft Excel, or alternatively in an Excel compatible format (for example, Excel can normally access data in Dbase or as an ASCII file).
- The Excel files must be compatible to the USA version.
- If you cannot present electronic data in the requested format contact the investigation case officer as soon as possible.

Further information

Before you respond to the questionnaire you should read all the documentation enclosed with this application including the applicant's non-confidential submission, the booklet *Australia's Anti-Dumping and Countervailing Administration* and the Australian Customs Dumping Notice notifying the initiation of the investigation. We also advise that you read the attached glossary of terms.

If you require further assistance, or you are having difficulties completing your submission, please contact the investigation case manager. Customs and Border Protection will need to know the reasons.

SECTION A - COMPANY STRUCTURE AND OPERATIONS

This section requests information relating to company details and financial reports.

A-1 Identity and communication

Please nominate a person within your company who can be contacted for the purposes of this investigation:

Head Office:

Name: Takeshi ESUMI

Position in the company: Staff Deputy General Manager
Export Planning & Coordination Sec.
Sales Coordination & Operation Dept.

Address: 2-3, Uchisaiwai-cho 2-chome, Chiyoda-ku,
Tokyo 100-0011, Japan

Telephone: +81-3-3597-3618

Facsimile number: +81-3-3597-3781

E-mail address of contact person: t-esumi@jfe-steel.co.jp

Factory:

Address:

Telephone:

Facsimile number:

E-mail address of contact person:

A-2 Representative of the company for the purpose of investigation

If you wish to appoint a representative to assist you in this investigation, provide the following details:

Name: John COSGRAVE

Director Trade Measures

Minter Ellison Lawyers

Address: Minter Ellison Building • 25 National Circuit • Forrest • ACT 2603

Telephone: +61 2 6225 3781

Facsimile/Telex number: +61 2 6225 1781

E-mail address of contact person: john.cosgrave@minterellison.com

Note that in nominating a representative, Customs and Border Protection will assume that confidential material relating to your company in this investigation may be freely released to, or discussed with, that representative.

A-3 Company information

1. What is the legal name of your business? What kind of entity is it (eg. company, partnership, sole trader)? Please provide details of any other business names that you use to export and/or sell goods.

Answer:

The legal name of our business is JFE Steel Corporation.

JFE Steel is a stock company under the Companies Act of Japan.

JFE Steel does not have any other particular business names it uses to export and/or sell goods.

2. Who are the owners and/or principal shareholders? Provide details of shareholding percentages for joint owners and/or principal shareholders. (List all shareholders able to cast, or control the casting of, 5% or more of the maximum amount of votes that could be cast at a general meeting of your company).

Answer:

JFE Steel is a wholly owned subsidiary of JFE Holdings, Inc. (i.e. JFE Holdings, Inc. owns 100% of the shares in JFE Steel.)

3. If your company is a subsidiary of another company, list the principal shareholders of that company.

Answer:

Please see Annex A-3.3.

4. If your parent company is a subsidiary of another company, list the principal shareholders of that company.

Answer:

Our parent company, JFE Holdings, Inc. is not a subsidiary of another company.

5. Provide a diagram showing all associated or affiliated companies and your company's place within that corporate structure.

Answer:

Please see Annex A-3.5.

6. Are any management fees/corporate allocations charged to your company by your parent or related company?

Answer:

[Allocation Details]

7. Describe the nature of your company's business. Explain whether you are a producer or manufacturer, distributor, trading company, etc.

Answer:

JFE Steel is a steel manufacturer and engages in producing and selling of steel products.

8. If your business does not perform all of the following functions in relation to the goods, then please provide names and addresses of the companies which perform each function:

- produce or manufacture;
- sell in the domestic market;
- export to Australia; and
- export to countries other than Australia.

Answer:

JFE Steel is a manufacturer of steel products. JFE Steel sells steel products through trading companies in the domestic market as well as Australia and other countries.

With regard to the names and addresses of trading companies, please see Annex A-3.8.

9. Provide your company's internal organisation chart. Describe the functions performed by each group within the organisation.

Answer:

Please see Annex A-3.9.

10. Provide a copy of your most recent annual report together with any relevant brochures or pamphlets on your business activities.

Answer:

Please see below website (JFE Group TODAY 2011) and brochure attached.

<http://www.jfe-holdings.co.jp/en/investor/library/group-today/index.html>

A-4 General accounting/administration information

1. Indicate your accounting period.
2. Indicate the address where the company's financial records are held.
3. Please provide the following financial documents for the two most recently completed financial years plus all subsequent monthly, quarterly or half yearly statements:
 - chart of accounts;

- audited consolidated and unconsolidated financial statements (including all footnotes and the auditor's opinion); and
- internal financial statements, income statements (profit and loss reports), or management accounts, that are prepared and maintained in the normal course of business for the goods.

These documents should relate to:

- the division or section/s of your business responsible for the production and sale of the goods, and
 - the company.
4. If you are not required to have the accounts audited, provide the unaudited financial statements for the two most recently completed financial years, together with your taxation returns. Any subsequent monthly, quarterly or half yearly statements should also be provided.
5. Do your accounting practices differ in any way from the generally accepted accounting principles in your country? If so, provide details.
6. Describe the significant accounting policies that govern your system of accounting, in particular:
- the method of valuation for raw material, work-in-process, and finished goods inventories (e.g. last in first out – LIFO, first in first out- FIFO, weighted average);
 - costing methods, including the method (e.g. by tonnes, units, revenue, direct costs etc) of allocating costs shared with other goods or processes (such as front office cost, infrastructure cost etc);
 - valuation methods for damaged or sub-standard goods generated at the various stages of production;
 - valuation methods for scrap, by products, or joint products;
 - valuation and revaluation methods for fixed assets;
 - average useful life for each class of production equipment and depreciation method and rate used for each;
 - treatment of foreign exchange gains and losses arising from transactions;
 - treatment of foreign exchange gains/losses arising from the translation of balance sheet items;
 - inclusion of general expenses and/or interest;
 - provisions for bad or doubtful debts;
 - expenses for idle equipment and/or plant shut-downs;
 - costs of plant closure;
 - restructuring costs;
 - by-products and scrap materials resulting from your company's production process; and
 - effects of inflation on financial statement information.

7. In the event that any of the accounting methods used by your company have changed over the last two years provide an explanation of the changes, the date of change, and the reasons for it.

A-5 Income statement

Please fill in the following table. It requires information concerning all products produced and for the goods. You should explain how costs have been allocated.

	Most recent completed financial year (specify)		Investigation period	
	All products	The goods	All products	The goods
Gross sales (1)				
Sales returns, rebates and discounts (2)				
Net sales (3=1-2)				
Raw materials (4)				
Direct labour (5)				
Depreciation (6)				
Manufacturing overheads (7)				
Other operating expenses (8)				
Total cost to make (9=4+5+6+7+8)				
Operating income (10=3-9)				
Selling expenses (11)				
Administrative & general expenses (12)				
Financial expenses (13)				
SG&A expenses (14)=(11+12+13)				
Income from normal activities (15)=(10-14)				
Interest income (16)				
Interest expense (enter as negative) (17)				
Extraordinary gains and losses – enter losses as negative (18)				
Abnormal gains and losses – enter losses as negative (19)				
Profit before tax (20)=(15+16+17+18+19)				
Tax (21)				
Net profit (22)=(20-21)				

Note: if your financial information does not permit you to present information in accordance with this table please present the information in a form that best reflects your financial reporting.

Prepare this information on a spreadsheet named "Income statement".

This information will be used to verify the completeness of cost data that you provide in Section G. If, because of your company's structure, the allocations would not be helpful in this process, please explain why this is the case.

A-6 Sales

State your company's net turnover (after returns and all discounts), and free of duties and taxes. Use the currency in which your accounts are kept, in the following format:

	Most recent completed financial year (specify)		Investigation period	
	Volume	Value	Volume	Value
Total company turnover (all products)				
Domestic market				
Exports to Australia				
Exports to Other Countries				
Turnover of the nearest business unit, for which financial statements are prepared, which includes the goods				
Domestic market				
Exports to Australia				
Exports to Other Countries				
Turnover of the goods				
Domestic market				
Exports to Australia				
Exports to Other Countries				

Prepare this information in a spreadsheet named **"Turnover"**.

This information will be used to verify the cost allocations to the goods in Section G.

Also, you should be prepared to demonstrate that sales data shown for the goods is a complete record by linking total sales of these goods to relevant financial statements.

SECTION B - SALES TO AUSTRALIA (EXPORT PRICE)

This section requests information concerning your export practices and prices to Australia. You should include costs incurred beyond ex-factory. Export prices are usually assessed at FOB point, but Customs and Border Protection may also compare prices at the ex factory level.

*You should report prices of **all goods shipped** to Australia during the investigation period.*

The invoice date will normally be taken to be the date of sale. If you consider:

- the sale date is not the invoice date (see 'date of sale' column in question B4 below) and;
- an alternative date should be used when comparing export and domestic prices.

*You **must** provide information in section D on domestic selling prices for a matching period - even if doing so means that such domestic sales data predates the commencement of the investigation period.*

B-1 For each customer in Australia to whom you shipped goods in the investigation period list:

name;
address;
contact name and phone/fax number where known; and
trade level (for example: distributor, wholesaler, retailer, end user, original equipment).

Answer:

Please see Annex B-1.

B-2 For each customer identified in B1 please provide the following information.

- Describe how the goods are sent to each customer in Australia, including a diagram if required.

Answer:

Please see Annex B-2(1).

- Identify each party in the distribution chain and describe the functions performed by them. Where commissions are paid indicate whether it is a pre or post exportation expense having regard to the date of sale.

Answer:

Please see Annex B-2(1).

- Explain who retains ownership of the goods at each stage of the distribution chain. In the case of DDP sales, explain who retains ownership when the goods enter Australia.

Answer:

[Details of ownership change]

- Describe any agency or distributor agreements or other contracts entered into in relation to the Australian market (supply copy of the agreement if possible).

Answer:

JFE Steel has not any agency nor distributor agreements or other contracts.

- Explain in detail the process by which you negotiate price, receive orders, deliver, invoice and receive payment. If export prices are based on price lists supply copies of those lists.

Answer:

JFE Steel receives an inquiry from customers through trading companies and negotiates terms and conditions of sales, [Negotiation details]

[Order & Order confirmation details]

The order confirmation will identify trading companies' customer, as well as trading companies.

After the goods are ready for shipment, JFE Steel loads the goods on a vessel according to trading companies' order. Trading companies are also shipper to declare for export.

JFE Steel invoices to trading companies by computer, usually within one day of shipment. JFE Steel ships the goods to the destination named in the order (often the destination of trading companies' customer). JFE Steel does not normally see invoice from trading companies to their customer.

JFE Steel does not invoice to trading companies before shipment. The date of shipment will appear on the invoice as the "Invoice Date".

After the vessel departs, trading companies arrange shipping documents such as invoice, bill of lading, packing list, mill certificate etc. in accordance with requirements of Letter of Credit issued by trading companies' customer and negotiate with the bank to receive payment.

JFE Steel receives payment from trading companies in accordance with agreed payment terms after shipment. The payment terms between JFE Steel and trading companies is "closing on 20th of the month of shipment, payment shall be made by the end of the month".

- State whether your firm is related to any of its Australian customers. Give details of any financial or other arrangements (eg free goods, rebates, or promotional subsidies) with the customers in Australia (including parties representing either your firm or the customers).

Answer:

JFE Steel is not related to any of its Australian customers.

- Details of the forward orders of the goods (include quantities, values and scheduled shipping dates).

Answer:

Please see Annex B-2(2).

- B-3** Do your export selling prices vary according to the distribution channel identified? If so, provide details. Real differences in trade levels are characterised by consistent and distinct differences in functions and prices.

Answer:

[Pricing levels]

- B-4** Prepare a spreadsheet named "**Australlan sales**" listing all shipments (i.e. transaction by transaction) to Australia of the goods in the investigation period. You must provide this list in electronic format. Include the following export related information:

Answer

Please see Attachment B-4

Column heading	Explanation
Customer name	Names of your customers
Level of trade	The level of trade of your customers in Australia
Model/grade/type	Commercial model/grade or type
Product code	Code used in your records for the model/grade/type of the goods identified. Explain the product codes in your submission.
Invoice number	Invoice number
Invoice date	Invoice date
Date of sale	Refer to the explanation at the beginning of this section. If you consider that a date other than the invoice date best establishes the material terms of sale, report that date.
Order number	If applicable, show order confirmation, contract or purchase order number if you have shown a date other than invoice date as being the date of sale.
Shipping terms	Delivery terms e.g. CIF, C&F, FOB, DDP (in accordance with Incoterms)
Payment terms	Agreed payment terms e.g. 60 days=60 etc
Quantity	Quantity in units shown on the invoice.
Packaging type	E.g. coil, sheet
Gross invoice value	Gross invoice value shown on invoice in the currency of sale, excluding taxes.
Discounts on the invoice	If applicable, the amount of any discount deducted on the invoice on each transaction. If a % discount applies show that % discount applying in another column.
Other charges	Any other charges, or price reductions, that affect the net invoice value. Insert additional columns and provide a description.
Invoice currency	The currency used on the invoice
Exchange rate	Indicate the exchange rate used to convert the currency of the sale to the currency used in your accounting system
Net invoice value in the currency of the exporting country	The net invoice value expressed in your domestic currency as it is entered in your accounting system
Rebates or other allowances	The amount of any deferred rebates or allowances paid to the importer in the currency of sale

Quantity discounts	The actual amount of quantity discounts not deducted from the invoice. Show a separate column for each type of quantity discount.
Ocean freight**	The actual amount of ocean freight incurred on each export shipment listed.
Marine insurance	Amount of marine insurance
FOB export price**	The free on board price at the port of shipment.
Packing*	Packing expenses
Inland transportation costs*	Inland transportation costs included in the selling price. For export sales this is the inland freight from factory to port in the country of export.
Handling, loading & ancillary expenses*	Handling, loading & ancillary expenses. For example, terminal handling, export inspection, wharfage & other port charges, container tax, document fees & customs brokers fees, clearance fees, bank charges, letter of credit fees, & other ancillary charges incurred in the exporting country.
Warranty & guarantee expenses*	Warranty & guarantee expenses
Technical assistance & other services*	Expenses for after sale services, such as technical assistance or installation costs.
Commissions*	Commissions paid. If more than one type is paid insert additional columns of data. Indicate in your response to question B2 whether the commission is a pre or post exportation expense having regard to the date of sale.
Other factors*	Any other costs, charges or expenses incurred in relation to the exports to Australia (include additional columns as required). See question B5.

* All of these costs are further explained in section E-1.

** FOB export price and Ocean Freight:

FOB export price: An FOB export price must be calculated for each shipment - regardless of the shipping terms. FOB price includes inland transportation to the port of exportation, inland insurance, handling, and loading charges. It excludes post exportation expenses such as ocean freight and insurance. Use a formula to show the method of the calculation on each line of the export sales spreadsheet.

Ocean freight: as ocean freight is a significant cost it is important that the actual amount of ocean freight incurred on each exportation be reported. If estimates must be made you must explain the reasons and set out the basis - estimates must reflect changes in freight rates over the investigation period. Freight allocations must be checked for consistency.

B-5 If there are any other costs, charges or expenses incurred in respect of the exports listed above which have not been identified in the table above, add a column (see "other factors" in question B-4) for each item, and provide a description of each item. For example, other selling expenses (direct or indirect) incurred in relation to the export sales to Australia.

Answer:

There are no other costs, charges or expenses incurred than the table B-4.

B-6 For each type of discount, rebate, allowance offered on export sales to Australia:

- provide a description; and
- explain the terms and conditions that must be met by the importer to obtain the discount.

Where the amounts of these discounts, rebates etc are not identified on the sales invoice, explain how you calculated the amount shown in your

response to question B4. If they vary by customer or level provide an explanation.

Answer:

There are no discount, rebate and allowance on export sales.

B-7 If you have issued credit notes (directly or indirectly) to the customers in Australia, in relation to the invoices listed in the detailed transaction by transaction listing in response to question B4, provide details of each credit note if the credited amount has **not** been reported as a discount or rebate.

Answer:

We have not issued credit notes to the customers in Australia.

B-8 If the delivery terms make you responsible for arrival of the goods at an agreed point within Australia (e.g. delivered duty paid), insert additional columns in the spreadsheet for all other costs incurred.

For example:

Import duties	Amount of import duty paid in Australia
Inland transport	Amount of inland transportation expenses within Australia included in the selling price
Other costs	Customs brokers, port and other costs incurred (itemise)

Answer:

[Delivery term details]

B-9 Select two shipments, in different quarters of the investigation period, and provide a complete set of all of the documentation related to the export sale. For example:

- the importer's purchase order, order confirmation, and contract of sale;
- any technical material in respect of the goods;
- commercial invoice;
- bill of lading, export permit;
- freight invoices in relation to movement of the goods from factory to Australia, including inland freight contract;
- marine insurance expenses; and
- letter of credit, and bank documentation, proving payment.

Customs and Border Protection will select additional shipments for payment verification at the time of the visit.

Answer:

Please see Annex B-9(1) and B-9(2).

SECTION C - EXPORTED GOODS & LIKE GOODS

- C-1** Fully describe all of the goods you have exported to Australia during the investigation period. Include specification details and any technical and illustrative material that may be helpful in identifying, or classifying, the exported goods.

Answer:

Please see Annex C-1.

- C-2** List each type of goods exported to Australia (these types should cover all types listed in spreadsheet "Australian sales" – see section B of this questionnaire).

Answer:

Please see Annex C-2.

- C-3** If you sell like goods on the domestic market, for each type that your company has exported to Australia during the investigation period, list the most comparable model(s) sold domestically;

and provide a detailed explanation of the differences where those goods sold domestically (ie. the like goods – see explanation in glossary) are not identical to goods exported to Australia.

EXPORTED TYPE	DOMESTIC TYPE	IDENTICAL?	DIFFERENCES
Product code of each model of the goods exported to Australia	Product code of comparable model sold on the domestic market of the country of export	If goods are identical indicate "YES". Otherwise "NO"	Where the good exported to Australia is not identical to the like goods, describe the specification differences. If it is impractical to detail specification differences in this table refer to documents which outline differences

Prepare this information on a spreadsheet named "**Like goods**".

- C-4** Please provide any technical and illustrative material that may be helpful in identifying or classifying the goods that your company sells on the domestic market.

SECTION D - DOMESTIC SALES

This section seeks information about the sales arrangements and prices in the domestic market of the country of export.

*All domestic sales made during the investigation period must be listed transaction by transaction. If there is an extraordinarily large volume of sales data and you are unable to provide the complete listing electronically you **must** contact the case officer **before** completing the questionnaire. If the case officer agrees that it is not possible to obtain a complete listing he or she will consider a method for sampling that meets Customs and Border Protection requirements. If agreement cannot be reached as to the appropriate method Customs and Border Protection may not visit your company.*

Customs and Border Protection will normally take the invoice date as being the date of sale in order to determine which sales fall within the investigation period.

If, in response to question B4 (Sales to Australia, Export Price), you have reported that the date of sale is not the invoice date and you consider that this alternative date should be used when comparing domestic and export prices.

*You **must** provide information on domestic selling prices for a matching period - even if doing so means that such domestic sales data predates the commencement of the investigation period.*

If you do not have any domestic sales of like goods you must contact the case officer who will explain the information Customs and Border Protection requires for determining a normal value using alternative methods.

D-1 Provide:

- a detailed description of your distribution channels to domestic customers, including a diagram if appropriate;
- information concerning the functions/activities performed by each party in the distribution chain; and
- a copy of any agency or distributor agreements, or contracts entered into.

If any of the customers listed are associated with your business, provide details of that association. Describe the effect, if any, that association has upon the price.

D-2 Do your domestic selling prices vary according to the distribution channel identified? If so, provide details. Real differences in trade levels are characterised by consistent and distinct differences in functions and prices.

D-3 Explain in detail the sales process, including:

- the way in which you set the price, receive orders, make delivery, invoice and finally receive payment; and the terms of the sales; and
- whether price includes the cost of delivery to customer.

If sales are in accordance with price lists, provide copies of the price lists.

D-4 Prepare a spreadsheet named "**Domestic sales**" listing all sales of like goods made during the investigation period. The listing must be provided on a CD-ROM. Include all of the following information.

Column heading	Explanation
Customer name	Names of your customers. If an English version of the name is not easily produced from your automated systems show a customer code number and in a separate table list each code and name.
Level of trade	The level of trade of your domestic customer
Model/grade/type	Commercial model/grade or type of the goods
Product code	Code used in your records for the model/grade/type of the goods identified. Explain the product codes in your submission.
Invoice number	Invoice number
Invoice date	Invoice date
Date of sale	Refer to the explanation at the beginning of this section. If you consider that a date other than the invoice date best establishes the material terms of sale and should be used, report that date.
Order number	Show order confirmation, contract or purchase order number if you have shown a date other than invoice date as being the date of sale.
Delivery terms	E.g. ex factory, free on truck, delivered into store
Payment terms	Payment terms agreed with the customer e.g. 60 days=60 etc
Quantity	Quantity in units shown on the invoice e.g. litres or kilos.
Packaging type	E.g. coil, sheet
Gross invoice value	Gross value shown on invoice in the currency of sale, net of taxes.
Discounts on the Invoice	The amount of any discount deducted on the invoice on each transaction. If a % discount applies show that % discount applying in another column.
Other charges	Any other charges, or price reductions, that affect the net invoice value. Insert additional columns and provide description.
Net invoice value in the currency of the exporting country	The net invoice value expressed in your domestic currency as recorded in your accounting system
Rebates or other Allowances	The actual amount of any deferred rebates or allowances in the currency of sale
Quantity discounts	The actual amount of quantity discounts not deducted from the invoice. Show a separate column for each type of quantity discount.
Packing*	packing expenses
Inland transportation costs*	Amount of inland transportation costs included in the selling price.
Handling, loading and ancillary expenses*	Handling, loading & ancillary expenses.
Warranty & guarantee expenses*	Warranty & guarantee expenses
Technical assistance & other services*	Expenses for after sale services such as technical assistance or installation costs.
Commissions*	Commissions paid. If more than one type is paid insert additional columns of data.
Other factors*	Any other costs, charges or expenses (including VAT) incurred in relation to the domestic sales (include additional columns as required). See question D5.

Costs marked with * are explained in section E-2.

D-5 If there are any other costs, charges or expenses incurred in respect of the sales listed which have not been identified in the table in question D-4 above add a column for each item (see "other factors"). For example, certain other selling expenses incurred.

D-6 For each type of commission, discount, rebate, allowance offered on domestic sales of like goods:

- provide a description; and
- explain the terms and conditions that must be met by the customer to qualify for payment.

Where the amounts of these discounts, rebates etc are not identified on the sales invoice, explain how you calculated the amounts shown in your response to question D4.

If you have issued credit notes, directly or indirectly to the customers, provide details if the credited amount has not been reported as a discount or rebate.

D-7 Select two domestic sales, in different quarters of the investigation period, that are at the same level of trade as the export sales. Provide a complete set of documentation for those two sales. (Include, for example, purchase order, order acceptance, commercial invoice, discounts or rebates applicable, credit/debit notes, long or short term contract of sale, inland freight contract, bank documentation showing proof of payment.)

Customs and Border Protection will select additional sales for verification at the time of our visit.

SECTION E - FAIR COMPARISON

Section B sought information about the export prices to Australia and Section D sought information about prices on your domestic market for like goods (ie. the normal value).

Where the normal value and the export price are not comparable adjustments may be made. This section informs you of the fair comparison principle and asks you to quantify the amount of any adjustment.

As prices are being compared, the purpose of the adjustments is to eliminate factors that have unequally modified the prices to be compared.

To be able to quantify the level of any adjustment it will usually be necessary to examine cost differences between sales in different markets. Customs and Border Protection must be satisfied that those costs are likely to have influenced price. In practice, this means that the expense item for which an adjustment is claimed should have a close nexus to the sale. For example, the cost is incurred because of the sale, or because the cost is related to the sale terms and conditions.

Conversely, where there is not a direct relationship between the expense item and the sale a greater burden is placed upon the claimant to demonstrate that prices have been affected, or are likely to have been affected, by the expense item. In the absence of such evidence Customs and Border Protection may disallow the adjustment.

Where possible, the adjustment should be based upon actual costs incurred when making the relevant sales. However, if such specific expense information is unavailable cost allocations may be considered. In this case, the party making the adjustment claim must demonstrate that the allocation method reasonably estimates costs incurred.

A party seeking an adjustment has the obligation to substantiate the claim by relevant evidence that would allow a full analysis of the circumstances, and the accounting data, relating to the claim.

The investigation must be completed within strict time limits therefore you must supply information concerning claims for adjustments in a timely manner. Where an exporter has knowledge of the material substantiating an adjustment claim that material is to be available at the time of the verification visit. Customs and Border Protection will not consider new claims made after the verification visit.

E-1 Costs associated with export sales

(These cost adjustments will relate to your responses made at question B-4, 'Australlian sales')

1. Transportation

Explain how you have quantified the amount of inland transportation associated with the export sale ("**Inland transportation costs**"). Identify the general ledger account where the expense is located. If the amount has been determined from contractual arrangements, not from an account item, provide details and evidence of payment.

2. **Handling, loading and ancillary expenses**

List all charges that are included in the export price and explain how they have been quantified ("**Handling, loading & ancillary expenses**"). Identify the general ledger account where the expenses are located. If the amounts have been determined using actual observations, not from a relevant account item, provide details.

The various export related ancillary costs are identified in the table at question B4, for example:

- terminal handling;
- wharfage and other port charges;
- container taxes;
- document fees and customs brokers fees;
- clearance fees;
- bank charges, letter of credit fees
- other ancillary charges.

3. **Credit**

The cost of extending credit on export sales is not included in the amounts quantified at question B4. However, Customs and Border Protection will examine whether a credit adjustment is warranted and determine the amount. Provide applicable interest rates over each month of the investigation period. Explain the nature of the interest rates most applicable to these export sales eg, short term borrowing in the currency concerned.

If your accounts receivable shows that the average number of collection days differs from the payment terms shown in the sales listing, *and if* export prices are influenced by this longer or shorter period, calculate the average number of collection days. See also item 4 in section E-2 below.

4. **Packing costs**

List material and labour costs associated with packing the export product. Describe how the packing method differs from sales on the domestic market, for each model. Report the amount in the listing in the column headed '**Packing**'.

5. **Commissions**

For any commissions paid in relation to the export sales to Australia:

- provide a description; and
- explain the terms and conditions that must be met.

Report the amount in the sales listing in question B-4 under the column headed **"Commissions"**. Identify the general ledger account where the expense is located.

6. Rebates

For any rebates paid in relation to the export sales to Australia:

- provide a description; and
- explain the terms and conditions that must be met.

Report the amount in the sales listing in question B-4 under the column headed **"Rebates or any other allowances"**. Identify the general ledger account where the expense is located

7. Warranties, guarantees, and after sales services

List the costs incurred. Show relevant sales contracts. Show how you calculated the expenses (**"Warranty & guarantee expenses"** and **"Technical assistance & other services"**), including the basis of any allocations. Include a record of expenses incurred. Technical services include costs for the service, repair, or consultation. Where these expenses are closely related to the sales in question, an adjustment will be considered. Identify the ledger account where the expense is located.

8. Other factors

There may be other factors for which an adjustment is required if the costs affect price comparability – these are identified in the column headed **"Other factors"**. For example, other variable or fixed selling expenses, including salesmen's salaries, salesmen's travel expenses, advertising and promotion, samples and entertainment expenses. Your consideration of questions asked at Section G, concerning domestic and export costs, would have alerted you to such other factors.

9. Currency conversions

In comparing export and domestic prices a currency conversion is required. Fluctuations in exchange rates can only be taken into account when there has been a 'sustained' movement during the investigation period (see article 2.4.1 of the WTO Agreement). The purpose is to allow exporters 60 days to adjust export prices to reflect 'sustained' movements. Such a claim requires detailed information on exchange movements in your country over a long period that includes the investigation period.

E-2 Costs associated with domestic sales

(These cost adjustments will relate to your responses made at question D-4, **"domestic sales"**)

The following items are not separately identified in the amounts quantified at question D-4. However you should consider whether any are applicable.

1. Physical characteristics

The adjustment recognises that differences such as quality, chemical composition, structure or design, mean that goods are not identical and the differences can be quantified in order to ensure fair comparison.

The amount of the adjustment shall be based upon the market value of the difference, but where this is not possible the adjustment shall be based upon the difference in cost plus the gross profit mark-up (i.e. an amount for selling general and administrative costs (S G & A) plus profit).

The adjustment is based upon actual physical differences in the goods being compared and upon the manufacturing cost data. Identify the physical differences between each model. State the source of your data.

2. Import charges and indirect taxes

If exports to Australia:

- are partially or fully exempt from internal taxes and duties that are borne by the like goods in domestic sales (or on the materials and components physically incorporated in the goods), or
- if such internal taxes and duties have been paid and are later remitted upon exportation to Australia;

the price of like goods must be adjusted downwards by the amount of the taxes and duties.

The taxes and duties include sales, excise, turnover, value added, franchise, stamp, transfer, border, and excise taxes. Direct taxes such as corporate income tax are not included as such taxes do not apply to the transactions.

Adjustment for drawback is not made in every situation where drawback has been received. Where an adjustment for drawback is appropriate you must provide information showing the import duty borne by the domestic sales. (That is, it is not sufficient to show the drawback amount and the export sales quantity to Australia. For example, you may calculate the duty borne on domestic sales by quantifying the total amount of import duty paid and subtracting the duty refunded on exports to all countries. The difference, when divided by the domestic sales volume, is the amount of the adjustment).

In substantiating the drawback claim the following information is required:

- a copy of the relevant statutes/regulations authorising duty exemption or remission, translated into English;
- the amount of the duties and taxes refunded upon exportation and an explanation how the amounts were calculated and apportioned to the exported goods;
- an explanation as to how you calculated the amount of duty payable on imported materials is borne by the goods sold domestically but is not borne by the exports to Australia;

Substitution drawback systems

Annex 3 of the WTO Agreement on Subsidies provides: "Drawback systems can allow for the refund or drawback of import duties on inputs which are consumed in the production process of another product and where the export of this latter product contains domestic inputs having the same quality and characteristics as those substituted for the imported inputs"

If such a scheme operates in the country of export adjustments can also be made for the drawback payable on the substituted domestic materials, provided the total amount of the drawback does not exceed the total duty paid.

3. Level of trade

Question D-4 asks you to indicate the level of trade to the domestic customer. To claim an adjustment for level of trade differences you will need to quantify the amount by which level of trade influences price.

Trade level is the level a company occupies in the distribution chain. The trade level to which that company in turn sells the goods and the functions carried out distinguish a level of trade. Examples are producer, national distributor, regional distributor, wholesaler, retailer, end user, and original equipment.

It may not be possible to compare export prices and domestic prices at the same level of trade. Where relevant sales of like goods at the next level of trade must be used to determine normal values an adjustment for the difference in level of trade may be required where it is shown that the difference affects price comparability.

The information needs to establish that there are real trade level differences, not merely nominal differences. Real trade level differences are characterised by a consistent pattern of price differences between the levels and by a difference in functions performed. If there is no real trade level differences all sales are treated as being at the same level of trade.

A real difference in level of trade (may be adjusted for using either of the following methods:

- (a) costs arising from different functions: the amount of the costs, expenses etc incurred by the seller in domestic sales of the like goods resulting from activities that would not be performed were the domestic sales made at the same level as that of the importer.

This requires the following information:

- a detailed description of each sales activity performed in selling to your domestic customers (for example sales personnel, travel, advertising, entertainment etc);
- the cost of carrying out these activities in respect of like goods;
- for each activity, whether your firm carries out the same activity when selling to importers in Australia;
- an explanation as to why you consider that you are entitled to a level of trade adjustment.

or

- (b) level discount: the amount of the discount granted to purchasers who are at the same level of trade as the importer in Australia. This is determined by an examination of price differences between the two levels of trade in the exporter's domestic market, for example sales of like goods by other vendors or sales of the same general category of goods by the exporter. For this method to be used it is important that a clear pattern of pricing be established for the differing trade levels. Such pattern is demonstrated by a general availability of the discounts to the level - isolated instances would not establish a pattern of availability.

4. Credit

The cost of extending credit on domestic sales is not included in the amounts quantified at question D-4. However, Customs and Border Protection will examine whether a credit adjustment is warranted and determine the amount. An adjustment for credit is to be made even if funds are not borrowed to finance the accounts receivable.

The interest rate on domestic sales in order of preference is:

- the rate, or average of rates, applying on actual short term borrowing's by the company; or
- the prime interest rate prevailing for commercial loans in the country for credit terms that most closely approximate the credit terms on which the sales were made; or
- such other rate considered appropriate in the circumstances.

Provide the applicable interest rate over each month of the investigation period.

If your accounts receivable shows that the average number of collection days differs from the payment terms shown in the sales listing, and if domestic prices are influenced by this longer or shorter period, calculate the average number of collection days.

Where there is no fixed credit period agreed at the time of sale the period of credit is determined on the facts available. For example, where payment is made using an open account system³, the average credit period may be determined as follows:

1 Calculate an accounts receivable turnover ratio

This ratio equals the total credit sales divided by average accounts receivable. (It is a measure of how many times the average receivables balance is converted into cash during the year).

³ Under an open account system, following payment the balance of the amount owing is carried into the next period. Payment amounts may vary from one period to the next, with the result that the amount owing varies.

In calculating the accounts receivable turnover ratio, credit sales should be used in the numerator whenever the amount is available from the financial statements. Otherwise net sales revenue may be used in the numerator.

An average accounts receivable over the year is used in the denominator. This may be calculated by:

- using opening accounts receivable at beginning of period plus closing accounts receivable at end of period divided by 2, or
- total monthly receivables divided by 12.

2 Calculate the average credit period

The average credit period equals 365 divided by the accounts receivable turnover ratio determined above at 1.

The resulting average credit period should be tested against randomly selected transactions to support the approximation.

The following items are identified in the amounts quantified at question D-4:

5. Transportation

Explain how you have quantified the amount of inland transportation associated with the domestic sales ("**Inland transportation Costs**"). Identify the general ledger account where the expense is located. If the amount has been determined from contractual arrangements, not from an account item, provide details and evidence of payment.

6. Handling, loading and ancillary expenses

List all charges that are included in the domestic price and explain how they have been quantified ("**Handling, loading and ancillary Expenses**"). Identify the general ledger account where the expense is located. If the amounts have been determined using actual observations, not from a relevant account item, provide details.

7. Packing

List material and labour costs associated with packing the domestically sold product. Describe how the packing method differs from sales on the domestic market, for each model. Report the amount in the listing in the column headed "**Packing**".

8. Commissions

For any commissions paid in relation to the domestic sales:

- provide a description
- explain the terms and conditions that must be met.

Report the amount in the sales listing under the column headed "**Commissions**". Identify the general ledger account where the expense is located.

9. Warranties, guarantees, and after sales services

List the costs incurred. Show relevant sales contracts. Show how you calculated the expenses ("**Warranty & Guarantee expenses**" and "**Technical assistance & other services**"), including the basis of any allocations. Include a record of expenses incurred. Technical services include costs for the service, repair, or consultation. Where these expenses are closely related to the sales in question, an adjustment will be considered. Identify the ledger account where the expense is located.

10. Other factors

There may be other factors for which an adjustment is required if the costs affect price comparability – these are identified in the column headed "**Other factors**". List the factors and show how each has been quantified in per unit terms. For example:

- *inventory carrying cost*: describe how the products are stored prior to sale and show data relating to the average length of time in inventory. Indicate the interest rate used;
- *warehousing expense*: an expense incurred at the distribution point;
- *royalty and patent fees*: describe each payment as a result of production or sale, including the key terms of the agreement;
- *advertising*; and
- *bad debt*.

E-3 Duplication

In calculating the amount of the adjustments you must ensure that there is no duplication.

For example:

- adjustments for level of trade, quantity or other discounts may overlap, or
- calculation of the amount of the difference for level of trade may be based upon selling expenses such as salesperson's salaries, promotion expenses, commissions, and travel expenses.

Separate adjustment items must avoid duplication.

An adjustment for quantities may not be granted unless the effect on prices for quantity differences is identified and separated from the effect on prices for level of trade differences.

SECTION F - EXPORT SALES TO COUNTRIES OTHER THAN AUSTRALIA (THIRD COUNTRY SALES)

Your response to this part of the questionnaire may be used by Customs and Border Protection to select sales to a third country that may be suitable for comparison with exports to Australia.

Sales to third countries may be used as the basis for normal value in certain circumstances. Customs and Border Protection may seek more detailed information on particular third country sales where such sales are likely to be used as the basis for determining normal value.

F-1 Using the column names and column descriptions below provide a summary of your export sales to countries other than Australia.

Column heading	Explanation
Country	Name of the country that you exported like goods to over the investigation period.
Number of customers	The number of different customers that your company has sold like goods to in the third country over the investigation period.
Level of trade	The level of trade that you export like goods to in the third country.
Quantity	Indicate quantity, in units, exported to the third country over the investigation period.
Unit of quantity	Show unit of quantity eg kg
Value of sales	Show net sales value to all customers in third country over the investigation period
Currency	Currency in which you have expressed data in column Sales
Payment terms	Typical payment terms with customer(s) in the country eg. 60 days=60 etc
Shipment terms	Typical shipment terms to customers in the third country eg CIF, FOB, ex-factory, DDP etc.

Supply this information in spreadsheet file named **"Third country"**

F-2 Please identify any differences in sales to third countries which may affect their comparison to export sales to Australia.

SECTION G - COSTING INFORMATION AND CONSTRUCTED VALUE

The information that you supply in response to this section of the questionnaire will be used for various purposes including:

- *testing the profitability of sales of like goods on the domestic market;*
- *determining a constructed normal value of the goods - ie of the goods exported to Australia; and*
- *making certain adjustments to the normal value.*

You will need to provide the cost of production of both the exported goods (the goods) and for the like goods sold on the domestic market. You will also need to provide the selling, general, and administration costs relating to goods sold on the domestic market; the finance expenses; and any other expenses (eg. non-operating expenses not included elsewhere) associated with the goods.

In your response please include a worksheet showing how the selling, general, and administration expenses; the finance expenses; and any other expenses have been calculated.

If, in response to question B4 (Sales to Australia, Export Price) you:

- *reported that the date of sale is not the invoice date and consider that this alternative date should be used when comparing domestic and export prices, and*
- *provided information on domestic selling prices for a matching period as required in the introduction to Section D (Domestic Sales)*

you must provide cost data over the same period as these sales even if doing so means that such cost data predates the commencement of the investigation period.

At any verification meeting you must be prepared to reconcile the costs shown to the accounting records used to prepare the financial statements.

G-1. Production process and capacity

1. Describe the production process for the goods. Provide a flowchart of the process. Include details of all products manufactured using the same production facilities as those used for the goods. Also specify all scrap or by-products that result from producing the goods.

G-2. Provide information about your company's total production in the following table:

	PREVIOUS FINANCIAL YEAR	MOST RECENT FINANCIAL YEAR	INVESTIGATION PERIOD
A – Production capacity (eg kg, tonnes)*			
B – Actual production in volume (eg kg, tonnes)			
C – Capacity utilisation (%) (B/A x 100)			

** rather than showing a 'name-plate' optimal capacity it is more meaningful to show the maximum level of production that may reasonably be attained under normal operating conditions. For example assuming: normal levels of maintenance and repair; a number of shifts and hours of operation that is not abnormally high; and a typical production mix.*

Provide this information on a spreadsheet named "**Production**".

G-3. Cost accounting practices

1. Outline the management accounting system that you maintain and explain how that cost accounting information is reconciled to your audited financial statements.
2. Is your company's cost accounting system based on standard (budgeted) costs? State whether standard costs were used in your responses to this questionnaire. If they were state whether all variances (ie differences between standard and actual production costs) have been allocated to the goods - and describe how those variances have been allocated.
3. Provide details of any significant or unusual cost variances that occurred during the investigation period.
4. Describe the profit/cost centres in your company's cost accounting system.
5. For each profit/cost centre describe in detail the methods that your company normally uses to allocate costs to the goods. In particular specify how, and over what period, expenses are amortised or depreciated, and how allowances are made for capital expenditures and other development costs.
6. Describe the level of product specificity (models, grades etc) that your company's cost accounting system records production costs.
7. List and explain all production costs incurred by your company which are valued differently for cost accounting purposes than for financial accounting purposes.
8. State whether your company engaged in any start-up operations in relation to the goods. Describe in detail the start-up operation giving dates (actual or projected) of each stage of the start-up operation.
9. State the total cost of the start-up operation and the way that your company has treated the costs of the start-up operation in its accounting records.

G-4 Cost to make and sell on domestic market

This information is relevant to testing whether domestic sales are in the ordinary course of trade⁴.

1. Please provide the actual unit cost to make and sell each model/type (identified in Section C) of the like goods sold on the domestic market. Provide this cost data for each quarter over the investigation period. If your company calculates costs monthly, provide monthly costs.
2. Indicate the source of cost information (account numbers etc) and/or methods used to allocate cost to the goods. Provide documentation and worksheets supporting your calculations.

	Quarter X	Quarter X	Quarter X	Quarter X
Like domestic model/type – from spreadsheet "like goods"				
Material costs ¹				
Direct labour				
Manufacturing overheads				
Other costs ²				
Total cost to make				
Selling costs				
Administration costs				
Financial costs				
Delivery expenses ³				
Other costs ³				
Unit cost to make and sell				

Prepare this information in a spreadsheet named "**Domestic CTMS**".

- ¹ Identify each cost separately. Include indirect material costs as a separate item only if not included in manufacturing overheads.
- ² Relating to costs of production only; identify each cost separately.
- ³ Identify each cost separately. Please ensure non-operating expenses **that relate to the goods** are included. Where gains/losses due to foreign currency exchange are incurred, please provide detail of the amounts separately for transaction and translation gains/losses.

If your financial information does not permit you to present information in accordance with this table please present the information in a form that best reflects your financial reporting.

Please specify unit of currency.

⁴ Customs applies the tests set out in s.269TAAD of the Customs Act 1901 to determine whether goods are in ordinary course of trade. These provisions reflect the WTO anti-dumping agreement – see Article 2.2.1.

G-5 Cost to make and sell goods exported to Australia

The information is relevant to calculating the normal values based on costs. It is also relevant to calculating certain adjustments to the normal value.

	Quarter X	Quarter X	Quarter X	Quarter X
Model/type exported to Australia- from spreadsheet "like goods"				
Material costs ¹				
Direct labour				
Manufacturing overheads				
Other costs ²				
Total cost to make				
Selling costs				
Administration costs				
Financial costs				
Delivery expenses ³				
Other costs ³				
Unit cost to make and sell				

Prepare this information in a spreadsheet named "**Australian CTMS**".

¹ Identify each cost separately. Include indirect material costs as a separate item only if not included in manufacturing overheads.

² Relating to costs of production only; identify each cost separately.

³ Identify each cost separately. Please ensure non-operating expenses **that relate to the goods** are included. Where gains/losses due to foreign currency exchange are incurred, please provide detail of the amounts separately for transaction and translation gains/losses.

Provide this information for each quarter (or month if your company calculates costs on a monthly basis) over the investigation period.

If your financial information does not permit you to present information in accordance with this table please present the information in a form that best reflects your financial reporting.

Please specify unit of currency.

- Where there are cost differences between goods sold to the domestic market and those sold for export, give reasons and supporting evidence for these differences.
- Give details and an explanation of any significant differences between the costs shown, and the costs as normally determined in accordance with your general accounting system. Reference should be made to any differences arising from movements in inventory levels and variances arising under standard costing methods.
- In calculating the unit cost to make and sell, provide an explanation if the allocation method used (eg number, or weight etc) to determine the unit cost differs from the prior practice of your company.

G-6 Major raw material costs

List major raw material costs, which individually account for 10% or more of the total production cost.

For these major inputs:

- identify materials sourced in-house and from associated entities;
- identify the supplier; and
- show the basis of valuing the major raw materials in the costs of production you have shown for the goods (eg market prices, transfer prices, or actual cost of production).

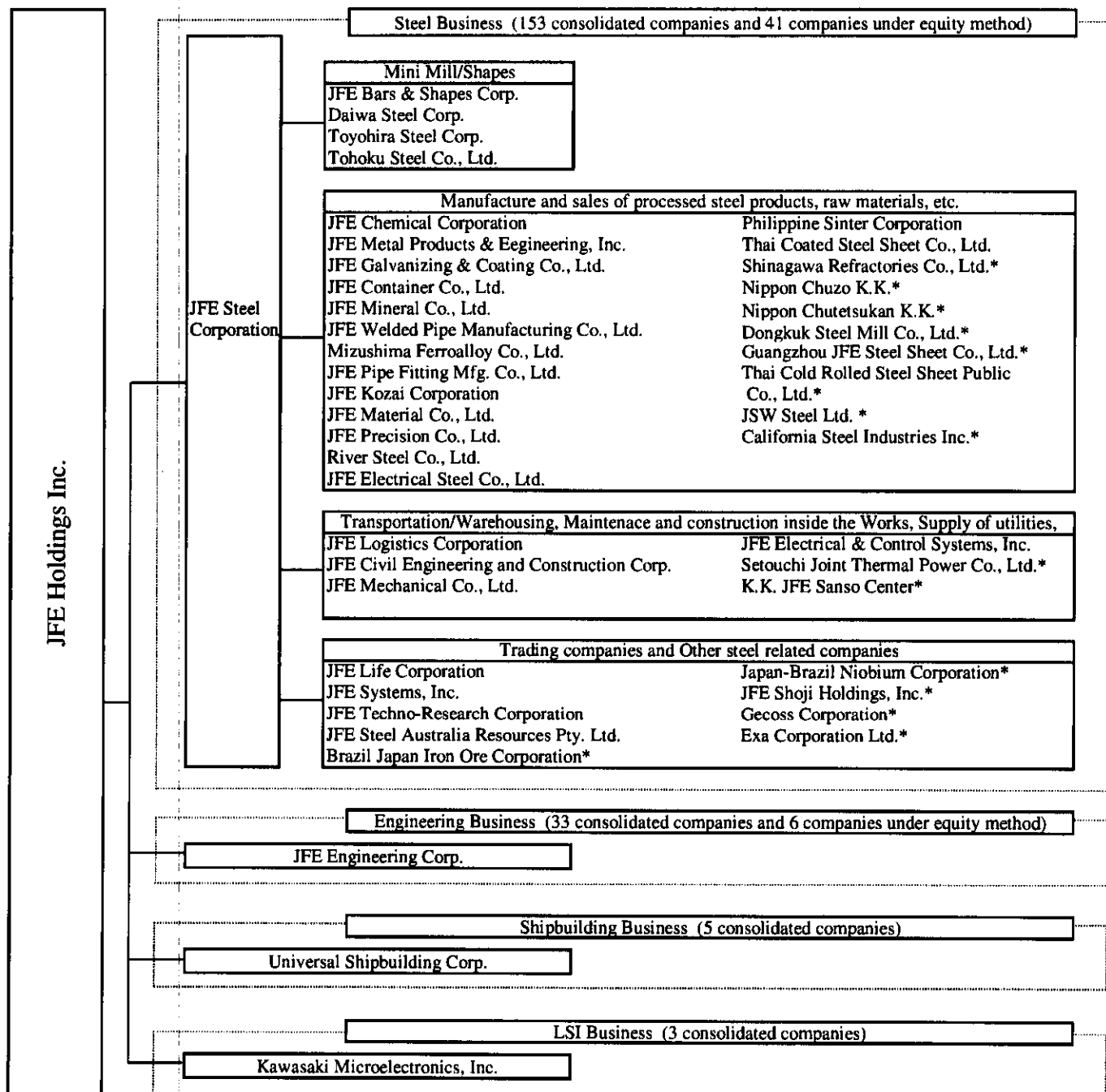
Where the major input is produced by an associate of your company Customs and Border Protection will compare your purchase price to a normal market price. If the associate provides information on the cost of production for that input such cost data may also be considered.

Normal market price is taken to be the price normally available in the market (having regard to market size, whether the input is normally purchased at 'spot prices' or under long term contracts etc).

The term associate is defined in section 269TAA of the Customs Act. Included in that definition are companies controlled by the same parent company (a company that controls 5% or more of the shares of another is taken to be an associated company); companies controlled by the other company; and companies having the same person in the board of directors.

If the major input is purchased from an integrated production process you should provide detailed information on the full costs of production of that input.

Chart of associated and affiliated companies of JFE Steel (in FY2011)



- Note
1. * denotes companies under Equity Method, and others are consolidated subsidiaries.
 2. The above chart shows the names of significant associated and affiliated companies of JFE Steel Corporation.

Annex A-3.3:

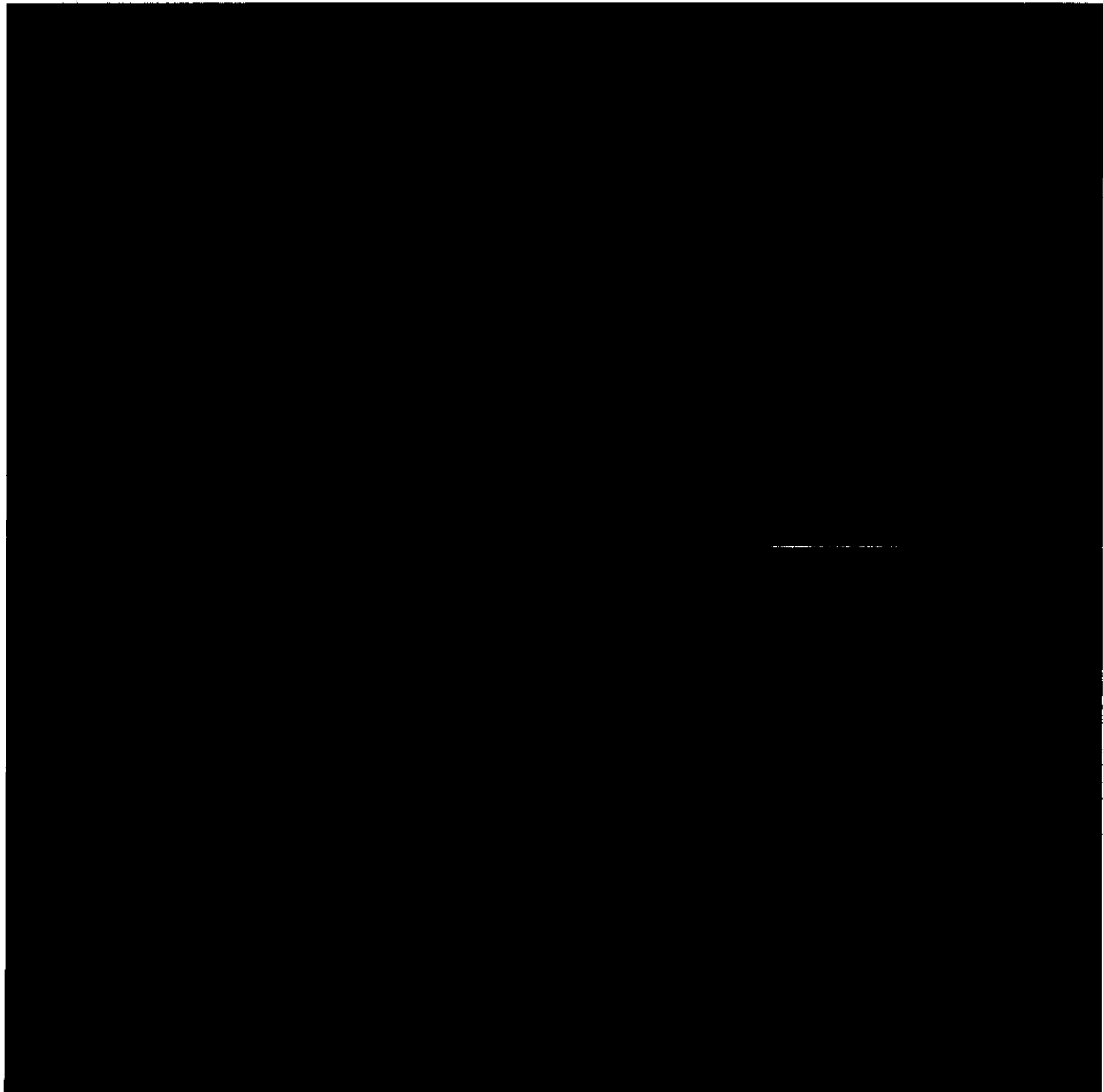
Principal shareholders of JFE Holdings' outstanding common shares and their respective shareholdings

(As of March 31, 2012)

Rank	Shareholder	Number of Shares Held (thousand shares)	Shareholding Ratio (%)
1	The Master Trust Bank of Japan, Ltd. (trust account)	40,085	6.5
2	Japan Trustee Services Bank, Ltd. (trust account)	33,566	5.5
3	Nippon Life Insurance Company	22,639	3.7
4	Mizuho Corporate Bank, Ltd.	14,351	2.3
5	The Dai-ichi Life Insurance Company, Limited	12,788	2.1
6	SSBT OD05 OMNIBUS Account-Treaty Clients	11,307	1.8
7	Tokio Marine & Nichido Fire Insurance Co., Ltd.	9,975	1.6
8	The Master Trust Bank of Japan, Ltd. (trust account 9)	9,289	1.5
9	Sompo Japan Insurance Inc.	7,998	1.3
10	Isuzu Motors Limited	7,434	1.2



HOT ROLLED STEEL SHEET



JFE Steel Corporation

JFE Steel Corporation who holds ISO 9001, QS-9000 and ISO 14001 certifications, produces a wide range of hot rolled steel sheets at the world's strongest and most efficient integrated steel works. Supported by advanced facilities, abundant know-how, and a high level of operational technology, JFE has developed a wide range of new products which meet customer requirements for dimensional accuracy, mechanical properties and available size range.

Characteristics

1. Consistent high quality

JFE products consistently realize the world's highest levels of quality thanks to an integrated quality control system which extends from order receiving through product shipment. JFE's production system is fully computerized and boasts advanced equipment and technologies.

2. Wide product line-up

Hot rolled products are produced under various public and JFE standards, and include the full line-up from general use to high strength steel. Regarding surface of products, JFE supplies non-pickled and pickled products.

3. Wide size range and superior dimensional accuracy

With a 5-mill production system, JFE produces a wide range of hot strip sizes, including thickness from 1.2mm to 25.4mm and widths from 600mm to 2,300mm, which is the world's widest hot rolled strip. Advanced production technologies ensure high dimensional accuracy.

4. Outstanding technical servicing system

JFE works closely with customers in selecting the optimum material for the user's application, and advises customers on production methods, considering property requirements. The company also cooperates in pre-use trials and provides technical assistance and follow-up on quality information.

HOT ROLLED STEEL SHEET

Contents

Characteristics	1
Manufacturing process	2
Products, characteristics and application	4
JFE Standard	6
Available product size range	18
Dimensional tolerance	22
Packaging and labeling / Instructions for ordering	25
Excerpts from public standards	26
Correspondence with JFE standards to public standards	37

JFE produces highest quality products with high end technologies.

Manufacturing process

Chiba No.3 continuous hot strip mill

"Super-OLAC H" installed on Fukuyama No.1 continuous hot strip mill

Fukuyama No.1 mill realizes the world highest cooling speed by "Super-OLACH"

Super-OLAC H at Fukuyama realizes the theoretically marginal world's highest cooling speed (700°C/sec at 3mm thickness) and uniform cooling over the strip surface. The new facility features high accuracy cooling rate control and improves uniformity of material quality such as high strength, high toughness, stable weldability and formability.

"Super-OLAC H" is an abbreviation of *Super On-Line Accelerated Cooling for Hot Strip Mill*.

Products, characteristics and application

JFE produces various kinds of products based on the public standards (Japanese Industrial Standard, The Japan Iron and Steel Federation Standard, foreign standards and ship's classification standards) and JFE standard.

● Public Standard

Japanese Industrial Standard (JIS)

G3101	Rolled steels for general structure	Having each strength level, it is applied to structural materials for architecture, bridge, ship, rolling stock body, etc.
G3103	Carbon steel and molybdenum alloy steel plates for boilers and other pressure vessels	For boiler and pressure vessel using at high temperature.
G3105	Rolled steels for machine structures	Having superior strength and weldability, it is applicable to architecture, bridge, ship, rolling stock body, oil holder and other structures.
G3115	Hot rolled steels for automobile frame, wheel and other parts	Having strength and press formability, it is applied to automobile frame, wheel and other parts.
G3117	Hot rolled steels for bridge, architecture and other structures	Having corrosion resistance with strength and weldability, it is applied to bridge, architecture and other structures.
G3119	Pressure vessel and high pressure equipment used except at high and low temperature.	Pressure vessel and high pressure equipment used except at high and low temperature.
G3121	Welded containers for high pressure gas holder of volume less than 500 l for LPG, acetylene and propane gases.	Welded containers for high pressure gas holder of volume less than 500 l for LPG, acetylene and propane gases.
G3122	Having superior atmospheric corrosion resistance, it is applied to rolling stock body, architecture, steel tower and other structures.	Having superior atmospheric corrosion resistance, it is applied to rolling stock body, architecture, steel tower and other structures.
G3123	General steels used for general forming, deep drawing.	General steels used for general forming, deep drawing.
G3124	Welded pipes with low and high frequency welding.	Welded pipes with low and high frequency welding.
G3125	Having superior workability of high strength steels, it is applied to automobiles.	Having superior workability of high strength steels, it is applied to automobiles.
G3126	Hot rolled steels for architecture structures.	Hot rolled steels for architecture structures.
G4001	Carbon steels for machinery structure produced by hot process and used with forging, shaving and with heat treatment.	Carbon steels for machinery structure produced by hot process and used with forging, shaving and with heat treatment.
G4002	Chromium steels for machinery structure produced by hot process and used with forging, shaving and with heat treatment.	Chromium steels for machinery structure produced by hot process and used with forging, shaving and with heat treatment.
G4003	Chromium molybdenum steels for machinery structure produced by hot process and used with forging, shaving and with heat treatment.	Chromium molybdenum steels for machinery structure produced by hot process and used with forging, shaving and with heat treatment.
G4401	Carbon tools steel made by hot rolling and forging.	Carbon tools steel made by hot rolling and forging.
G4402	Alloy tools steel made by hot rolling and forging.	Alloy tools steel made by hot rolling and forging.
G2801	Steel sheets and strips for rotating electric machine.	For magnetic pole of rotating electric machine.

The Japan Iron and Steel Federation Standard (JFS)

A1001	Hot rolled steel sheets and strips for automobile use	The Japan Iron and Steel Federation Standard of hot rolled steel sheets and strips for automobile use
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Foreign Standards

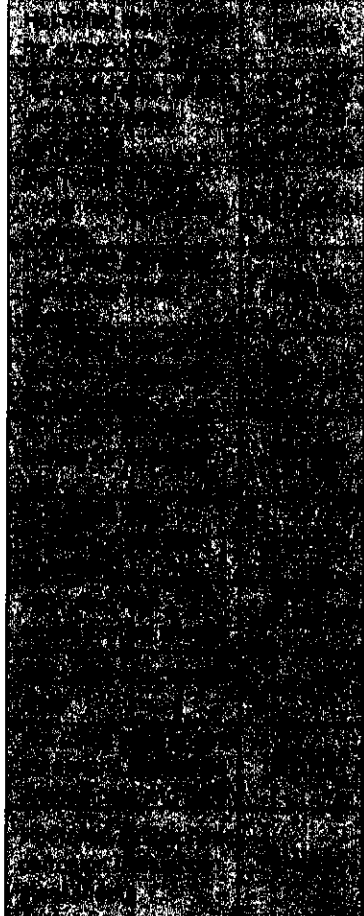
ASTM Standard
BS Standard
DIN Standard
EN Standard
ISO Standard
SAE Standard
AP Standard

Ship's Class Standard

JFE Steel produces the products based on following society's standards.

NK, ABS, BV, CR, LR, DNV

● JFE Standard

	Quality with wide range of formability. Various types of hot rolled steels are available.
	Because of good formability same as cold rolled one, press formability is improved. Low carbon steel is suitable to extra deep drawing parts like compressor chambers.
	High corrosion resistance against seawater splashes. It is applicable to port facilities, quays, off shore structures.
	High corrosion resistance to sulfuric or hydrochloric acid. It is suitable to equipments exposed to sulfuric corrosion atmosphere. Also it has superior atmospheric corrosion resistance, formability and weldability.
	With good formability at room temperature. It has superior anti-oxidation and strength under high temperature atmosphere. It can be applied to boiler skin casing, chimney, duct and other parts which need heat proof property.
	Steel aiming good flatness and appearance. Having superior surface appearance and shape, it is suitable to application needs good shape and fine appearance as exposed parts.
	Both-side porcelain enameling is possible. It has also superior porcelain properties like anti-fish tail, adhesionability and anti-strain during baking.
	Specifying tensile strength levels. It is used as rolled. It has superior formability and weldability. It contributes to weight saving by inducing higher strength.
	With simple and beautiful stripe patterns, it has good anti-slip and good water-cut property with good weldability and formability.
	By specifying finer strength levels than JIS, it is suitable to various application.
	Having superior atmospheric corrosion resistance and corrosion resistance, it has also sufficient strength, weldability and formability for structural uses. Stabilized rust after two years has no progress. It is applied to exposed parts of buildings.



Container



Gas cylinder

● Mechanical Properties

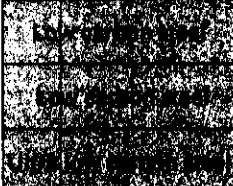
1. The values in parentheses are reference values.
2. BFR means the increase in tensile strength during the baking process.
3. The VR means the ratio of the yield point to the tensile strength.
4. Rolling or Transverse in the column of Testing Direction indicates test piece taken for the tensile test in the rolling direction or transverse to the rolling direction.
5. The bend test is available depending on a demand.

JFE Standard


Hot rolled steel sheets with good press formability JFE-H * N

Improved press formability is attained by good ductility same as that of cold rolled steel.
This is suitable for deep drawing parts such as a compressor chamber.

● Characteristics

	Drawing quality
	Deep drawing quality
	Extra deep drawing quality

● Mechanical Properties

	—	270	—	35	37	39	41	42	43	44
	—	270	40	41	42	42	43	44	—	—
	—	280	—	—	42	43	45	47	—	—

Reference : JIS No.5 test piece for the tensile test taken to the rolling direction.

● Dimension tolerance

JIS G 3131 for thickness and JIS G 3193 for width are applied.

● Available product size range

Available product size comes to negotiation.

Hot rolled anti-sea water corrosion steel sheets JFE-MARIN

JFE-MARIN offers superior weldability and toughness as a structural material for welding, combined with excellent corrosion resistance. The synergistic effects of alloying elements provide corrosion resistance not only in sea water, but also at the splash line, which is most susceptible to seawater corrosion. Suitable for port and harbor facilities, quays, and offshore structures.



● Chemical Composition

	0.15 Max	0.55 Max	1.50 Max	0.030 Max	0.030 Max	0.20 ~0.50	0.40 Max	0.50 ~0.80	0.10 Max	0.15 ~0.55
--	-------------	-------------	-------------	--------------	--------------	---------------	-------------	---------------	-------------	---------------

● Mechanical Properties

	3.2-6.0	365	490~610	25	JIS No.5
--	---------	-----	---------	----	----------

Reference : The bend test is available depending on a demand.

● Dimension tolerance

JIS G 3193 is applied.

● Available product size range

Available product size comes to negotiation.

Hot rolled corrosion resistance steel sheets JFE-ASA

Optimum addition of special alloying elements to SS400 equivalent material secures high corrosion resistance against sulfuric and hydrochloric acids, as well as atmospheric environments, combined with good formability and weldability. Main applications include air preheaters for oil boilers, chimneys, and incinerators.

● Chemical Composition

0.14 max.	0.55 max.	0.30 - 0.70	0.030 max.	0.020 max.	0.25 - 0.50	0.50 max.	—	—	0.05 - 0.20	0.10 max.
0.14 max.	0.55 max.	0.30 - 0.70	0.030 max.	0.020 max.	0.25 - 0.50	0.50 max.	0.50 - 1.00	0.10 max.	—	—
0.14 max.	0.55 max.	0.30 - 0.70	0.030 max.	0.020 max.	0.25 - 0.50	0.50 max.	0.50 - 1.00	0.10 max.	0.05 - 0.20	0.10 max.
0.17 max.	0.55 max.	0.30 - 0.70	0.030 max.	0.020 max.	0.25 - 0.50	0.50 max.	—	—	0.05 - 0.20	0.10 max.
0.17 max.	0.55 max.	0.30 - 0.70	0.030 max.	0.020 max.	0.25 - 0.50	0.50 max.	0.50 - 1.00	0.10 max.	—	—
0.17 max.	0.55 max.	0.30 - 0.70	0.030 max.	0.020 max.	0.25 - 0.50	0.50 max.	0.50 - 1.00	0.10 max.	0.05 - 0.20	0.10 max.

● Mechanical Properties

1.6-16.0	245	400	22	18	JIS No.6	JIS No.1A	Transverse to rolling direction
1.6-16.0	245	400	22	18			
1.6-16.0	245	400	22	18			
1.6-16.0	265	440	22	17			
1.6-16.0	265	440	22	17			
1.6-16.0	265	440	22	17			

Reference : The bend test is available depending on a demand.

● Dimension tolerance

JIS G 3193 is applied.

● Available product size range

Available product size comes to negotiation.

● Chemical Composition and applied environment of D, H, W type

Cu-Ni-Sn-Sb	Surface temperature less than 120-130° C. Mainly considered on the sulfuric acid corrosion.
Cr-Cu-Ni	Resistance against sulfuric acid corrosion is less than that of JFE-ASA...D. Considered on the strength in comparatively high temperature atmosphere.
Cr-Cu-Ni-Sn-Sb	Condition of the environment is not decisive.

Hot rolled steel sheets for high temperature atmosphere JFE-HHCR

Hot rolled steel sheets for high temperature atmosphere have good formability at room temperature, combined with high temperature oxidation resistance and heat resistance at temperatures of 450-600°C. Suitable for applications which require heat resistance and formability, such as boiler skin casings, chimneys, and ducts.

● Chemical Composition

	0.10 max.	—	0.40 max.	0.035 max.	0.035 max.
--	-----------	---	-----------	------------	------------

Reference : Other special elements are included.

● Mechanical Properties

	1.2-12.7	—	330~430	37	JIS No.5	Rolling direction
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Reference : The bend test is available depending on a demand.

● Dimension tolerance

JIS G 3193 is applied.

● Available product size range

Available product size comes to negotiation.

Hot rolled flat steel sheets for exposed use JFE-HDH

The steel sheet mainly produced in the stand point of flatness and attractive appearance. It has superior attractive appearance and strip shape. It is suitable for application which require good shape and appearance as exposed parts.

● Chemical Composition and Mechanical Properties

	1.6-4.5	0.040 max.	0.040 max.
--	---------	------------	------------

Reference : The bend test is available depending on a demand.

● Dimension tolerance

JIS G 3193 is applied.

● Flatness tolerance

The half of the value in Table 9 of JIS G 3193 is the aiming of flatness.

Details come to negotiation.

● Available product size range

Available product size comes to negotiation.

Hot rolled steel sheets for porcelain enameling JFE-HPE

It is possible to apply both-side porcelain enameling and it has superior anti-fish tail property, excellent adhesionability, and less distortion during baking.

● Characteristics

1. Superior anti-fish tail property
2. Good adhesionability
3. Less distortion and residual strain during baking
4. Superior formability
5. Superior weldability

● Chemical Composition

	1.2 - 13.0	0.10 max.	0.10 max.	0.70 max.	0.035 max.	0.035 max.	Special additives
--	------------	-----------	-----------	-----------	------------	------------	-------------------

● Dimension tolerance

JIS G 3131 is applied

● Available product size range

The available product size range of JFE-HPE steel sheets for porcelain enameling is strip width of 610 mm to 1,925 mm, strip thickness of 1.2 mm to 13.0 mm.

Available product size comes to negotiation.

● Typical Chemical Composition (wt%)

	0.025	0.02	0.25	0.012	0.008	0.010	0.17
--	-------	------	------	-------	-------	-------	------

● Typical Mechanical Properties

Typical mechanical properties are shown below. The strength level comes to negotiation.

	3.2	436	512	23
--	-----	-----	-----	----

Hot rolled high strength steel sheets JFE-HITEN

Used as-rolled in applications which require high strength with specified tensile strength levels. Also has superior formability and weldability. High strength contributes to weight reduction.

● Chemical Composition

	0.18 max.	0.50 max.	1.50 max.	0.035 max.	0.035 max.
	0.20 max.	0.50 max.	1.60 max.	0.035 max.	0.035 max.
	0.20 max.	0.50 max.	1.60 max.	0.035 max.	0.035 max.
	0.20 max.	0.60 max.	2.00 max.	0.030 max.	0.015 max.
	0.20 max.	0.60 max.	2.00 max.	0.020 max.	0.010 max.

● Mechanical Properties

		305	490	22	22	24	25	25
	1.6-10.0	345	540	20	20	22	23	23
		430	590	16	16	18	20	—
	1.6-8.0	550	690	14	15	16	18	—
	2.3-8.0	665	780	—	14	15	16	—

Reference : 1. JIS No.5 test piece for the tensile test taken transverse to the rolling direction.
2. JIS No.3 test piece for the bend test taken transverse to the rolling direction.
3. The bend test is available depending on a demand.

● Dimension tolerance

JIS G 3193 is applied.

● Available product size range

Available product size comes to negotiation.

JFE Standard (5)

PURPOSE

211

Hot rolled checkered plate JFE-HCP

JFE checkered plate is available in a single-stripe or triple-stripe pattern. Both have an attractive design and good anti-slip and water draining properties, combined with excellent dimensional accuracy, weldability, and formability. Suitable for floors, stairs, and landings, and for rolling stock bodies. Tight-scale type checkered plate with excellent scale peeling resistance is available upon request.

● Characteristics

1. Attractive stripe pattern
2. Excellent anti-slip property
3. Excellent water draining property
4. High weldability and formability

● Chemical Composition

General use	—	—
General use	—	—
Structural use	0.050 max.	0.050 max.
Structural use	0.050 max.	0.050 max.

● Mechanical Properties

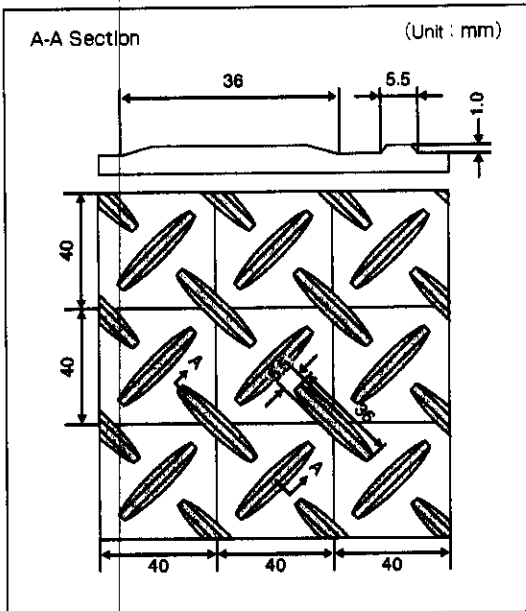
2.3-13.0	—	—	—	—	—	—	—
	—	—	—	—	—	—	—
	245	400~ 510	(21)	(17)	JIS No.5	JIS No.1A	Rolling

Reference : 1. The figures in the parentheses are the reference values.
2. The bend test is available depending on a demand.

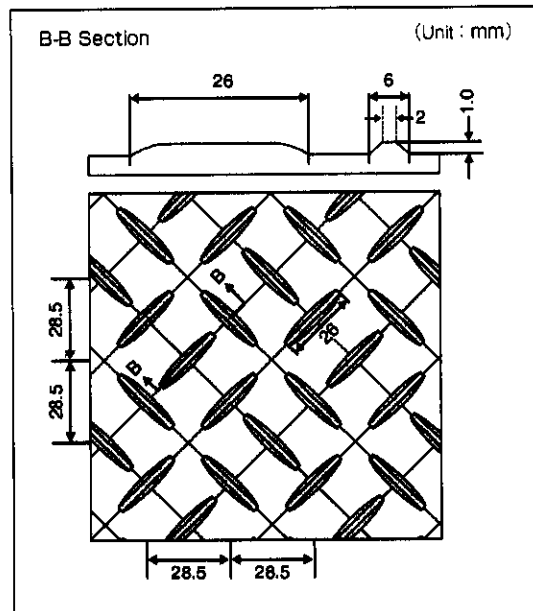
● Mass of cut sheet

19.42	32.5	57.7	—	—	33.0	58.7	—	—
26.48	44.3	78.7	123	443	44.9	79.7	125	—
36.69	61.3	109	170	613	61.9	110	172	619
48.46	81.0	144	225	810	81.8	145	227	818
64.16	107	191	298	1,073	108	192	300	1,079
72.01	120	214	334	1,204	121	215	336	1,210
95.56	160	284	444	1,596	160	285	446	1,604

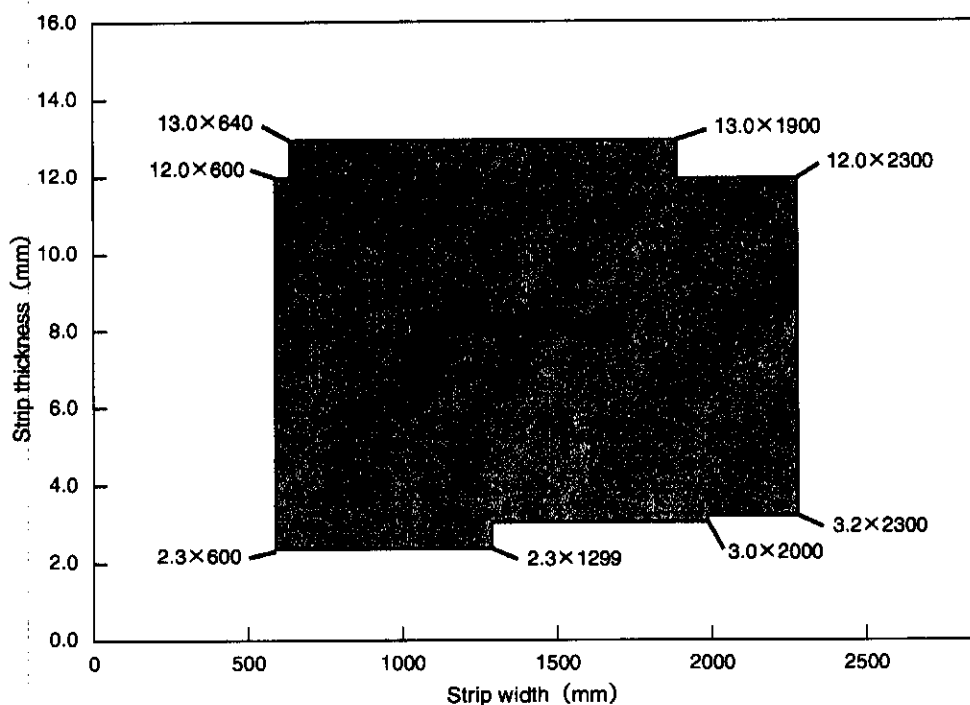
Single-striped surface pattern
of JFE-HCP-1 and JFE-HCP400-1



Triple-striped surface pattern
of JFE-HCP-3 and JFE-HCP400-3



- Dimension tolerance
JIS G 3193 is applied.
- Available product size range
Size outside of the available range is subject to negotiation.



Hot rolled steel sheets for electric resistance welded pipe and tube JFE-HP

By specifying finer strength levels than JIS, it is suitable to various applications.

● Chemical Composition

0.10 max.	0.35 max.	0.50 max.	0.035 max.	0.035 max.	—
0.18 max.	0.35 max.	0.60 max.	0.035 max.	0.035 max.	—
0.18 max.	0.35 max.	0.60 max.	0.035 max.	0.035 max.	—
0.25 max.	0.35 max.	0.30 - 0.90	0.035 max.	0.035 max.	—
0.25 max.	0.35 max.	0.30 - 0.90	0.035 max.	0.035 max.	—
0.30 max.	0.35 max.	0.30 - 1.00	0.035 max.	0.035 max.	—
0.30 max.	0.35 max.	0.30 - 1.00	0.035 max.	0.035 max.	—
0.23 max.	0.35 max.	1.50 max.	0.035 max.	0.035 max.	0.080 max.

● Mechanical Properties

1.2-16.0	—	290	30	32	35	37	38	JIS No.6 Rolling Direction
1.2-16.0	175	320	28	30	33	36	37	
1.2-16.0	205	340	26	28	31	34	36	
1.6-16.0	215	370	—	25	28	31	33	
1.6-16.0	245	410	—	22	25	28	30	
1.6-16.0	305	440	—	21	24	27	29	
1.6-16.0	345	490	—	19	23	25	27	
3.0-16.0	390	540	—	—	18	20	22	

Reference : The bend test is available depending on a demand.

In addition to above materials, JFE-HP * * * B for boiler tubes is also available.



● Dimension tolerance

JIS G 3132 is applied for thickness tolerance and JIS G 3193 is applied for other tolerances.
Strip thickness thicker than 13mm comes to negotiation.

● Available product size range

Available product size comes to negotiation.

Hot rolled atmospheric corrosion resistance steel sheets JFE-HCUP

Superior atmospheric corrosion resistance and general corrosion resistance, combined with adequate strength, weldability, and formability for structural applications. Rust stabilizes and does not progress after approximately 2 years. Suitable for exposed parts of buildings and structures.



● Chemical Composition

	0.12 max.	0.25 - 0.75	0.20 - 0.50	0.07 - 0.15	0.035 max.	0.25 - 0.55	0.45 max.	0.30 - 1.00
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● Mechanical Properties

	1.6-16.0	1.6 ≤ ≤ 6.0	345	480	22	JIS No.5	Rolling direction
		6.0 < ≤ 16.0	355	490	15	JIS No.1A	

Reference : 1. JIS No.3 test piece for the bend test can be used in case of sheet thickness equal to or less than 6mm.
2. In case of the sheet thicker than 6.0mm of JFE-HCUP, maximum Mn content becomes 0.60%.
3. The bend test is available depending on a demand.

● Dimension tolerance

JIS G 3193 is applied.

● Available product size range

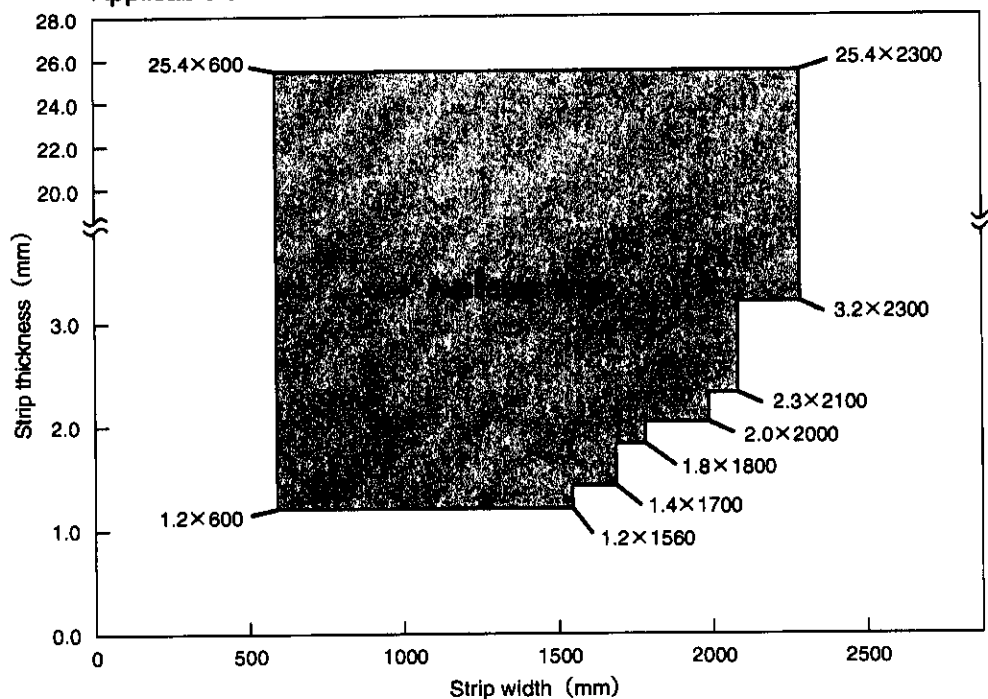
Available product size comes to negotiation.

Available product size range

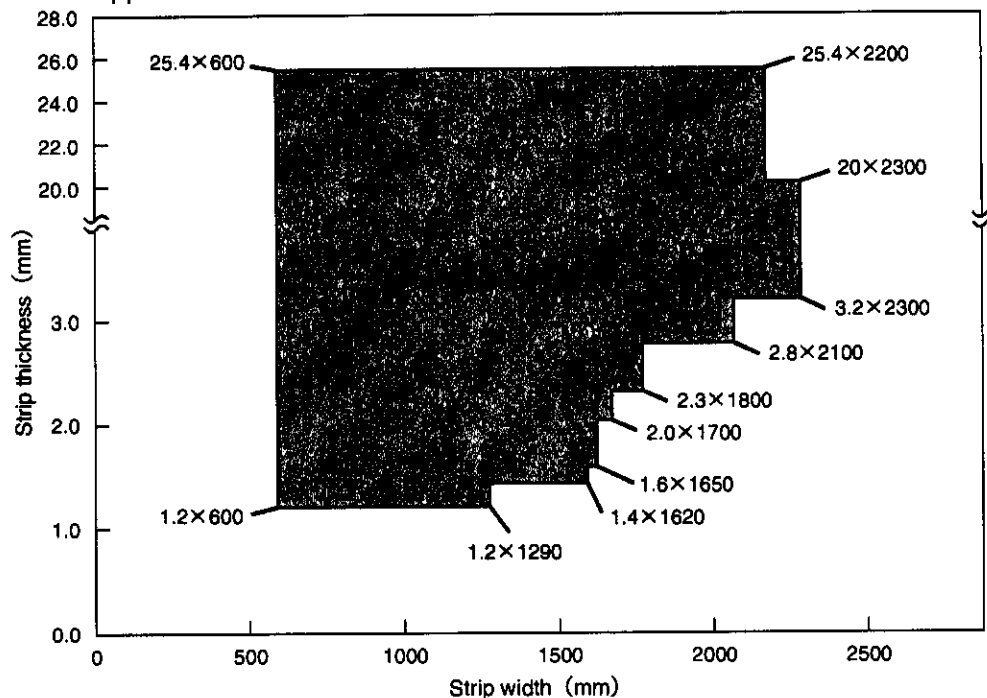
PURPOSE :
207

Non pickled coil

Applicable standard : 270N/mm² Class



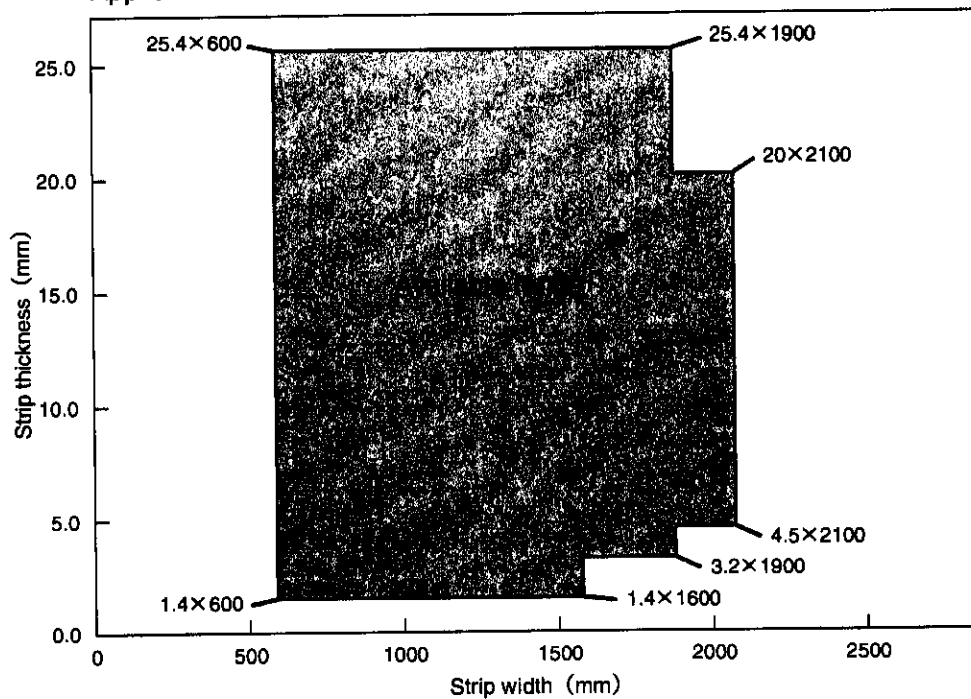
Applicable standard : 440N/mm² Class



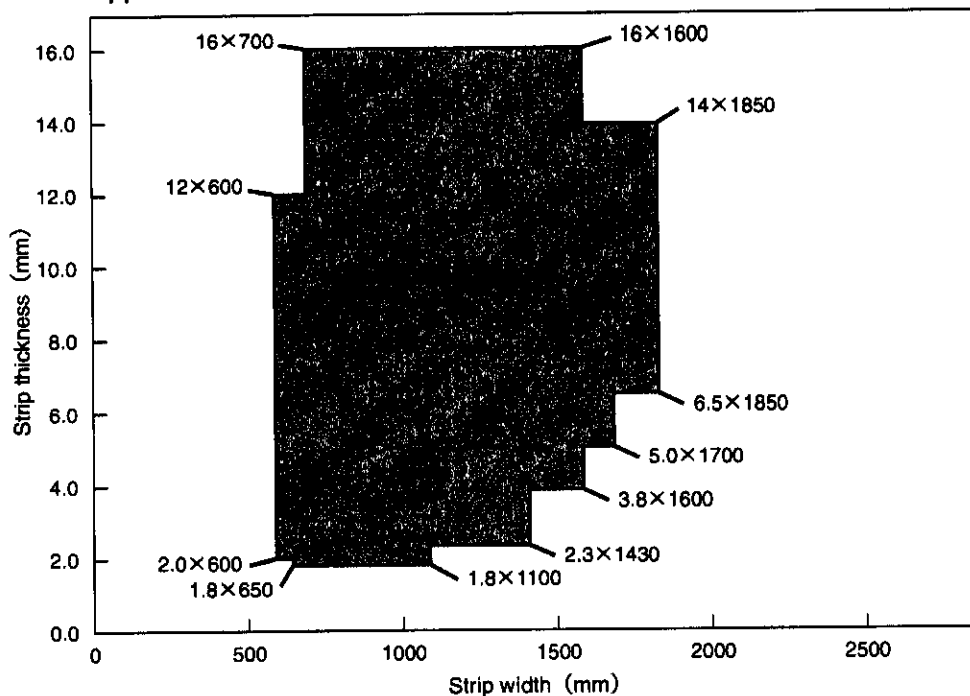
As there may be minor changes of the available product size range according to standard, application and method of working, contact and negotiation will be welcomed.

Size outside the available range is subject to negotiation. Available size for cut-length sheets or slit coil is also subject to negotiation.

Applicable standard : 590N/mm² Class



Applicable standard : 780N/mm² Class



As there may be minor changes of the available product size range according to standard, application and method of working, contact and negotiation will be welcomed.

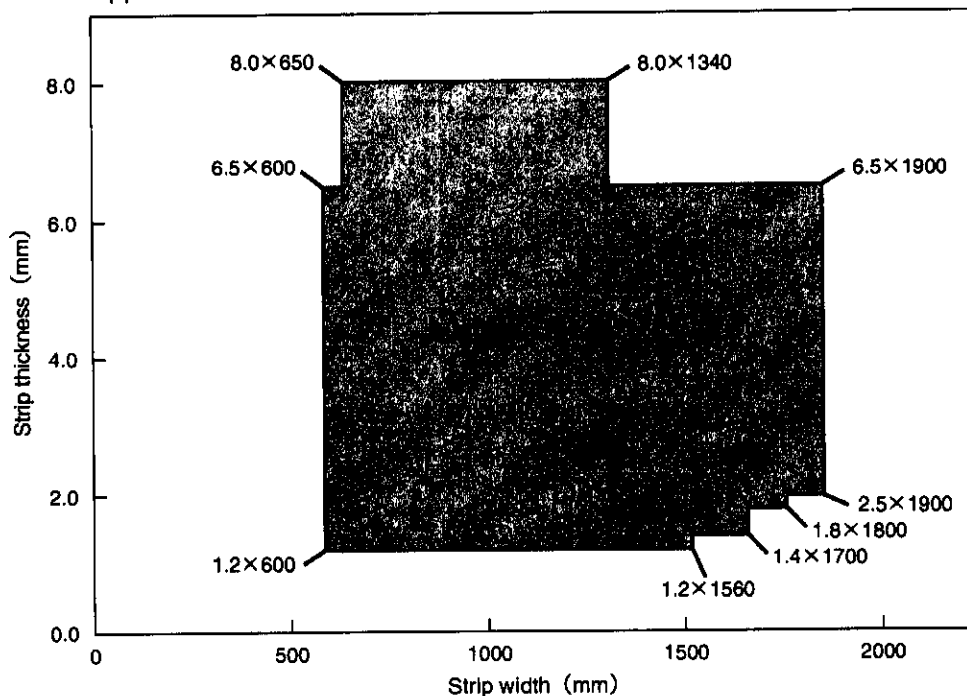
Size outside the available range is subject to negotiation. Available size for cut-length sheets or slit coil is also subject to negotiation.

Available product size range

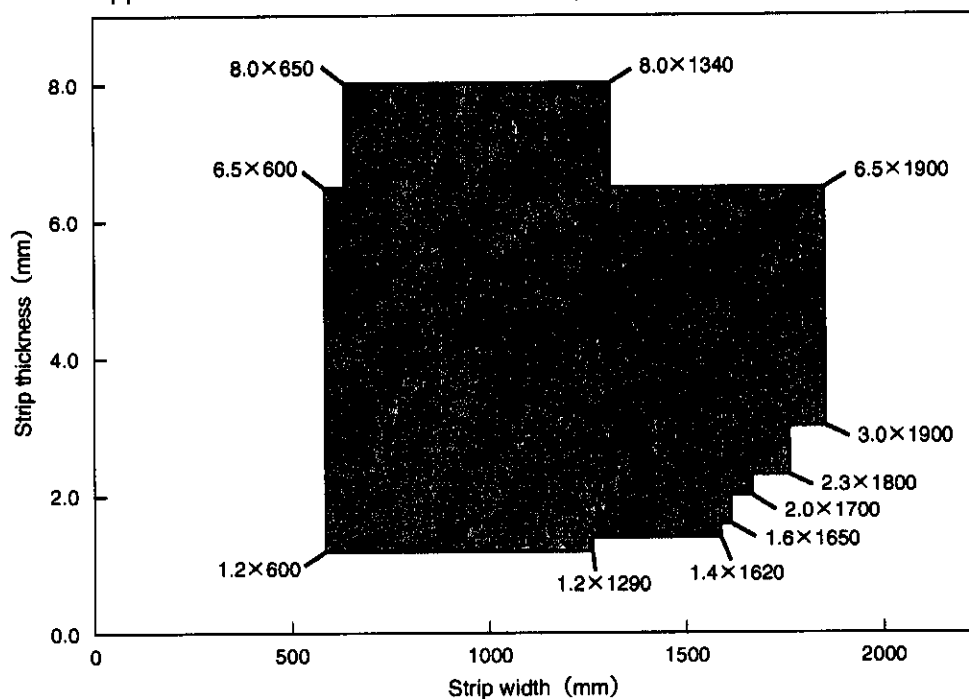
PUBLIC FILE
205

Pickled coil

Applicable standard : 270N/mm² Class (Pickled)



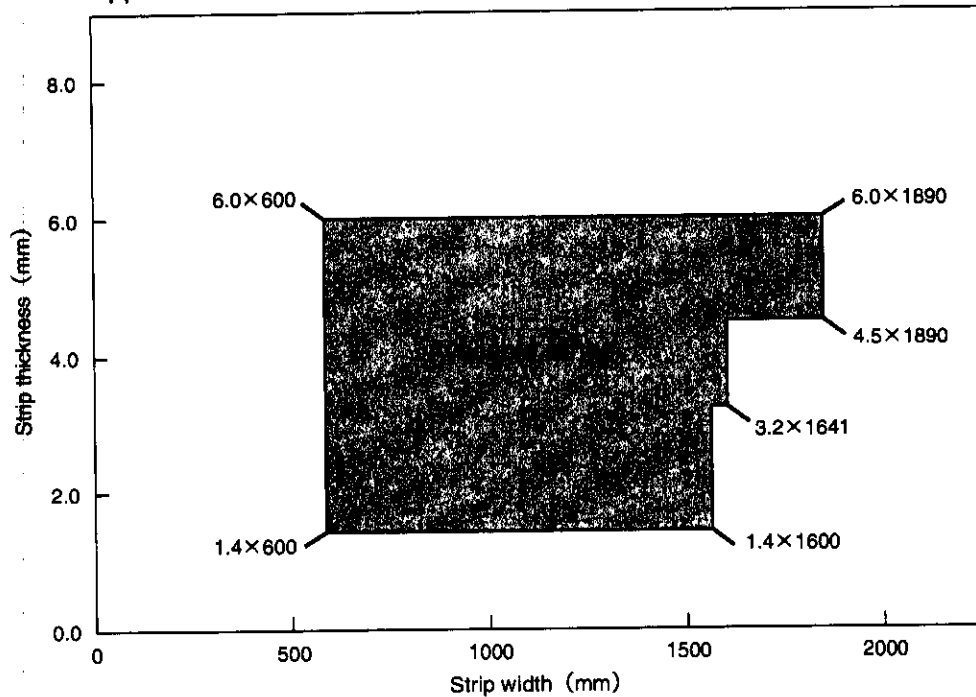
Applicable standard : 440N/mm² Class (Pickled)



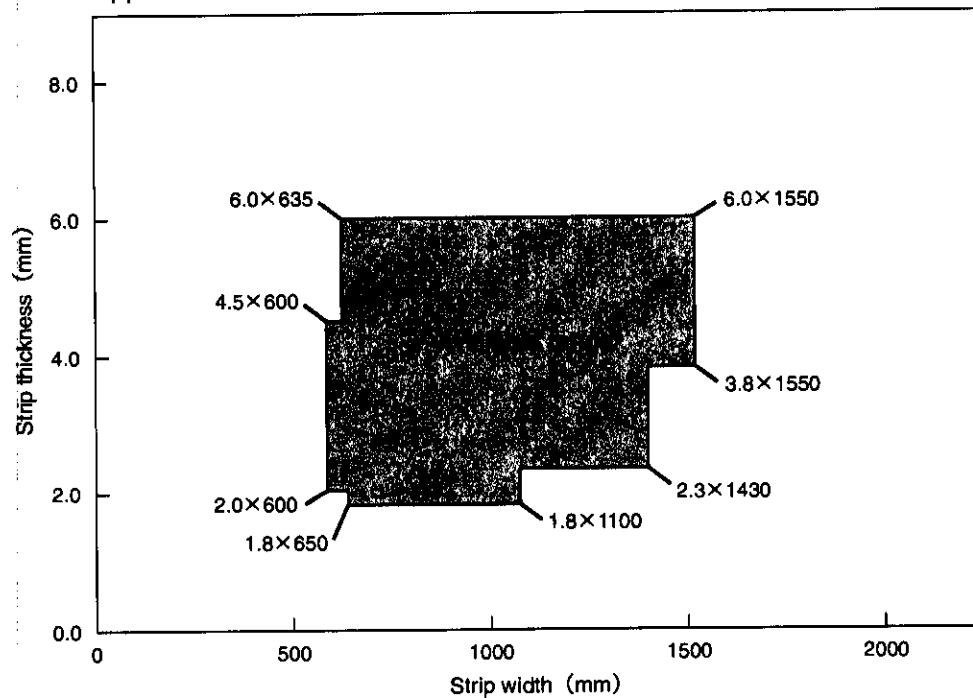
As there may be minor changes of the available product size range according to standard, application and method of working, contact and negotiation will be welcomed.

Size outside the available range is subject to negotiation. Available size for cut-length sheets or slit coil is also subject to negotiation.

Applicable standard : 590N/mm² Class (Pickled)



Applicable standard : 780N/mm² Class (Pickled)



As there may be minor changes of the available product size range according to standard, application and method of working, contact and negotiation will be welcomed.

Size outside the available range is subject to negotiation. Available size for cut-length sheets or slit coil is also subject to negotiation.

Dimensional tolerance (1)

PU 203

● Strip thickness tolerance

Table: Thickness tolerance specified in JIS G 3131, JIS G 3132 (Tensile strength less than 490N/mm²), JIS G 3113 and JIS G 3116 (Tensile strength less than 490N/mm²)

±0.14	±0.15	±0.16 ⁽¹⁾	—
±0.16	±0.17	±0.18	±0.21 ⁽²⁾
±0.17	±0.19	±0.21	±0.25 ⁽²⁾
±0.19	±0.21	±0.24	±0.26
±0.21	±0.23	±0.26	±0.27
±0.24	±0.26	±0.28	±0.29
±0.26	±0.28	±0.29	±0.31
±0.29	±0.30	±0.31	±0.35
±0.32	±0.33	±0.34	±0.40
±0.35	±0.36	±0.37	±0.45
±0.38	±0.39	±0.40	±0.50

Notes: (1) The value shall be applied to the steel sheet and coil up to and excluding 1,600mm in width.

(2) The value shall be applied to the steel sheet and coil up to and excluding 2,000mm in width.

Remarks: 1. The thickness shall be measured at any point on the steel sheet and coil not less than 20mm from a side edge. For the steel sheet and coil under 40mm in width, measurement shall be made at the mid width thereof.
2. The value specified in Table shall not be applied to the irregular portions of both ends of the steel coil.
3. The tolerances on the thickness of the steel sheet which is not manufactured from the steel coil may be agreed between the purchaser and supplier.

Table: Thickness tolerance specified in JIS G 3132 (Tensile strength 490N/mm² and more), JIS G 3116 (Tensile strength 490N/mm² and more) and JIS G 3134

±0.14	±0.15	±0.16 ⁽³⁾	—
±0.16	±0.19	±0.20	—
±0.18	±0.22	±0.23	±0.25 ⁽⁴⁾
±0.20	±0.24	±0.26	±0.29
±0.23	±0.26	±0.28	±0.30
±0.26	±0.29	±0.31	±0.32
±0.29	±0.31	±0.32	±0.34
±0.32	±0.33	±0.34	±0.38
±0.35	±0.36	±0.37	±0.44
±0.38	±0.40	±0.41	±0.49
±0.41	±0.44	±0.45	±0.54

Notes: (3) The value shall be applied to the steel sheet and coil up to and excluding 1,600mm in width.

(4) The value shall be applied to the steel sheet and coil up to and excluding 2,000mm in width.

Remarks: 1. The thickness shall be measured at any point not less than 20mm inside from a side edge of the steel strip. For the steel strip under 40mm in width, measurement shall be made at the mid width of the steel strip.
2. The value specified in Table shall not be applied to the irregular portions of both ends of the steel strip.

Table :Thickness tolerance specified in JIS G 3193

	± 0.16	—	—
	± 0.18	—	—
	± 0.19	± 0.23	—
	± 0.20	± 0.25	—
	± 0.22	± 0.29	± 0.29
	± 0.24	± 0.34	± 0.34
	± 0.45	± 0.55	± 0.55
	± 0.50	± 0.60	± 0.60
	± 0.55	± 0.65	± 0.65
	± 0.55	± 0.65	± 0.65
	± 0.65	± 0.75	± 0.75
	± 0.70	± 0.80	± 0.80

- Reference : 1. Either plus or minus side of the thickness tolerances given in Table may be limited on request. The total tolerances in this case shall be equal to those given in Table.
2. Thickness shall be measured at any point on the steel strip not less than 25mm from a side edge for the mill edge strip 50mm or over in width and cut lengths therefrom, and on the center line for those less than 50mm in width. For the cut edge steel strip 30mm or over in width and cut lengths therefrom, measurement shall be made at any point not less than 15mm from a side edge, and on the center line for those less than 30mm in width.
- Thickness shall be measured at any point inward the scheduled cutting line concerning width for the as-rolled steel plate (with untrimmed edge), and any point not less than 15mm from the aforementioned line for the cut edge plate.

Dimensional tolerance (2)

201

● Strip width tolerance

Table: Width tolerance specified in JIS G 3193

—	±2	5	0	2.0	0	±0.3
		5		3.0		±0.5
		10		4.0		—
		10		—		—
—	±2	5	0	2.0	0	±0.4
		5		3.0		±0.5
		10		4.0		—
		15		—		—
0 + Not specified	±5	5	0	2.0	0	±0.5
		5		3.0		±0.5
		10		4.0		—
		15		—		—
0 + Not specified	+20 0	10	0	3.0	0	±0.5
		10		3.0		±0.5
		10		5.0		—
		15		—		—
0 + Not specified	+25 0	10	0	4.0	0	—
		10		4.0		—
		10		6.0		—
		15		—		—
0 + Not specified	+30 0	10	0	4.0	0	—
		10		4.0		—
		15		6.0		—
		15		—		—
0 + Not specified	+35 0	10	0	4.0	0	—
		10		4.0		—
		15		6.0		—
		15		—		—
0 + Not specified	+40 0	10	0	4.0	0	—
		10		4.0		—
		1.2%		6.0		—
		1.2%		—		—

Remarks: For the mill edge steel strip less than 400mm in width than cut lengths therefrom, the width tolerance on minus side may be limited to zero. In this case, the tolerance on plus side shall be twice the values given in Table.

● Length tolerance

Table: Length tolerance specified in JIS G 3193

A Normal cut edge

+20	0
+30	0
+40	0
+50	0
+75	0
+100	0
+0.5%	0

B Resheared or fine cut edge

+5	0
+10	0
+10	0
+15	0

Packaging and labeling / Instructions for ordering

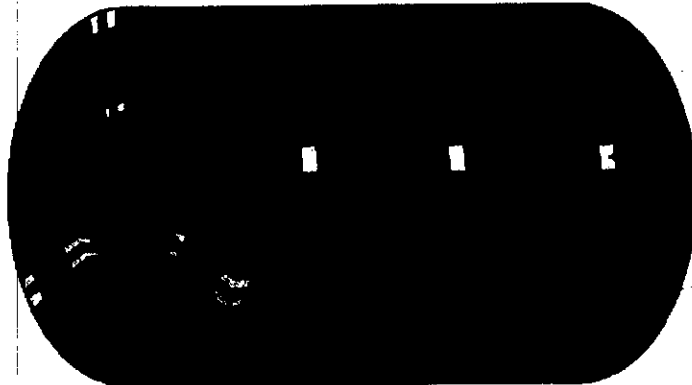
200

Packaging and labeling

● Packaging

Products are packaged according to applicable standards and preserved in a properly controlled environment until shipment.

● Hot-Rolled Coil

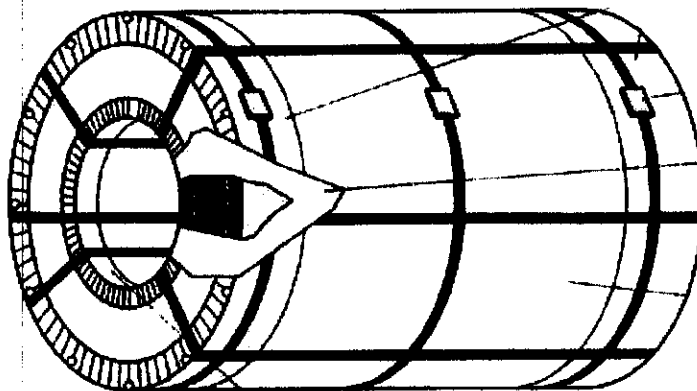


Steel Hoop

Seal

Protecting Piece

● Picked and Oiled Coil



Metal Edge Protector

Seal

Waterproof Paper

Steel Hoop

Protective Steel sheet

Metal Edge Protector

Labels showing the product standard, dimensions, weight, and product serial no. are attached to the product

Instructions for ordering

- When ordering, please give detailed information, including the following.
Detailed information on product requirements;
Standard, dimensions, quantity, surface finish, packaging specifications (inner and outer diameter, mass conditions), delivery date requirements
- Application and processing method
Intended application, processing method, any heat treatments, welding, and/or surface treatment to be applied, and any other requirements.

Excerpts from public standards (1)

199

Japanese Industrial Standard (JIS) (1)

JIS G 3131 - 1996 Hot-Rolled Mild Steel Plates, Sheets and Strip

● Chemical Composition

Unit : %

0.15 max.	0.60 max.	0.050 max.	0.050 max.
0.10 max.	0.50 max.	0.040 max.	0.040 max.
0.10 max.	0.50 max.	0.030 max.	0.035 max.

Informative Reference : Grade SPHE is manufactured by a special process, such as made of killed steel to improve drawability

● Mechanical Properties

270 min.	27min.	29min.	29min.	29min.	31min.	31min.	No.5 in rolling direction	180°	Flat on itself	Thickness ×0.5	No.3 in rolling direction
270 min.	30min.	32min.	33min.	35min.	37min.	39min.		—	—	—	
270 min.	31min.	33min.	35min.	37min.	39min.	41min.		—	—	—	

JIS G 3101 – 1995 Rolled Steels for General Structure

● Chemical Composition

Unit : %

	—	—	0.050max.	0.050max.
	0.30max.	1.60max.	0.040max.	0.040max.

Remarks : Alloy elements other than those given in the above table may be added as necessary.

● Mechanical Properties

205min.	195min.	330 to 430	5 or under in thickness	No.5	26min.	180°	Half of thickness	No1
			Over 5 up to 16 in thickness	No.1A	21min.			
			Over 16 up to 50 in thickness	No.1A	26min.			
245min.	235min.	400 to 510	5 or under in thickness	No.5	21min.	180°	1.5 times the thickness	No1
			Over 5 up to 16 in thickness	No.1A	17min.			
			Over 16 up to 50 in thickness	No.1A	21min.			
285min.	275min.	490 to 610	5 or under in thickness	No.5	19min.	180°	2.0 times the thickness	No1
			Over 5 up to 16 in thickness	No.1A	15min.			
			Over 16 up to 50 in thickness	No.1A	19min.			
400min.	390min.	540min.	5 or under in thickness	No.5	16min.	180°	2.0 times the thickness	No1
			Over 5 up to 16 in thickness	No.1A	13min.			
			Over 16 up to 50 in thickness	No.1A	17min.			

Remarks : 1. The values given in the table shall not be applied to the both ends of the steel coil.
2. No.3 test piece may be used for the bend test for the steel product 5mm or under in thickness.

Excerpts from public standards (2)

Japanese Industrial Standard (JIS) (2)

JIS G 3106 - 1999 Rolled Steels for Welded Structure

● Chemical Composition

Unit : %

Up to and incl. 50mm	0.23 max.	—	2.5 x C min.(1)	0.035 max.	0.035 max.
Up to and incl. 50mm	0.20 max.	0.35 max.	0.60 to 1.40	0.035 max.	0.035 max.
Up to and incl. 100mm	0.18 max.	0.35 max.	1.40 max.	0.035 max.	0.035 max.
Up to and incl. 50mm	0.20 max.	0.55 max.	1.60 max.	0.035 max.	0.035 max.
Up to and incl. 50mm	0.18 max.	0.55 max.	1.60 max.	0.035 max.	0.035 max.
Up to and incl. 100mm	0.18 max.	0.55 max.	1.60 max.	0.035 max.	0.035 max.
Up to and incl. 100mm	0.20 max.	0.55 max.	1.60 max.	0.035 max.	0.035 max.
Up to and incl. 100mm	0.20 max.	0.55 max.	1.60 max.	0.035 max.	0.035 max.
Up to and incl. 100mm	0.18 max.	0.55 max.	1.60 max.	0.035 max.	0.035 max.

Note : (1) The value of carbon shall be applied the values of actual ladle analysis.

Remarks : Alloy elements other than those given in Table may be added as necessary.

● Mechanical Properties

245min.	235min.	400 to 510	Up to and incl. 5	No.5	23min.
			Over 5, up to and incl. 16	No.1A	18min.
			Over 16, up to and incl. 50	No.1A	22min.
325min.	315min.	490 to 610	Up to and incl. 5	No.5	22min.
			Over 5, up to and incl. 16	No.1A	17min.
			Over 16, up to and incl. 50	No.1A	21min.
365min.	355min.	490 to 610	Up to and incl. 5	No.5	19min.
			Over 5, up to and incl. 16	No.1A	15min.
			Over 16, up to and incl. 50	No.1A	19min.
365min.	355min.	520 to 640	Up to and incl. 5	No.5	19min.
			Over 5, up to and incl. 16	No.1A	15min.
			Over 16, up to and incl. 50	No.1A	19min.
460min.	450min.	570 to 720	Up to and incl. 16	No.5	19min.
			Over 16	No.5	26min.
			Over 20	No.4	20min.

Remarks : Table does not apply to both ends of strip.

● Charpy Absorption Energy

0	27min.	No.4 in rolling direction
0	47min.	
0	27min.	
0	47min.	
0	27min.	
0	27min.	
0	47min.	
-5	47min.	

Remarks : 1. The steel products over 12mm in thickness shall be tested.

2. The Charpy absorption energy in this case shall be expressed by the average of measured values of three test pieces.

Excerpts from public standards (3)

Japanese Industrial Standard (JIS) (3)

JIS G 3125 – 1987 Superior Atmospheric Corrosion Resisting Rolled Steels

● Chemical Composition

Unit : %

0.12 max.	0.25 to 0.75	0.20 to 0.50	0.070 to 0.150	0.040 max.	0.25 to 0.60	0.30 to 1.25	0.65 max.
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Remarks : 1. For the steel over 6.0mm in thickness, the upper limit of manganese content shall be 0.60%.
2. Alloy elements other than those in the above table may be added as required.

● Mechanical Properties

270min.	30min.	32min.	35min.	37min.	No.5 Test Piece taken in rollin direction	180°	Flat on itself	Thickness × 0.5	No.3 taken in rolling direction
340min.	25min.	27min.	30min.	32min.		180°	Thickness × 1.0	Thickness × 1.5	
410min.	20min.	22min.	25min.	27min.		180°	Thickness × 1.5	Thickness × 0.5	
490min.	15min.	18min.	20min.	22min.		180°	Thickness × 1.5	Thickness × 2.0	

Note : (1) For SPA-H steel sheet and strip of 6.0mm and under in thickness, inside radius for bend ability may be 1.0 times as large as the thickness subject to agreement between the parties concerned.

JIS G 3132 – 1990 Hot-Rolled Carbon Steel Strip for Pipes and Tubes

● Chemical Composition

Unit : %

0.10 max.	0.35 max. (1)	0.50 max.	0.040 max.	0.040 max.
0.18 max.	0.35 max.	0.60 max.	0.040 max.	0.040 max.
0.25 max.	0.35 max.	0.30 to 0.90	0.040 max.	0.040 max.
0.30 max.	0.35 max.	0.30 to 1.00	0.040 max.	0.040 max.

Note : (1) The maximum silicon content may be modified to 0.04% max. by agreement between the purchaser and the supplier.

● Mechanical Properties

270min.	30min.	32min.	35min.	37min.	No.5 Test Piece taken in rollin direction	180°	Flat on itself	Thickness × 0.5	No.3 taken in rolling direction
340min.	25min.	27min.	30min.	32min.		180°	Thickness × 1.0	Thickness × 1.5	
410min.	20min.	22min.	25min.	27min.		180°	Thickness × 1.5	Thickness × 0.5	
490min.	15min.	18min.	20min.	22min.		180°	Thickness × 1.5	Thickness × 2.0	

Remarks : The values given in the above table are not applicable to the irregular portions at the either end of the steel strip.

JIS G 3134 – 1990 Hot Rolled High Strength Steel Sheets with Improved Formability for Automobile Structural Uses

● Chemical Composition

The chemical composition shall be agreed upon by the purchaser and supplier, if necessary.

● Mechanical Properties

490min.	325min.	22min.	23min.	24min.	25min.	No.5 test piece taken in transverse direction	180°	Thickness × 0.5	Thickness × 1.0	No.3 test piece taken in transverse direction
540min.	355min.	21min.	22min.	23min.	24min.			Thickness × 1.0	Thickness × 1.5	
590min.	420min.	19min.	20min.	21min.	22min.			Thickness × 1.5	Thickness × 1.5	
540min.	295min.	—	24min.	25min.	26min.			Thickness × 1.0	Thickness × 1.5	
590min.	325min.	—	22min.	23min.	24min.			Thickness × 1.5	Thickness × 1.5	

Excerpts from public standards (4)

PU 193

ASTM Standard (1)

ASTM A36 - 2001 Carbon Structural Steel

● Chemical Requirements

Unit : %

0.25 max.	0.40 max.	—	0.04 max.	0.05 max.	0.20 min, when specified.
0.25 max.	0.40 max.	0.80-1.20	0.04 max.	0.05 max.	0.20 min, when specified.

● Tensile Requirements

58-80 [400-550]	23 min.	—
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Remarks : For plates wider than 24in. [600mm], the elongation requirement is reduced two percentage points.

ASTM A283 - 2000 Low and Intermediate Tensile Strength Carbon Steel Plates

● Chemical Requirements

Unit : %

0.14 max.	0.40 max.	0.90 max.	0.035 max.	0.040 max.	0.20 min. ,when required
0.17 max.	0.40 max.	0.90 max.	0.035 max.	0.040 max.	0.20 min. ,when required
0.24 max.	0.40 max.	0.90 max.	0.035 max.	0.040 max.	0.20 min. ,when required
0.27 max.	0.40 max.	0.90 max.	0.035 max.	0.040 max.	0.20 min. ,when required

● Mechanical Requirements

24[185]	45-60 [310-415]	30 min.	—
27[185]	50-65 [345-450]	28 min.	—
30[205]	55-75 [380-515]	25 min.	—
33[230]	60-80 [415-550]	23 min.	—

Remarks : For plates wider than 24in. [600mm], the elongation requirement is reduced two percentage points.

ASTM A572 - 2001 High-Strength Low-Alloy Columbium-Vanadium Structural Steel

● Chemical Requirements

Unit : %

6 [150]	max.	0.21 max.	0.40 max.	1.35 max.	0.04 max.	0.05 max.	0.20 min. When specified
4 [100]	max.	0.23 max.	0.40 max.	1.35 max.	0.04 max.	0.05 max.	0.20 min. When specified
2 [50]	max.	0.25 max.	0.40 max.	1.35 max.	0.04 max.	0.05 max.	0.20 min. When specified
11/4 [32]	max.	0.26 max.	0.40 max.	1.35 max.	0.04 max.	0.05 max.	0.20 min. When specified
Over 1/2 to 11/4 [13-32]	excl.	0.23 max.	0.40 max.	1.65 max.	0.04 max.	0.05 max.	0.20 min. When specified
Under 1/2 [13]	incl. (2)	0.26 max.	0.40 max.	1.35 max.	0.04 max.	0.05 max.	0.20 min. When specified

Remarks : (1) Manganese, minimum, by heat analysis of 0.80% (0.75% by product analysis) shall be required for all plates over 3/8in. [10mm] in thickness; a minimum of 0.50% (0.45% by product analysis) shall be required for plates 3/8in. [10mm] and less in thickness, and for all products. The manganese to carbon ratio shall not be less than 2 to 1.
(2) An alternative chemical requirement with a maximum carbon 0.21 % and a maximum manganese of 1.65% is permitted, with the balance of the elements as shown in table.

● Alloy contents

Unit : %

0.005-0.05	—	—	—	—
—	0.01-0.15	—	—	—
0.005-0.05	0.01-0.15	0.02-0.15	—	—
—	0.01-0.15	—	0.015 max.	—
—	0.06 max.	—	0.003-0.015	0.006-0.04

● Tensile Requirements

42 [290]	60 [415]	24
50 [345]	65 [450]	21
55 [380]	70 [485]	20
60 [415]	75 [520]	18
65 [450]	80 [550]	17

Remarks : For plates wider than 24in. [600mm], the elongation requirement is reduced two percentage points for Grade 42, 50 and 52 [290, 345 and 380], and three percentage points for Grades 60 and 65 [415 and 450].

ASTM A606 - 2001 Steel, Sheet and Strip, High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, with Improved Atmospheric Corrosion Resistance

● Chemical Requirements

Unit : %

0.22 (0.26) max.	1.25 (1.30) max.	0.04 (0.06) max.
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● Tensile Requirements

50 [340]	70 [480]	22	2 1/2t
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Remarks : The figures in () is product analysis.

Excerpts from public standards (5)

PUBLIC

191

ASTM Standard (2)

ASTM A1011 - 2001 Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy and High-Strength Low-Alloy with Improved Formability

● Chemical Composition

Unit : %

0.10 max.	0.60 max.	0.030 max.	0.035 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	0.025 max.	—
0.02- 0.15	0.60 max.	0.030 max.	0.035 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	0.025 max.	—
0.08 max.	0.60 max.	0.10 max.	0.035 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	0.025 max.	—
0.08 max.	0.60 max.	0.020 max.	0.030 max.	0.01 min.	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	0.025 max.	—
0.02- 0.08	0.50 max.	0.020 max.	0.030 max.	0.01 min.	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	0.025 max.	—
0.25 max.	0.90 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	0.90 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	0.90 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	1.35 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	0.90 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	1.35 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	0.90 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	1.35 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.25 max.	1.35 max.	0.035 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.008 max.	0.008 max.	—	—
0.22 max.	1.35 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.15 max.	1.35 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.23 max.	1.35 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.15 max.	1.35 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.25 max.	1.35 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.15 max.	1.35 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.26 max.	1.50 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	—
0.15 max.	1.50 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	0.020 max.
0.26 max.	1.50 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	0.012 max.
0.15 max.	1.50 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	0.020 max.
0.26 max.	1.65 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	0.012 max.
0.15 max.	1.65 max.	0.04 max.	0.04 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	0.01 min.	0.005 min.	—	0.020 max.
0.15 max.	1.65 max.	0.020 max.	0.025 max.	—	—	0.20 max.	0.20 max.	0.15 max.	0.06 max.	—	—	—	—

● Mechanical Property Requirements

30 to 50 [205 to 340]	—	25 and over	—	—	—
30 to 45 [205 to 310]	—	28 and over	—	—	—
30 [205]	49 [340]		25.0	24.0	21.0
33 [230]	52 [360]		23.0	22.0	18.0
36 [250]	53 [365]		22.0	21.0	17.0
36 [250]	58-80 [400-550]		21.0	20.0	16.0
40 [275]	55 [380]		21.0	20.0	15.0
45 [310]	60 [410]		19.0	18.0	13.0
50 [340]	65 [450]		17.0	16.0	11.0
55 [380]	70 [480]		15.0	14.0	9.0

45 [310]	60 [410]		25.0		23.0
45 [310]	55 [380]		25.0		23.0
50 [340]	65 [450]		22.0		20.0
50 [340]	60 [410]		22.0		20.0
55 [380]	70 [480]		20.0		18.0
55 [380]	65 [450]		20.0		18.0
60 [410]	75 [520]		18.0		16.0
60 [410]	70 [480]		18.0		16.0
65 [450]	80 [550]		16.0		14.0
65 [450]	75 [520]		16.0		14.0
70 [480]	85 [585]		14.0		12.0
70 [480]	80 [550]		14.0		12.0
50 [340]	60 [410]		24.0		22.0
60 [410]	70 [480]		22.0		20.0
70 [480]	80 [550]		20.0		18.0
80 [550]	90 [620]		18.0		16.0

Excerpts from public standards (6)

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SAE Standard

J403- 2000

●Chemical Composition

Unit : %

G 10050	1005	0.06 max.	0.35 max.	0.030	0.050
G 10060	1006	0.08 max.	0.25 - 0.40	0.030	0.050
G 10080	1008	0.10 max.	0.30 - 0.50	0.030	0.050
G 10090	1009	0.16 max.	0.50 max.	0.030	0.050
G 10100	1010	0.08 - 0.13	0.30 - 0.60	0.030	0.050
G 10120	1012	0.10 - 0.15	0.30 - 0.60	0.030	0.050
G 10130	1013	0.11 - 0.16	0.30 - 0.60	0.030	0.050
G 10150	1015	0.13 - 0.18	0.60 - 0.90	0.030	0.050
G 10160	1016	0.13 - 0.18	0.60 - 0.90	0.030	0.050
G 10170	1017	0.15 - 0.20	0.60 - 0.90	0.030	0.050
G 10180	1018	0.15 - 0.20	0.60 - 0.90	0.030	0.050
G 10190	1019	0.15 - 0.20	0.60 - 0.90	0.030	0.050
G 10200	1020	0.18 - 0.23	0.30 - 0.60	0.030	0.050
G 10210	1021	0.18 - 0.23	0.70 - 1.00	0.030	0.050
G 10220	1022	0.18 - 0.23	0.70 - 1.00	0.030	0.050
G 10230	1023	0.20 - 0.25	0.30 - 0.60	0.030	0.050
G 10250	1025	0.22 - 0.28	0.30 - 0.60	0.030	0.050
G 10260	1026	0.22 - 0.28	0.60 - 0.90	0.030	0.050
G 10290	1029	0.25 - 0.31	0.60 - 0.90	0.030	0.050
G 10300	1030	0.25 - 0.31	0.60 - 0.90	0.030	0.050
G 10330	1033	0.30 - 0.36	0.60 - 0.90	0.030	0.050
G 10350	1035	0.35 - 0.38	0.60 - 0.90	0.030	0.050
G 10370	1037	0.32 - 0.38	0.60 - 0.90	0.030	0.050
G 10380	1038	0.30 - 0.38	0.60 - 0.90	0.030	0.050
G 10390	1039	0.39 - 0.44	0.70 - 1.00	0.030	0.050
G 10400	1040	0.37 - 0.44	0.60 - 0.90	0.030	0.050
G 10420	1042	0.40 - 0.47	0.60 - 0.90	0.030	0.050
G 10430	1043	0.42 - 0.47	0.60 - 0.90	0.030	0.050
G 10440	1044	0.43 - 0.50	0.30 - 0.60	0.030	0.050
G 10450	1045	0.43 - 0.50	0.60 - 0.90	0.030	0.050
G 10460	1046	0.43 - 0.50	0.70 - 1.00	0.030	0.050
G 10480	1048	0.45 - 0.51	0.60 - 0.90	0.030	0.050
G 10500	1050	0.48 - 0.55	0.60 - 0.90	0.030	0.050
G 10530	1053	0.45 - 0.55	0.60 - 0.90	0.030	0.050
G 10550	1055	0.50 - 0.60	0.60 - 0.90	0.030	0.050
G 10560	1056	0.55 - 0.65	0.60 - 0.90	0.030	0.050
G 10650	1065	0.60 - 0.70	0.60 - 0.90	0.030	0.050
G 10700	1070	0.65 - 0.75	0.60 - 0.90	0.030	0.050
G 10740	1074	0.70 - 0.80	0.50 - 0.70	0.030	0.050
G 10750	1075	0.70 - 0.85	0.40 - 0.70	0.030	0.050
G 10780	1078	0.72 - 0.85	0.30 - 0.60	0.030	0.050
G 10800	1080	0.75 - 0.85	0.60 - 0.90	0.030	0.050
G 10840	1084	0.80 - 0.93	0.60 - 0.90	0.030	0.050
G 10850	1085	0.80 - 0.93	0.70 - 1.00	0.030	0.050
G 10860	1086	0.80 - 0.93	0.30 - 0.50	0.030	0.050
G 10900	1090	0.85 - 0.95	0.60 - 0.90	0.030	0.050
G 10950	1095	0.90 - 1.03	0.30 - 0.50	0.030	0.050

Correspondence with JFE standards to public standards

Steel Sheets for General Uses and Welded Structural Uses	G3131 G3101 G3106	SPHC SPHD SPHE SS SM	A1011 A36 A283	BS1449 Part1 DIN1614-1 BS EN10025 DIN EN10025 BS EN10113 DIN EN10113
Steel Sheets for Automobile Parts	G3113 G3134	SAPH SPFH	A1011	
Steel Sheets for Pipes and Tubes	G3132	SPHT		
Atmospheric Corrosion Resistance Steel Sheets	G3125	SPA-H	A242 A606	BS EN10155 DIN EN10155
Anti-sea Water Corrosion Steel Sheets				
Corrosion Resistance Steel Sheets				
Steel Sheets in High Temperature Atmosphere				
Steel Sheets for Porcelain Enameling				
Checkered Plate			A786	
Anti-aging Steel Sheets				
High Strength Steel Sheets				
Flat Steel Sheets for Exposed Uses				

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