STANDING ORDER NO. 62/2009
Date: 21.12.2009

Subject: Assessment / Examination of Prime Steel including Stainless Steel Sheets/ Coils/ Plates/ Tin Plates etc. Instructions Reg.

Instances of mis-declaration of description have been noticed in the recent past in respect of steel and stainless steel flat products (sheets/strips/coils/plates etc.) wherein either prime goods are being mis-described as non-prime or non-prime as prime. Although the volume of imports of non-prime steel and stainless steel flat products is quite high through this Port, but it is noticed that there were no specific guidelines/instructions on identification, examination and assessment of non-prime steel and stainless flat products so as to have a check on the mis-declaration. Further, it is seen that various terminologies, for prime/non-prime goods, are used by steel trade and industry or declared by the importers in the Bills of Entry and the same can be broadly grouped as:-

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Category</th>
<th>Terminology/description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prime</td>
<td>Ex-Stock, Stock Lot, Prime Excess, Surplus Stock, Mill Excess, Over-rolls, Left-Overs etc.</td>
</tr>
<tr>
<td>2</td>
<td>Non-Prime</td>
<td>'Seconds &amp; Defective' or 'Seconds', 'Secondary', 'Second Grade', 'Second Choice', 'Third Choice', 'Defectuous' etc.</td>
</tr>
</tbody>
</table>

The first category of Prime steel/stainless steel flat product basically covers prime products except that they are sold by Steel Manufacturers/ Suppliers at lower rates/prices (or on discounts) when compared to prime goods. These goods are generally shipped in varying quality, thickness, width and length. Hence, the goods of same size and thickness or of homogeneous dimensions can not be regarded as Stock Lot/ Ex-Stock. It, therefore, follows that the main criteria for identifying these goods has been that the consignments should be presented in mixed variety, size and thickness, that too, in small quantities supported by Manufacturer's Invoice or Mill Test Certificate (MTC). These goods, for all practical purpose, are traded or sold at par with prime goods except for price consideration.

In respect of second category of non-prime steel/stainless steel flat product (i.e. 'Seconds & Defective' or 'Seconds', 'Secondary', 'Second Grade', 'Second Choice', 'Third Choice', 'Defectuous' etc.), there is no laid down criteria or definition for classifying a given product or products on the basis of its/their actual characteristics. The non-prime (Seconds & Defective)
steel products may be defined as (i) Products of non-standard dimensions and (ii) Down-graded products.

3(i) These Products are sold and delivered in different or heterogeneous formats with **no guarantee or indication of quality**. These consignments are often not accompanied with MTC. However, it is to be ensured that the dimensions must be given on **the packing list** by the importer at the time of examination to enable the heterogeneity of the shipment to be confirmed.

3(ii) **The Down-graded Products** :- means iron and steel products having (a) surface defects and (a) internal faults. The most common surface defects are roll marks, visible scratches, rust spots, scabs, scuff beads, bran, dirt and excessive oil, dents, bents, pinholes, fold edges, bent corners, mill grease, streaks, lamination and sand spots, scuff beads, transit rub marks, indentation, blisters, oil patches etc. The importers are required to declare or specify, for the examination and assessment purpose on the Bill of Entry, the non-prime nature of the goods as seconds or defective goods. The main types of surface defects are briefly described as under:

1. **Blister** : Small clusters of blisters on the surface or blisters at the edge.
2. **Split ends/ lamination** : (a) Fissure which can sometimes lead to complete detachment. It takes the form of cavity in the central part of the cross-section. (b) Fissure at the ends or along the body of rolled products with actual or potential separation of the material.
3. **Scabs** : Piece of metal partly attached to the surface of rolled products, often surrounded by a thin oxide layer. The scab is elongated in the rolling direction.
4. **Cracks** : Discontinuity, usually of the hairline type: - longitudinal - parallel to rolling direction, - transverse-perpendicular to rolling direction, - with scale or Y-shaped (forked).
5. **Waviness / Buckling** : Lack of flatness consisting of undulation (including waves and buckles) in the surface of a sheet or plate. Troughs and crests on rolled products which may occur along with waviness of edges.
6. **Notched edge/ cracked edge/ edge burrs** : Irregular notching on the edges.
7. **Spoilt edge** : Damage to the edges of products caused mechanically during handling and the defect takes the form of cuts, bends and dents on the edge, varying in aspect and extent, depending on the cause.
8. **Seams** : Parts of material which in rolling having overlapped without the surfaces becoming completely welded. The defect takes the form of a flattened metal strip on the edge of the sheet or plate or else a crevice which forms an acute angle with the surface. Seams resemble longitudinal cracks; but whilst in cross-section cracks are perpendicular to the surface, seams have a fairly small angle and sometimes run the whole of the length.
9. **Vocalization/Ovality (irregularity of cross-section)** : Defect seen in products of round section. The final section is oval.
10. **Beading / Fins** : This takes the form of a projection along a generatrix of the bar or two diametrically opposite generatrices.
11. **Straightness and profile:** Defects whereby the section or its cross-section depart from the required dimensions and straightness by more than the tolerances specified in international technical standards.

12. **Annealing halo:** Discoloration by oxidation seen at the edges of cold-rolled products after annealing operations. The colour varies from straw yellow to dark blue.

13. **Rust:** Rusting of surface of rolled, pickled or coated products as a result of extended storage or inadequate oiling. Slightly rusted material does not justify any depreciation and is considered as being in accordance with trade practice. Such Rust is not a sufficient reason for downgrading except in the case of severe corrosion. *Source: Various BIS Publications."

Internal faults (other than surface defects) or characteristics not conforming to the values specified in the National / International standards specification with regard to chemical analysis (i.e. off chemistry), mechanical properties (i.e. off mechanical properties), dimensional tolerances (i.e. off size), magnetic properties, stacking factor, insulation resistivity etc. in case of electrical steel grades can not be determined on visual examination and the same are required to be tested on supply of information by the manufacturer/importer before clearance in this regard. Further, internal defects (physico-chemical faults) concern the analytical and structural composition of the steel and/or presence of radio active elements in the steel. These faults are internal defects and make the product unusable in the corresponding commercial quality. In general, these defects - such as inclusions, split ends, piping, off chemistry etc. - cannot be seen with the naked eye. These defects are detected by ultrasonic methods, by mechanical and/or chemical tests. Presence of radio active elements, if any, may be detected by radiation meter. As in the case of products with surface defects, the importer must declare products with physico-chemical faults and supply documentary evidence. The Assessing Group is required to check and ascertain these faults (Internal defect or physico-chemical faults) by forwarding samples from the consignments to the approved Chemical Laboratory or Test Agencies.

4. There are greater chances of mis-declarations of goods declared as Seconds/Defective as Prime-Excess/Stock Lot/Ex-Stock due to lower duty structure. Even prime goods can be mis-described as prime-excess/Stock Lot/Ex-Stock in order to justify under-invoicing.

5. At present the duty structure for Prime Steel products is 18.62% whereas the duty structure for Seconds/Defective is 24.42%. It may be noted that by way of mis-declaration of seconds/defective steel products as Ex-Stock/Stock Lot, the importer can gain duty by 5.80% (i.e. 24.42% minus 18.62%). In view of this position, the Assessing Groups and the Examining Staff at Docks should thoroughly scrutinize the documents, declarations and examine the goods to ensure proper assessment and detection of mis-declarations, if any. Therefore, the
following instructions are to be adopted by the assessing and examining officers while dealing with the Bills of Entry relating to Steel Flat products including Stainless Products:

- i) the present practice of first-check appraisal shall be continued and all the ex-stock/stock lot and secondary/defective goods shall be examined first to ascertain the correctness of the declarations before completion of assessment. The assessing Officer should insist for Mill Test Certificate (MTC) for all consignments of Stock Lot/ Ex-Stock/ Prime goods.

- ii) the examining staff must insist on detailed packing list, Mill Test Certificate (MTC) and manufacturer’s invoice while examining the consignments of Prime/Ex-Stock/Stock Lot goods and on completion of physical examination of the goods, they should invariably attest the invoice and packing list and MTC. If no Mill Test Certificate is submitted, they should also record the same in the examination report accordingly.

- iii) in the absence of MTC or non-submission of the same for the purpose of assessment of ex-stock/stock lot goods, the assessing group shall assess these goods on higher rate of duty as Secondary/Defective merit. It is needless to say that the burden to prove the ex-stock/stock lot nature of goods would rest on the importer, being the beneficiary.

- iv) minimum 25% of secondary/defective/ and ex-stock/stock lot consignments must be subjected to 100% de-stuffing to verify the correctness of the declarations and to detect mis-declarations.

- v) Further, if the number of containers are more than two (2) for a particular Bill of Entry, then the goods shall be examined under the Asst/Dy. Commissioner (Docks) supervision.

- vi) The present instructions of examination of H.R. Stainless Steel consignments under AC/DC Docks supervision would continue.

6. In respect of Stainless Steel Flat Products (sheets/coils/strips), the price variations among the Grades is substantially high between grades 304 and 316, between grades 304 and 201 as the composition of raw materials like Chromium, Nickel and Molybdenum vary from grade to grade. For instance, the cost of Prime CR Coil of 304 is around US$ 2800/PMT whereas the cost of Prime Grade 316 is around US$ 3600/PMT subject to fluctuations in the international market for the raw materials. Thus, there is a possibility of mis-declaration of Grade, declaration of grade 304 as 301; grade 316 as 304 and 301; declaration of Cold Rolled (CR) as Hot Rolled (HR). In case of Ex-Stock/Stock Lot while mixing of thickness is possible, mixing of grade is not and there may be cases that in ex-stock goods of grade 304 declared, there may be material of grade 316.

7. In order to have better understanding about the grades in stainless steel and its bearing on the value for the assessment purpose, the following table of chemical composition of main raw material for different grades may be referred for guidance:
<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Grade</th>
<th>Chromium (%) Cr</th>
<th>Nickel (%) Ni</th>
<th>Molybdenum (%) Mo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>304</td>
<td>18 20</td>
<td>8 - 10.5</td>
<td>----</td>
</tr>
<tr>
<td>2</td>
<td>301</td>
<td>16 18</td>
<td>6 - 8</td>
<td>----</td>
</tr>
<tr>
<td>3</td>
<td>310</td>
<td>24 26</td>
<td>19 - 22</td>
<td>----</td>
</tr>
<tr>
<td>4</td>
<td>316</td>
<td>16 18</td>
<td>10 - 14</td>
<td>2 3</td>
</tr>
<tr>
<td>5</td>
<td>201</td>
<td>16 18</td>
<td>3.5 - 5.5</td>
<td>----</td>
</tr>
<tr>
<td>6</td>
<td>202</td>
<td>17 19</td>
<td>4 6</td>
<td>---</td>
</tr>
<tr>
<td>7</td>
<td>409</td>
<td>10.5 11.75</td>
<td>0.05</td>
<td>---</td>
</tr>
<tr>
<td>8</td>
<td>430</td>
<td>16 -18</td>
<td>0.75</td>
<td></td>
</tr>
</tbody>
</table>

Source: SAE Steel Grades - wikipedia.org

To prevent mis-declaration, in respect of stainless steel flat products, the following measures are to be adopted by the assessing and examination officers:

(a) Series 400 on account of low nickel content is attracted to magnet, while series 300 does not. Therefore, magnet can be used for checking whether the stainless steel belongs to series 400 or series 300;

(b) To check the grade 316, a molybdenum detection chemical bottle is available. When a drop of this white chemical is put on stainless steel containing molybdenum, the colour of the steel changes to red;

(c) To check the thickness of sheet or coil, digital micrometer can be used which can detect correct density of the sheet or coil.

(d) Minimum 25% of the ex-stock/stock lot consignments should be subject to 100% de-stuffing to verify presence of mixed grades especially grade 316.

(e) In view of possibility of mis-declarations of grades, non-regular grade like 301, 201, etc, officers should insist on manufacturer's invoice or mill test certificate from the manufacturer or alternatively should get the consignment examined from an independent lab/DYCC to confirm the declared grades at random.

A. K. Das  
Commissioner of Customs (Import), JNCH, NHAVA SHEVA.

(Source DGOU note on Understanding Stainless Steel F. No. VAL/POLICY/10/2006 DT. 11.09.2006)
1. The Chief Commissioner of Customs, JNCH, Sheva.
2. The Commissioner of Customs (Import/Export/Appeals), JNCH, Sheva.
3. All the Addl. Commissioner of Customs (Import/Export), JNCH, Sheva.
4. All Asstt/Dy. Commissioner of Customs (Import/Export), JNCH, Sheva.
5. Guard file.