

UNITED STATES COURT OF INTERNATIONAL TRADE

**UNION STEEL and DONGBU STEEL CO.,  
LTD.,**

Plaintiffs,

**LG HAUSYS, LTD. and LG HAUSYS  
AMERICA, INC.,**

Plaintiff-Intervenors,

v.

**UNITED STATES,**

Defendant,

**NUCOR CORPORATION and UNITED  
STATES STEEL CORPORATION,**

Defendant-Intervenors.

**Before: Jane A. Restani, Judge**

**Consol. Court No. 11-00083**

**OPINION**

[Discretionary practice of weighted average dumping margin to include zeroing in administrative reviews of antidumping duty order upheld.]

Dated: February 27, 2012

Donald B. Cameron, Morris, Manning & Martin, LLP, of Washington, D.C., argued for plaintiffs and plaintiff-intervenors. With him on the brief were Julie C. Mendoza, Mary S. Hodgins, Brady W. Mills, and R. Will Planert.

L. Misha Preheim, Trial Attorney, Commercial Litigation Branch, Civil Division, U.S. Department of Justice, of Washington D.C., argued for defendant. With him on the brief were Tony West, Assistant Attorney General, Jeanne E. Davidson, Director, and Claudia Burke, Assistant Director. Of counsel on the brief was Daniel J. Calhoun, Office of the Chief Counsel for Import Administration, U.S. Department of Commerce, of Washington, D.C.

Timothy C. Brightbill, Wiley Rein, LLP, of Washington, D.C., argued for defendant-intervenor Nucor Corporation. With him on the brief was Alan H. Price, Lori E. Scheetz, Robert E. DeFrancesco, III, and Tessa V. Capeloto.

Ellen J. Schneider, Skadden, Arps, Slate Meagher & Flom, LLP, of Washington, D.C., argued for defendant-intervenor United States Steel Corporation. With her on the brief were Jeffrey D. Gerrish, Robert E. Lighthizer, and Ying Lin.

Restani, Judge: This consolidated antidumping duty matter is before the court following remand to the United States Department of Commerce (“Commerce”) requiring it to explain its “zeroing” practice. See Results of Redetermination Pursuant to Remand at 3 (Oct. 13, 2011) (Docket No. 49) (“Remand Results”). The court has jurisdiction under 28 U.S.C. § 1581(c) because it is reviewing a final antidumping duty determination and it reviews such determinations for substantial evidence and, as in this matter, to decide if the agency determination complies with the applicable law. 19 U.S.C. § 1516a(b)(1)(B)(i).

Two relevant appellate decisions post-dated the original determination at issue here, Certain Corrosion-Resistant Carbon Steel Flat Products from the Republic of Korea: Notice of Final Results of the Sixteenth Administrative Review, 76 Fed. Reg. 15,291 (Dep’t Commerce Mar. 21, 2011) (“Final Results”). Those decisions are Dongbu Steel Co., Ltd. v. United States, 635 F.3d 1363 (Fed. Cir. 2011) (“Dongbu”) and JTEKT Corp. v. United States, 642 F.3d 1378 (Fed. Cir. 2011) (“JTEKT”). Most pertinately, the court in JTEKT stated that Commerce there

failed to address the relevant question – why is it a reasonable interpretation of the statute to zero in administrative reviews, but not in investigations? It is not illuminating to the continued practice of zeroing to know that one phase uses average-to-average comparisons while the other uses average-to-transaction comparisons. In order to satisfy the requirement set out in Dongbu, Commerce must explain why these (or other) differences between the two phases make it reasonable to continue zeroing in one phase, but not the other.

642 F.3d at 1384–85. Commerce has provided the explanation in the Remand Results and the court finds it sufficient to uphold the determination here.

Both Dongbu and JTEKT came as a surprise to many<sup>1</sup> because a long-line of cases seemed to allow Commerce great discretion in making the calculation at issue. It is necessary to discuss this line of precedent in order to address the first argument raised by Commerce and defendant-intervenor, i.e., that the appellate court was bound by its prior decision, and Dongbu and JTEKT cannot be followed. See Remand Results at 9–10; Def.’s Reply to Pls.’ Cmts. upon the Remand Redetermination 15–16; Cmts. of Def.-Intervenor U.S. Steel Corp. on the Results of Redetermination Pursuant to Remand Issued by the Dep’t of Comm. 7–8. It is also necessary to describe exactly what the essentially mathematical issue is that has caused so much consternation, so that the zeroing issue may be addressed on the merits. So we begin.

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<sup>1</sup> Apparently, not to all. See Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş. v. United States, Slip Op. 11–30, 2011 Ct. Intl. Trade LEXIS 28, \*6–8 (CIT Mar. 22, 2011) wherein Judge Musgrave, in granting a stay pending an appellate resolution, opined that the precise issue now before the court was not settled.

## BACKGROUND<sup>2</sup>

As explained in the House Report and in the Statement of Administrative Action (“SAA”) to the Uruguay Round Agreements Act (“URAA”), Commerce had a practice of calculating the amount of dumping by comparing an average of normal (or fair) values to individual export transaction prices both in investigations, which establish an antidumping duty order, and in subsequent administrative reviews of the order. H.R. Rep. No. 103–826, pt. 1, at 98 (1994), reprinted in 1994 U.S.C.C.A.N. 3773; Uruguay Round Agreements Act, SAA, H.R. Doc. No. 103–316 (1994), reprinted in 1994 U.S.C.C.A.N. 4040, 4177. That changed in 1995

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<sup>2</sup> The Court of Appeals has recently concisely explained the basics of antidumping duty law in Sioux Honey Ass’n v. Hartford Fire Ins. Co., Appeal No. 11–1040, 2012 U.S. App. LEXIS 2399, at \*4–9 (Fed. Cir. Feb. 7, 2012). To quote one paragraph:

Dumping occurs when a foreign company sells a product in the United States at a lower price than what it sells that same product for in its home market. Such a product can be described as being sold below “fair value.” Dumping presents unfair competition concerns because foreign companies selling goods below fair value can undercut domestic producers selling those same goods at market prices. Congress attempted to offset the harmful effects of dumping by enacting the Tariff Act of 1930. This statute, in combination with other statutes and regulations, provides a complex framework for determining the extent to which an imported product is being dumped, and for calculating a duty rate that offsets the dumping.

Id. at \*4.

because of the URAA. To quote the SAA:

Section 229 of the bill adds new section 777A(d) [19 U.S.C. § 1677f-1(d)] to implement the provisions of the Agreement regarding the use of average normal values and export prices for purposes of calculating dumping margins. Although current U.S. law permits the use of averages on both sides of the dumping equation, Commerce's preferred practice has been to compare an average normal value to individual export prices in investigations and reviews. In part, the reluctance to use an average-to-average methodology has been based on a concern that such a methodology could conceal "targeted dumping." In such situations, an exporter may sell at a dumped price to particular customers or regions, while selling at higher prices to other customers or regions.

Consistent with the Agreement, new section 777A(d)(1)(A)(i) provides that in an investigation, Commerce normally will establish and measure dumping margins on the basis of a comparison of a weighted-average of normal values with a weighted-average of export prices or constructed export prices.

1994 U.S.C.C.A.N. at 4177. Thus, Commerce was forced to abandon the methodology it favored, and which it continued to use in reviews, and it switched to an average-to-average price comparison methodology in investigations.<sup>3</sup>

The parties' understandings of the methodologies at issue seem to be in agreement. Because Commerce is aiming for one weighted-average dumping margin to be applied to the imports of a producer/exporter, it has to deal in some way with the various forms of a product. Commerce gives each unique product a control number. As explained by plaintiffs

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<sup>3</sup> The court is not going to distinguish among all the various ways of establishing a normal value, for which the paradigm is a price in the exporting/producing country, and some of which are not price based, or among the various ways of establishing the dumped price to the United States, either as export price or a constructed export price. For these purposes, the terms "normal value" and "export price" suffice to describe what is being compared.

in their post-argument submission:

A “CONNUM” is a contraction of the term “control number,” and is simply Commerce jargon for a unique product (defined in terms of a hierarchy of specified physical characteristics determined in each antidumping proceeding). All products whose product hierarchy characteristics are identical are deemed to be part of the same CONNUM and are regarded as “identical” merchandise for purposes of the price comparison. The hierarchy of product characteristics defining a unique CONNUM varies from case to case depending on the nature of the merchandise under investigation. The definition of the CONNUM in the instant corrosion-resistant steel sheet review consisted of 12 physical characteristics (e.g., grade, specification, thickness, width, etc.) and may be found in the record at PR Doc. 36 at Appendix IV. In the instant review Union Steel alone reported 690 unique CONNUMs in its home market and U.S. sales databases.

Response of Pls. Union Steel, Dongbu Steel, LG Hausys, Ltd. and LG Hausys America, Inc. to the Ct.’s Invitation to Provide a Numerical Example of the Calculation of Dumping Margins (“Pls.’ Example”) 2 n.1 (citation omitted).

Thus, in an average-to-average comparison, Commerce takes average normal value for the CONNUM, or averaging group, and compares it to the average export price. The average margin for the averaging group is multiplied by the quantity of export price sales to derive an absolute dumping margin for the averaging group. Without zeroing, the absolute dumping margins for each averaging group are added together, and negative numbers may offset positive ones. The total dumping amount is divided by the total export price to achieve a weighted-average dumping margin, expressed as a percentage, for a specific exporter or producer. This is generally reflected in the definitional provision, 19 U.S.C. § 1677(35)(B). After a World Trade Organization (“WTO”) decision holding that zeroing in average-to-average comparisons in antidumping investigations was contrary to U.S. international obligations, Commerce explained its abandonment of zeroing in average-to-average comparisons in

Antidumping Proceedings: Calculation of the Weighted-Average Dumping Margin During an Antidumping Investigation; Final Modification, 71 Fed. Reg. 77,722 (Dep't of Commerce Dec. 27, 2006) ("Final Modification").

Prior to the Final Modification, Commerce "zeroed" in average-to-average comparisons. That is, after it computed an average dumping margin for each averaging group, if that averaging group (CONNUM) product did not have a positive dumping margin, Commerce set the margin at zero rather than a negative number that would offset a positive margin for another averaging group. Commerce did not remove the sales from the calculation to obtain the single aggregated weighted dumping margin. It simply did not permit the offset.

The average-to-average method is indeed inexact and may mask dumping of some unique products, as the SAA noted. See SAA, 1994 U.S.C.C.A.N. at 4177. It is further inexact because the averages in the CONNUM are based on the whole period of investigations. See 19 C.F.R. § 351.414(d)(3). The price comparisons in reviews are based on monthly averages for normal values. See 19 U.S.C. § 1677f-1(d)(2).

Now for the review methodology at issue here, which Commerce did not change in the Final Modification. For each CONNUM, Commerce uses the average normal value and on a month-to-month basis compares it to the individual United States transaction prices in that month. Id. If the result is a transaction which is not dumped, i.e., there is no margin, Commerce sets the margin for that transaction at zero. See Remand Results at 12–13. Nonetheless, the sale price for the transaction goes into the denominator in calculating the final weighted-average

dumping margin percentage, thereby lowering the percentage margin.<sup>4</sup>

Has this been approved by judicial precedents? The answer is “yes.” Looking only at Court of Appeals for the Federal Circuit (“Court of Appeals”) decisions, the court begins with Timken Co. v. United States, 354 F.3d 1334 (Fed. Cir. 2004) (“Timken”). In considering a challenge to zeroing in an administrative review of an antidumping duty order on Japanese roller-bearings, the court stated that at a minimum, the statute “allow[s] for Commerce’s construction” and that Commerce’s methodology “makes practical sense.” Id. at 1342. In Corus Staal BV v. Dep’t of Commerce, with regard to an investigation of Dutch hot-rolled steel products, the Court of Appeals opined that there was insufficient distinction between investigations and reviews to mandate the elimination of zeroing based merely on the new post-Uruguay round methodology for averaging on both sides of the comparison. 395 F.3d 1343, 1347–48 (Fed. Cir. 2005) (“Corus I”). Zeroing in investigations thus was found permissible.

Next, in NSK Ltd. v. United States, zeroing was upheld in a bearings review, despite a WTO decision that had found the practice inconsistent with the governing international agreements. 510 F.3d 1375, 1379–80 (Fed. Cir. 2007). Then, in Corus Staal BV v. United States, upon Commerce’s announcement of the elimination of zeroing in investigations in the Final Modification, the court stated that “our previous determination that Commerce’s policy of zeroing is permissible under the statute applies to the challenged administrative review.” 502 F.3d 1370, 1375 (Fed. Cir. 2007) (footnote omitted) (“Corus II”). After the United States

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<sup>4</sup> There is an Appendix to this opinion that demonstrates the two scenarios for investigations and the one for reviews. It was provided by plaintiffs, see Pls.’ Example, and dramatically demonstrates the percentage differences that hypothetically may result. It is not a representation of any values in this matter.



formally changed its methodology in investigations to discontinue zeroing, the Court of Appeals upheld the change in methodology as reflecting “Commerce’s reasonable interpretation of an ambiguous statute.” U.S. Steel Corp. v. United States, 621 F.3d 1351, 1360 (Fed. Cir. 2010). It concluded further that “none of the cited statutory provisions speaks to the precise issue of zeroing – or offsetting – methodology.” Id. “[T]he statute is silent.” Id. Finally, “[w]e are bound by our previous decisions in Timken [review] and Corus II [investigation]” that the antidumping duty statute “does not unambiguously preclude – or require – Commerce to use zeroing methodology.” Id. at 1361 (citation omitted).

The coffin finally appeared to be sealed by SKF USA, Inc. v. United States, 630 F.3d 1365 (Fed. Cir. 2011). This was another bearings review. Commerce was actively taking steps to eliminate zeroing in investigations. The court noted that in Corus II, 502 F.3d at 1375, it had been aware that the investigation methodology had changed, and that it was adhering to its approval of zeroing in reviews. SKF, 630 F.3d at 1375.

That leads to Dongbu. The court there noted many of its decisions on zeroing, but not specifically its holding on the issue in the latest SKF decision, just discussed. See Dongbu, 635 F.3d at 1365–68. The court stated that “we agree with Union that this court has never addressed the reasonableness of Commerce’s interpretation of 19 U.S.C. § 1677(35) with respect to administrative reviews now that Commerce is no longer using a consistent interpretation.

Accordingly, we are not bound by the prior cases and apply the Chevron<sup>5</sup> step two analysis anew.” Id. at 1371. The court observed:

The government argues, without explanation, that Congress contemplated that inconsistent interpretations might occur through the process of complying with adverse WTO decisions. We are not persuaded that Congress’s intent is so clear. In addition, the government has not pointed to any basis in the statute for reading 19 U.S.C. § 1677(35) differently in administrative reviews than in investigations. Indeed, as noted above, it has previously argued the opposite. In the absence of sufficient reasons for interpreting the same statutory provision inconsistently, Commerce’s action is arbitrary.

Id. at 1372–73. This leads to the final case in the line, JTEKT, which echoed Dongbu and specifically asked for an explanation from Commerce, as set forth previously.

## STATUTES AND REGULATIONS

### **19 U.S.C. § 1673. Imposition of antidumping duties**

If –

- (1) the administering authority determines that a class or kind of foreign merchandise is being, or is likely to be, sold in the United States at less than its fair value, and
- (2) the Commission determines that –
  - (A) an industry in the United States –
    - (i) is materially injured, or
    - (ii) is threatened with material injury, or
  - (B) the establishment of an industry in the United States is materially retarded, by reason of imports of that merchandise or by reason of sales (or the likelihood of sales) of that merchandise for importation, then there shall be imposed upon such merchandise an antidumping duty, in addition to any other duty imposed, in an amount equal to the amount by which the normal value exceeds the export price (or the constructed export price) for the merchandise.

### **19 U.S.C. § 1675. Administrative review of determinations**

- (a) Periodic review of amount of duty
  - (1) In general

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<sup>5</sup> Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 842–43 (1984).

At least once during each 12-month period beginning on the anniversary of the date of publication of a countervailing duty order under this subtitle or under section 1303 of this title, an antidumping duty order under this subtitle or a finding under the Antidumping Act, 1921, or a notice of the suspension of an investigation, the administering authority, if a request for such a review has been received and after publication of notice of such review in the Federal Register, shall –

.....

(B) review, and determine (in accordance with paragraph (2)), the amount of any antidumping duty,

.....

and shall publish in the Federal Register the results of such review, together with notice of any duty to be assessed, estimated duty to be deposited, or investigation to be resumed.

(2) Determination of antidumping duties

(A) In general

For the purpose of paragraph (1)(B), the administering authority shall determine –

- (i) the normal value and export price (or constructed export price) of each entry of the subject merchandise, and
- (ii) the dumping margin for each such entry.

**19 U.S.C § 1677f-1. Sampling and averaging; determination of weighted average dumping margin and countervailable subsidy rate**

(d) Determination of less than fair value

(1) Investigations

(A) In general

In an investigation under part II of this subtitle, the administering authority shall determine whether the subject merchandise is being sold in the United States at less than fair value –

- (i) by comparing the weighted average of the normal values to the weighted average of the export prices (and constructed export prices) for comparable merchandise,

.....

(2) Reviews

In a review under section 1675 of this title, when comparing export prices (or constructed export prices) of individual transactions to the weighted average price of sales of the foreign like product, the administering authority shall limit its averaging of prices to a period not exceeding the calendar month that corresponds most closely to the calendar month of the individual export sale.

**19 U.S.C. § 1677. Definitions; special rules**

(34) Dumped; dumping

The terms “dumped” and “dumping” refer to the sale or likely sale of goods at less than fair value.

(35) Dumping margin; weighted average dumping margin

(A) Dumping margin

The term “dumping margin” means the amount by which the normal value exceeds the export price or constructed export price of the subject merchandise.

(B) Weighted average dumping margin

The term “weighted average dumping margin” is the percentage determined by dividing the aggregate dumping margins determined for a specific exporter or producer by the aggregate export prices and constructed export prices of such exporter or producer.

(C) Magnitude of the margin of dumping

The magnitude of the margin of dumping used by the Commission shall be—

(i) in making a preliminary determination under section 1673b(a) of this title in an investigation (including any investigation in which the Commission cumulatively assesses the volume and effect of imports under paragraph (7)(G)(i)), the dumping margin or margins published by the administering authority in its notice of initiation of the investigation;

(ii) in making a final determination under section 1673d(b) of this title, the dumping margin or margins most recently published by the administering authority prior to the closing of the Commission's administrative record;

(iii) in a review under section 1675(b)(2) of this title, the most recent dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title, if any, or under section 1673b(b) or 1673d(a) of this title; and

(iv) in a review under section 1675(c) of this title, the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title.

**19 C.F.R. § 351.414 Comparison of normal value with export price (constructed export price).**

(a) Introduction. The Secretary normally will average prices used as the basis for normal value and, in an investigation, prices used as the basis for export price or constructed export price as well. This section explains when and how the Secretary will average prices in making comparisons of export price or constructed export price with normal value. (See section 777A(d) of the Act.)

(b) Description of methods of comparison– (1) Average-to-average method. The “average-to-average” method involves a comparison of the weighted average of the normal values with the weighted average of the export prices (and constructed export prices) for comparable merchandise.

(2) Transaction-to-transaction method. The “transaction-to-transaction” method involves a comparison of the normal values of individual transactions with the export prices (or constructed export prices) of individual transactions for comparable merchandise.

(3) Average-to-transaction method. The “average-to-transaction” method involves a comparison of the weighted average of the normal values to the export prices (or constructed export prices) of individual transactions for comparable merchandise.

(c) Preferences. (1) In an investigation, the Secretary normally will use the average-to-average method. The Secretary will use the transaction-to-transaction method only in unusual situations, such as when there are very few sales of subject merchandise and the merchandise sold in each market is identical or very similar or is custom-made. [This is even less used than implied and is not relevant here.]

(2) In a review, the Secretary normally will use the average-to-transaction method.

(d) Application of the average-to-average method– (1) In general. In applying the average-to-average method, the Secretary will identify those sales of the subject merchandise to the United States that are comparable, and will include such sales in an “averaging group.” The Secretary will calculate a weighted average of the export prices and the constructed export prices of the sales included in the averaging group, and will compare this weighted average to the weighted average of the normal values of such sales.

(2) Identification of the averaging group. An averaging group will consist of subject merchandise that is identical or virtually identical in all physical characteristics and that is sold to the United States at the same level of trade. In identifying sales to be included in an averaging group, the Secretary also will take

into account, where appropriate, the region of the United States in which the merchandise is sold, and such other factors as the Secretary considers relevant.

(3) Time period over which weighted average is calculated. When applying the average-to-average method, the Secretary normally will calculate weighted averages for the entire period of investigation or review, as the case may be. However, when normal values, export prices, or constructed export prices differ significantly over the course of the period of investigation or review, the Secretary may calculate weighted averages for such shorter period as the Secretary deems appropriate.

(e) Application of the average-to-transaction method— (1) In general. In applying the average-to-transaction method in a review, when normal value is based on the weighted average of sales of the foreign like product, the Secretary will limit the averaging of such prices to sales incurred during the contemporaneous month.

(2) Contemporaneous month. Normally, the Secretary will select as the contemporaneous month the first of the following which applies:

(i) The month during which the particular U.S. sale under consideration was made;

(ii) If there are no sales of the foreign like product during this month, the most recent of the three months prior to the month of the U.S. sale in which there was a sale of the foreign like product.

(iii) If there are no sales of the foreign like product during any of these months, the earlier of the two months following the month of the U.S. sale in which there was a sale of the foreign like product.<sup>6</sup>

## DISCUSSION

The first issue raised by the parties is whether the court should disregard

Dongbu and JTEKT as contrary to binding Court of Appeals precedent. See Newell Companies,

Inc. v. Kenny Mfg. Co., 864 F.2d 757, 765 (Fed. Cir. 1989) (holding that if panel decisions

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<sup>6</sup> The court notes that the United States has reached an agreement with other WTO members to limit or end zeroing in reviews. See Antidumping Proceedings: Calculation of the Weighted-Average Dumping Margin and Assessment Rate in Certain Antidumping Duty Proceedings; Final Modification, 77 Fed. Reg. 8,101 (Dep't Commerce Feb. 14, 2012). Completed reviews such as is before the court are unaffected. The agreement will result in a new 19 C.F.R. § 351.414 that permits monthly average-to-average calculations in reviews. As in investigations, average-to-average calculations will not be zeroed. The court expresses no opinion on whether use of average-to-average calculations in reviews is permissible.

conflict, the earlier case controls); U.S. Steel Corp., 621 F.3d at 1361 (applying the rule that earlier decisions prevail unless overturned en banc) (citation omitted). One might argue that the JTEKT court might have followed the last SKF case, instead of Dongbu, but the Dongbu court clearly stated it had a new issue before it, 635 F.3d at 1371, and JTEKT agreed, 642 F.3d at 1384–85.<sup>7</sup> Thus, the Circuit apparently has decided that Dongbu is not to be disregarded as a failure to follow stare decisis. Whatever the Court of Appeals decides on this issue, if it is squarely before it, it would appear that this court should conclude for this case that it is bound by JTEKT's view of the issue. That is, stare decisis does not apply. Thus, what is the new issue?

Perhaps, more background will assist in presenting the problem. Domestic industry interests, which favor zeroing, have argued in the past that the word “exceeds,” which is found in the basic antidumping provision, 19 U.S.C. § 1673 (dumping occurs when “the normal value exceeds the export price . . .”), and in the definitional provision, 19 U.S.C. § 1677(35), mandates zeroing. See, e.g., Timken, 354 F.3d at 1341. That is, “exceeds” must mean that when making the comparisons in the averaging groups, the negative results must be disregarded or, as stated otherwise, normal value does not exceed export price so the sales are not dumped, and must not be counted. Id. This absolute view has been rejected time and again, as demonstrated. Furthermore, why does “exceeds” refer just to one way of computing a dumping margin, and beyond that, one particular step is the one way? Why does “exceeds” require a particular calculation for the aggregate? The Court of Appeals does not appear to have concluded anything

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<sup>7</sup> Examination of the appellate briefs in SKF reveal that the focus was on the impact of WTO decisions and not the statutory language. See, e.g., Brief for Plaintiffs–Appellants, SKF, (No. 10–1128), 2010 WL 894953, at \*32–40; Brief for Defendant–Appellee, SKF, (No. 10–1128), 2010 WL 2320599, at \*24–25.

like that. Furthermore, “exceeds” is not found in just the definitions in 19 U.S.C. § 1677(35), describing dumping margins and weighted-average dumping margins. It is used in 19 U.S.C. § 1673, in a very general way to describe the basic inquiry at issue, and in the same words as are used in 19 U.S.C. § 1677(35). As stated by the Court of Appeals, specific antidumping calculation methodology is not set forth in the statute. See U.S. Steel Corp., 621 F.3d at 1361.

In a masterful about face, plaintiffs want the court to mandate “exceeds” to mean “not zeroing,” exactly the opposite of what the domestic industry has attempted. That is, plaintiffs essentially argue that if Commerce now reads “exceeds” as leading to a non-zeroing methodology in investigations, it must read it as requiring non-zeroing in reviews. See Cmts. of Pls. Union Steel, Dongbu Steel and LG Hausys on Comm.’s Remand Results 3, 11 n.7. In other words, the court must mandate not zeroing. As plaintiffs specifically argue that having two methods is arbitrary, they likely must admit that zeroing in both types of proceedings is acceptable. Of course, they would be safe in making such an admission because Commerce had committed to not zeroing in average-to-average comparisons used in investigations in order to satisfy international commitments.

Whether or not Commerce, in the past, has agreed with the domestic industry and used “exceeds” as one justification for zeroing, it is no more right when it does that, than if it were to attempt the opposite, as plaintiffs do here. In this context, “exceeds” decides nothing. So, it was understandable for the Court of Appeals to ask Commerce, what are you doing? Are you interpreting the word “exceeds” to mean opposite things? This is the new issue raised by these plaintiffs and addressed by Dongbu and JTEKT. The court will turn to it now.



Plaintiffs argue that “dumping margin” is defined in 19 U.S.C. § 1677(35)(A) to refer specifically to the first step in Commerce’s calculation methodology, comparisons within a CONNUM, and that “dumping margins” has this one particularly meaning. But “dumping margin” is itself a very general term that sometimes means “dumping margin” as a comparison and sometimes actually means “weighted-average dumping margin” as a percentage, plaintiffs’ “step two.” See Pls.’ Example at 3. In other words, the term defined in 19 U.S.C.

§ 1677(35)(A), in some contexts, has the meaning expressed in 19 U.S.C. § 1677(35)(B). One example that comes to mind is found in 19 U.S.C. § 1677(35) itself, that is, in part (C) thereof.

The International Trade Commission (“ITC”), in performing the injury determination referred to in 19 U.S.C. § 1673, may examine the magnitude of the margin of dumping. See 19 U.S.C. § 1677(7)(B). 19 U.S.C. § 1677(35)(C) defines “magnitude of the dumping margin” with reference specifically to “dumping margin.” But, as plaintiffs agreed at oral argument, Commerce does not publish the individual margins found in the CONNUM comparisons, which is what plaintiffs say is defined by 19 U.S.C. § 1677(35)(A). Rather, Commerce provides for ITC’s purposes, among others, the weighted-average dumping margin percentage calculated for specific companies. If “dumping margin” in 19 U.S.C. § 1677(35)(A) were meant to be as specific as plaintiffs argue, the practice under § 1677(35)(C) would be impossible and the statute would not make sense. For example, some of the comparison numbers are likely proprietary and would not be useful for this purpose.

Furthermore, turning to 19 U.S.C. § 1675(a)(2), the statute refers to a “dumping margin” for each entry. In a typical review, there is no “dumping margin,” in the sense plaintiffs use the term, for each entry. There are weighted-average dumping margin percentages, which

eventually are translated into assessment rates to be applied to each entry. See 19 C.F.R. § 351.212(b). Once again, if the statute had one common meaning for the words which define “dumping margin,” the statute could not function.

This is the court’s understanding of essentially why the Court of Appeals has never read “exceeds” to mandate anything, particularly “not zeroing,” and why plaintiffs’ attempt to mandate “not zeroing” is futile. Commerce is not reading “exceeds” to mean two things. It is reading it as basically irrelevant to the calculation methodology, whether it expresses its view in that manner or not.

The court now turns to Commerce’s attempt to answer the Court of Appeals’ question as to why as a matter of discretion and reasonable practice, it chose to continue zeroing in reviews, but ceased doing so in investigations. Commerce offers three reasons. The first has been summarized by the court and it is essentially that zeroing has been the preferred method and it has been upheld as permissible. See Remand Results at 3–9. Reading Dongbu and JTEKT, the court concludes that this reason is insufficient to satisfy the inquiry of the Court of Appeals.

The second reason is that Commerce decided upon the various procedures implicated here as a result of a decision by the United States to accede to WTO dispute settlement opinions. See Remand Results at 9–10; see also Final Modification, 71 Fed. Reg. at 77,722. Commerce’s view is that, if the statute is silent, it is free to make a limited change to its practice in investigations. Remand Results at 9–10. The court agrees. While Dongbu rejected this as a reason “standing alone” to support the two different approaches, 635 F.3d at 1372, it is at least part of a total rationale for Commerce’s choice. The court concludes that because the

statute is silent, it is within Commerce's discretion to adopt a new reasonable methodology to meet international obligations. Because apparently the Court of Appeals focused on the one word that has been used obsessively by all sides, it likely viewed this as a pure statutory interpretation problem, and the parties did not argue otherwise. See JTEKT, 642 F.3d at 1384–85. This, however, is not a simple statutory interpretation issue.

Commerce has wide latitude to bring its practices into WTO compliance. If Commerce needs a statutory change to comply, it must seek that change before it acts. See 19 U.S.C. §§ 3533, 3538 [URAA §§ 123, 129]. Commerce may, however, change its practices to comply, if they do not violate the statute. See id. §§ 3533(g), 3538(b). It was just this type of change permitted by 19 U.S.C. § 3533 and § 3538 that the court approved for investigations in United States Steel Corp., 621 F.3d at 1354–55, 1363.<sup>8</sup> The court concludes that whether the partial change is permitted is best looked at as whether Commerce abused its discretion in coming into compliance. Because this may not be how the Court of Appeals concludes the issue should be analyzed, the court further examines the issue under all potentially applicable forms of inquiry. It is likely that in this context, the standards are indistinguishable. Thus, to determine whether adherence to the prior zeroing practice in reviews is acceptable, reasonable, not an abuse of discretion, and not arbitrary, the court turns to Commerce's third reason.

While the court does not conclude that Commerce's methodologies, as applied,

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<sup>8</sup> Commerce relies on Murray v. Schooner Charming Betsy, 6 U.S. 64, 118 (1804) to bolster its changes in practice. That precedent may or may not support the view that Commerce acts reasonably when it conforms itself to international norms, but it does not answer the question of whether Commerce should also move further and change its practice in reviews. Moreover, there is no binding precedent applying Charming Betsy to efforts to comply with WTO decisions, as opposed to customary international law.

give any particular words in the statute contrary meanings, terms may be interpreted differently in different contexts. See FAG Kugelfischer George Schafer AG v. United States, 332 F.3d 1370, 1373 (Fed. Cir. 2003) (different interpretations of “foreign like product” upheld). Thus, the third reason focuses on the differences in proceedings, specifically, the inherent differences in investigations and reviews, which provide the context for different calculation methodologies. See Remand Results at 11–14. There was no explanation of record at all before the court in Dongbu and the explanation of the significance of the differences was missing in JTEKT. See Dongbu, 635 F.3d at 1372; JTEKT, 642 F.3d at 1384. While these differences have never been found sufficient to mandate different approaches, see, e.g., Corus I, 395 F.3d at 1346–47, they are sufficient to permit different approaches.

Commerce now states that its new investigation approach focuses on overall pricing behavior of an exporter in order to establish an antidumping duty order. Remand Results at 13. Thus, positive margins in one CONNUM may be offset by negative margins in another. Id. As indicated, this approach was upheld in United States Steel Corp., 621 F.3d at 1360–61, and is supported by the statute.

When the statutory change following the Uruguay Round forced Commerce to switch to the average-to-average approach, there was much less reason remaining to look for a particular type of specificity in the investigation calculation. As a result, Commerce might have abandoned zeroing for investigations at that time. Commerce, however, generally moves

incrementally in changing its practices.<sup>9</sup> Specificity is less important in investigations in that CONNUM averages in investigations are not even monthly averages, as they are in reviews. Rather, they are averages over a broad time period compared to all other broad averages. See 19 U.S.C. § 1677f-1(d); 19 C.F.R. § 351.414(d)(3), (e). On the other hand, when it comes to setting the final rates to be used for actual assessment, i.e., the review rates, it is reasonable for the agency to look for more accuracy, which it achieves in some measure through monthly averaging, and also for the agency to look for the full measure of duties resulting therefrom, which it better achieves through zeroing.

The parties who are marginally dumping or not dumping may be excluded from the order pursuant to the looser standards of the investigation, particularly after zeroing is eliminated. See, e.g., 19 U.S.C. §§ 1673d(a)(4), 1673b(b)(3) (providing in investigations de minimis treatment for margins of less than 2%). Once a party's overall selling behavior has led it to be placed under the discipline of the antidumping duty order, however, it is not unreasonable for Commerce to attempt to counteract as much dumping behavior as it can. See, e.g., 19 C.F.R. § 351.106(c) (providing in reviews for a 0.5% de minimis rate). Thus, Commerce continued to zero in reviews.

Of course, it is true that sometimes rates in the investigation can become part of the final assessment rates. That is, the parties may forego an administrative review. See 19 U.S.C. § 1675(a)(1); 19 C.F.R. § 351.212(a). The court has no problem with parties, both

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<sup>9</sup> Some permissible, but not mandatory, changes from extant practices that would be of benefit to foreign producers might not be made immediately for positioning in future multilateral negotiations.

domestic and foreign, giving up rights to more specific calculations. The court also understands that parties who want reviews do not always get them. That is, they may not be chosen as mandatory respondents and a voluntary request for review may be rejected if Commerce decides it is too burdened. See, e.g., Grobest & I-Mei Industrial (Vietnam) Co. v. United States, Slip Op. 12-09, 2012 Ct. Int'l Trade LEXIS 9, \*47-56 (CIT Jan. 18, 2012) (remanding for explanation of rejection of voluntary review.) Whether Commerce is too stringent in rejecting requests for reviews has no particular bearing on this inquiry. That is a matter to be resolved in other cases. Here, the court concludes that when it comes to reviews, which are intended to more accurately reflect commercial reality, Commerce is permitted to unmask dumping behavior in a way that is not necessary at the investigation stage.

### CONCLUSION

In sum, the statute does not dictate a particular manner of calculating a weighted-average dumping margin percentage. Neither does it specify, for average-to-average comparisons in investigations or for average-to-transaction comparisons in reviews, how to find the numbers that are weight averaged to get a usable percent dumping margin. The statute does restrict the comparison in reviews to monthly averages. That is essentially all it does in this regard. The statute does not say whether to use or not use a zeroing methodology in computing the weighted-average dumping margin percentage.

Commerce did not abuse its discretion in changing its investigation methodology, but not its review methodology, in the Final Modification in response to WTO decisions. Commerce acted reasonably in applying the antidumping statute to conform to the different purposes of investigations and reviews. Commerce's practices are not arbitrary in this regard.

The court takes no position as to whether Commerce may forego zeroing in reviews going forward, in average-to-transaction or average-to-average comparisons. The court holds that the methodology at issue here is permissible, not that any particular methodology is required.

The determination of Commerce is SUSTAINED.

/s/ Jane A. Restani

Jane A. Restani

Judge

Dated this 27th day of February, 2012.  
New York, New York.

## APPENDIX



**Average-to-Average Comparisons (without Zeroing)**

| Month                   | Home Market |               |                 |                      |                            | U.S. Market  |               |                  |                      |                            | Absolute Dumping Margin<br>(1677(35)(A))<br>I=(D-H)*E | Zeroing of Negative Margins | Weighted-Average Dumping Margin<br>(1677(35)(B)) |
|-------------------------|-------------|---------------|-----------------|----------------------|----------------------------|--------------|---------------|------------------|----------------------|----------------------------|---|-----------------------------|--|
|                         | Sale #      | Quantity<br>A | Unit Price<br>B | Total Price<br>C=A*B | POI Average Price<br>D=C/A | Sale #       | Quantity<br>E | Unit Price<br>F  | Total Price<br>G=E*F | POI Average Price<br>H=G/E |   |                             |  |
| <b><u>Product 1</u></b> |             |               |                 |                      |                            |              |               |                  |                      |                            |   |                             |  |
| June                    | 1           | 50            | 1200            | 60,000               | 905.56                     | 1            | 250           | 1000             | 250,000              | 986.36                     | <b>-88,889</b>  | N/A                         |  |
| June                    | 2           | 100           | 1000            | 100,000              |                            | 2            | 100           | 1100             | 110,000              |                            |   |                             |  |
| June                    | 3           | 150           | 800             | 120,000              |                            | 3            | 150           | 900              | 135,000              |                            |   |                             |  |
| November                | 4           | 250           | 1100            | 275,000              |                            | 4            | 250           | 1100             | 275,000              |                            |   |                             |  |
| November                | 5           | 150           | 800             | 120,000              |                            | 5            | 150           | 900              | 135,000              |                            |   |                             |  |
| November                | 6           | 200           | 700             | 140,000              |                            | 6            | 200           | 900              | 180,000              |                            |   |                             |  |
|                         |             | <u>900</u>    |                 | <u>815,000</u>       |                            | <u>1,100</u> |               | <u>1,085,000</u> |                      |                            |   |                             |  |
| <b><u>Product 2</u></b> |             |               |                 |                      |                            |              |               |                  |                      |                            |   |                             |  |
| April                   | 7           | 100           | 800             | 80,000               | 666.67                     | 7            | 100           | 700              | 70,000               | 595.24                     | 75,000  | N/A                         |  |
| April                   | 8           | 150           | 700             | 105,000              |                            | 8            | 150           | 600              | 90,000               |                            |   |                             |  |
| April                   | 9           | 200           | 600             | 120,000              |                            | 9            | 200           | 500              | 100,000              |                            |   |                             |  |
| September               | 10          | 100           | 700             | 70,000               |                            | 10           | 250           | 700              | 175,000              |                            |   |                             |  |
| September               | 11          | 50            | 700             | 35,000               |                            | 11           | 150           | 600              | 90,000               |                            |   |                             |  |
| September               | 12          | 150           | 600             | 90,000               |                            | 12           | 200           | 500              | 100,000              |                            |   |                             |  |
|                         |             | <u>750</u>    |                 | <u>500,000</u>       |                            | <u>1,050</u> |               | <u>625,000</u>   |                      |                            |   |                             |  |
| <b><u>Product 3</u></b> |             |               |                 |                      |                            |              |               |                  |                      |                            |   |                             |  |
| March                   | 13          | 75            | 1600            | 120,000              | 1,375.00                   | 13           | 75            | 1500             | 112,500              | 1,328.57                   | 24,375  | N/A                         |  |
| March                   | 14          | 25            | 1400            | 35,000               |                            | 14           | 150           | 1400             | 210,000              |                            |   |                             |  |
| March                   | 15          | 50            | 1200            | 60,000               |                            | 15           | 50            | 1300             | 65,000               |                            |   |                             |  |
| October                 | 16          | 125           | 1500            | 187,500              |                            | 16           | 125           | 1400             | 175,000              |                            |   |                             |  |
| October                 | 17          | 50            | 1300            | 65,000               |                            | 17           | 50            | 1200             | 60,000               |                            |   |                             |  |
| October                 | 18          | 75            | 1100            | 82,500               |                            | 18           | 75            | 1000             | 75,000               |                            |   |                             |  |
|                         |             | <u>400</u>    |                 | <u>550,000</u>       |                            | <u>525</u>   |               | <u>697,500</u>   |                      |                            |   |                             |  |
|                         |             |               |                 |                      |                            |              |               | <u>2,407,500</u> | <b>J</b>             |                            |   |                             |  |
|                         |             |               |                 |                      |                            |              |               |                  |                      | <u>10,486</u>              | <b>K</b>  |                             |  |
|                         |             |               |                 |                      |                            |              |               |                  |                      |                            |   | <b>0.44%</b>                | <b>L=K/J</b>                                     |



**Average-to-Transaction Comparisons (without Zeroing)**

| Month                   | Home Market |               |                 |                      | Monthly Average Price<br>D=C/A | U.S. Market |               |                 |                      | Absolute Dumping Margin<br>(1677(35)(A))<br>H=(D-F)*E | Zeroing of Negative Margins | Weighted-Average Dumping Margin<br>(1677(35)(B)) |       |       |
|-------------------------|-------------|---------------|-----------------|----------------------|--------------------------------|-------------|---------------|-----------------|----------------------|---|-----------------------------|--|-------|-------|
|                         | Sale #      | Quantity<br>A | Unit Price<br>B | Total Price<br>C=A*B |                                | Sale #      | Quantity<br>E | Unit Price<br>F | Total Price<br>G=E*F |   |                             |  |       |       |
| <b><u>Product 1</u></b> |             |               |                 |                      |                                |             |               |                 |                      |   |                             |  |       |       |
| June                    | 1           | 50            | 1200            | 60,000               | 933.33                         | 1           | 250           | 1000            | 250,000              | -16,667   | N/A                         |  |       |       |
| June                    | 2           | 100           | 1000            | 100,000              |                                | 2           | 100           | 1100            | 110,000              | -16,667   | N/A                         |  |       |       |
| June                    | 3           | 150           | 800             | 120,000              |                                | 3           | 150           | 900             | 135,000              | 5,000   | N/A                         |  |       |       |
|                         |             | <u>300</u>    |                 | <u>280,000</u>       |                                | <u>500</u>  |               | <u>495,000</u>  |                      |   |                             |  |       |       |
| November                | 4           | 250           | 1100            | 275,000              | 891.67                         | 4           | 250           | 1100            | 275,000              | -52,083   | N/A                         |  |       |       |
| November                | 5           | 150           | 800             | 120,000              |                                | 5           | 150           | 900             | 135,000              | -1,250  | N/A                         |  |       |       |
| November                | 6           | 200           | 700             | 140,000              |                                | 6           | 200           | 900             | 180,000              | -1,667  | N/A                         |  |       |       |
|                         |             | <u>600</u>    |                 | <u>535,000</u>       |                                | <u>600</u>  |               | <u>590,000</u>  |                      |   |                             |  |       |       |
| <b><u>Product 2</u></b> |             |               |                 |                      |                                |             |               |                 |                      |   |                             |  |       |       |
| April                   | 7           | 100           | 800             | 80,000               | 677.78                         | 7           | 100           | 700             | 70,000               | -2,222  | N/A                         |  |       |       |
| April                   | 8           | 150           | 700             | 105,000              |                                | 8           | 150           | 600             | 90,000               | 11,667  | N/A                         |  |       |       |
| April                   | 9           | 200           | 600             | 120,000              |                                | 9           | 200           | 500             | 100,000              | 35,556  | N/A                         |  |       |       |
|                         |             | <u>450</u>    |                 | <u>305,000</u>       |                                | <u>450</u>  |               | <u>260,000</u>  |                      |   |                             |  |       |       |
| September               | 10          | 100           | 700             | 70,000               | 650.00                         | 10          | 250           | 700             | 175,000              | -12,500   | N/A                         |  |       |       |
| September               | 11          | 50            | 700             | 35,000               |                                | 11          | 150           | 600             | 90,000               | 7,500   | N/A                         |  |       |       |
| September               | 12          | 150           | 600             | 90,000               |                                | 12          | 200           | 500             | 100,000              | 30,000  | N/A                         |  |       |       |
|                         |             | <u>300</u>    |                 | <u>195,000</u>       |                                | <u>600</u>  |               | <u>365,000</u>  |                      |   |                             |  |       |       |
| <b><u>Product 3</u></b> |             |               |                 |                      |                                |             |               |                 |                      |   |                             |  |       |       |
| March                   | 13          | 75            | 1600            | 120,000              | 1,433.33                       | 13          | 75            | 1500            | 112,500              | -5,000  | N/A                         |  |       |       |
| March                   | 14          | 25            | 1400            | 35,000               |                                | 14          | 150           | 1400            | 210,000              | 5,000   | N/A                         |  |       |       |
| March                   | 15          | 50            | 1200            | 60,000               |                                | 15          | 50            | 1300            | 65,000               | 6,667   | N/A                         |  |       |       |
|                         |             | <u>150</u>    |                 | <u>215,000</u>       |                                | <u>275</u>  |               | <u>387,500</u>  |                      |   |                             |  |       |       |
| October                 | 16          | 125           | 1500            | 187,500              | 1,340.00                       | 16          | 125           | 1400            | 175,000              | -7,500  | N/A                         |  |       |       |
| October                 | 17          | 50            | 1300            | 65,000               |                                | 17          | 50            | 1200            | 60,000               | 7,000   | N/A                         |  |       |       |
| October                 | 18          | 75            | 1100            | 82,500               |                                | 18          | 75            | 1000            | 75,000               | 25,500  | N/A                         |  |       |       |
|                         |             | <u>250</u>    |                 | <u>335,000</u>       |                                | <u>250</u>  |               | <u>310,000</u>  |                      |   |                             |  |       |       |
| Total                   |             |               |                 |                      |                                |             |               |                 | <u>2,407,500</u>     | I   | <u>18,333</u>               | J  | 0.76% | K=J/I |

**Average-to-Transaction Comparisons (with Zeroing)**

| Month                   | <u>Home Market</u> |               |                 |                      |          | Monthly<br>Average<br>Price<br>D=C/A | <u>U.S. Market</u> |               |                  |                      | Absolute<br>Dumping Margin<br>(1677(35)(A))<br>H=(D-F)*E | Zeroing of<br>Negative<br>Margins | Weighted-Average<br>Dumping Margin<br>(1677(35)(B)) |       |
|-------------------------|--------------------|---------------|-----------------|----------------------|----------|--------------------------------------|--------------------|---------------|------------------|----------------------|--|-----------------------------------|---|-------|
|                         | Sale #             | Quantity<br>A | Unit Price<br>B | Total Price<br>C=A*B |          |                                      | Sale #             | Quantity<br>E | Unit Price<br>F  | Total Price<br>G=E*F |  |                                   |   |       |
| <b><u>Product 1</u></b> |                    |               |                 |                      |          |                                      |                    |               |                  |                      |  |                                   |   |       |
| June                    | 1                  | 50            | 1200            | 60,000               |          | 1                                    | 250                | 1000          | 250,000          | -16,667              | 0  |                                   |   |       |
| June                    | 2                  | 100           | 1000            | 100,000              |          | 2                                    | 100                | 1100          | 110,000          | -16,667              | 0  |                                   |   |       |
| June                    | 3                  | 150           | 800             | 120,000              |          | 3                                    | 150                | 900           | 135,000          | 5,000                | 5,000  |                                   |   |       |
|                         |                    | <u>300</u>    |                 | <u>280,000</u>       | 933.33   |                                      | <u>500</u>         |               | <u>495,000</u>   |                      |  |                                   |   |       |
| November                | 4                  | 250           | 1100            | 275,000              |          | 4                                    | 250                | 1100          | 275,000          | -52,083              | 0  |                                   |   |       |
| November                | 5                  | 150           | 800             | 120,000              |          | 5                                    | 150                | 900           | 135,000          | -1,250               | 0  |                                   |   |       |
| November                | 6                  | 200           | 700             | 140,000              |          | 6                                    | 200                | 900           | 180,000          | -1,667               | 0  |                                   |   |       |
|                         |                    | <u>600</u>    |                 | <u>535,000</u>       | 891.67   |                                      | <u>600</u>         |               | <u>590,000</u>   |                      |  |                                   |   |       |
| <b><u>Product 2</u></b> |                    |               |                 |                      |          |                                      |                    |               |                  |                      |  |                                   |   |       |
| April                   | 7                  | 100           | 800             | 80,000               |          | 7                                    | 100                | 700           | 70,000           | -2,222               | 0  |                                   |   |       |
| April                   | 8                  | 150           | 700             | 105,000              |          | 8                                    | 150                | 600           | 90,000           | 11,667               | 11,667   |                                   |   |       |
| April                   | 9                  | 200           | 600             | 120,000              |          | 9                                    | 200                | 500           | 100,000          | 35,556               | 35,556   |                                   |   |       |
|                         |                    | <u>450</u>    |                 | <u>305,000</u>       | 677.78   |                                      | <u>450</u>         |               | <u>260,000</u>   |                      |  |                                   |   |       |
| September               | 10                 | 100           | 700             | 70,000               |          | 10                                   | 250                | 700           | 175,000          | -12,500              | 0  |                                   |   |       |
| September               | 11                 | 50            | 700             | 35,000               |          | 11                                   | 150                | 600           | 90,000           | 7,500                | 7,500  |                                   |   |       |
| September               | 12                 | 150           | 600             | 90,000               |          | 12                                   | 200                | 500           | 100,000          | 30,000               | 30,000   |                                   |   |       |
|                         |                    | <u>300</u>    |                 | <u>195,000</u>       | 650.00   |                                      | <u>600</u>         |               | <u>365,000</u>   |                      |  |                                   |   |       |
| <b><u>Product 3</u></b> |                    |               |                 |                      |          |                                      |                    |               |                  |                      |  |                                   |   |       |
| March                   | 13                 | 75            | 1600            | 120,000              |          | 13                                   | 75                 | 1500          | 112,500          | -5,000               | 0  |                                   |   |       |
| March                   | 14                 | 25            | 1400            | 35,000               |          | 14                                   | 150                | 1400          | 210,000          | 5,000                | 5,000  |                                   |   |       |
| March                   | 15                 | 50            | 1200            | 60,000               |          | 15                                   | 50                 | 1300          | 65,000           | 6,667                | 6,667  |                                   |   |       |
|                         |                    | <u>150</u>    |                 | <u>215,000</u>       | 1,433.33 |                                      | <u>275</u>         |               | <u>387,500</u>   |                      |  |                                   |   |       |
| October                 | 16                 | 125           | 1500            | 187,500              |          | 16                                   | 125                | 1400          | 175,000          | -7,500               | 0  |                                   |   |       |
| October                 | 17                 | 50            | 1300            | 65,000               |          | 17                                   | 50                 | 1200          | 60,000           | 7,000                | 7,000  |                                   |   |       |
| October                 | 18                 | 75            | 1100            | 82,500               |          | 18                                   | 75                 | 1000          | 75,000           | 25,500               | 25,500   |                                   |   |       |
|                         |                    | <u>250</u>    |                 | <u>335,000</u>       | 1,340.00 |                                      | <u>250</u>         |               | <u>310,000</u>   |                      |  |                                   |   |       |
| Total                   |                    |               |                 |                      |          |                                      |                    |               | <u>2,407,500</u> | I                    |  |                                   |   |       |
|                         |                    |               |                 |                      |          |                                      |                    |               |                  |                      | <u>133,889</u>   | J                                 | 5.56%   | K=J/I |