

The Director  
Operations 5  
Anti-Dumping Commission  
Level 35, 55 Collins Street  
Melbourne VIC 3000  
[operations5@adcommission.gov.au](mailto:operations5@adcommission.gov.au)

## **Comments on the Exemption of Certain High Chrome Cast Grinding Balls --- EX0052**

Dear Melissa Guilfoyle,

On behalf of Anhui Sanfang New Material Technology Co., Ltd. (Sanfang), with reference to the Anti-dumping Notice No. 2017/15 regarding the initiation of an exemption inquiry on certain small sized high chrome cast grinding balls, as well as the responses to applications made by two Australian producers, we would like to make comments on certain issues. It is highly appreciated if you could take these comments into account when you complete the report and recommendation to the Parliamentary Secretary.

### **I. The scope of goods the exemption is being sought**

In Sanfang's application, the scope of goods the exemption is being sought was described by Sanfang with three criteria.

- A. The cast grinding balls with chromium content equal or above 15%.
- B. The cast grinding balls with diameters between 25mm to 50mm (inclusive).
- C. The cast grinding balls satisfied the above descriptions are manufactured by and exported from the Applicant i.e. *Anhui Sanfang New Material Technology Co., Ltd.*, and imported by the designated importer i.e. [REDACTED]

In the Anti-dumping Notice No. 2017/15, we note that the scope of goods were

described with only the first two criteria. It is certainly preferable to define the scope of goods sought for exemption without the limitation of the third criteria. But in order to reduce any unforeseeable impact that might cause to the Australian industry due to the exemption of certain small sized cast grinding balls, Sanfang would like to be voluntarily bound by the third criteria. It means that Sanfang only seeks to exempt the said goods that it exports to the designated importer from the antidumping and countervailing duties. If the said goods is exported to other Australian importers, these goods will be subject to antidumping measures.

As far as Sanfang knows, the designated importer does not use the grinding media manufactured by the Australian industry for some technical reasons. Besides, due to the Australian industry cannot provide the said goods, the designated importer has to import the said goods from other countries if the goods from China is blocked by the antidumping measures. Thus, if the scope of goods the exemption is being sought is limited to the designated importer, Sanfang foresees no impact or injury to the Australian industry in any way.

## **II. Legal basis the exemption is being sought**

Sanfang seeks an exemption under the exemption category one, which is provided by subsection 8(7)(a) and 10(8)(a) of the Act, that

*Like or directly competitive goods are not offered for sale in Australia to all purchasers on equal terms under like conditions having regard to the custom and usage of trade.*

Thus, the question should be asked by the Commission is whether like or directly competitive goods can be offered on equal terms under like conditions. Simply because the goods the exemption being sought and the goods manufactured by the Australian industry are like products due to they are functionally alike is not sufficient to conclude that exemption is not justified. In fact, these two types of goods are like each other is the threshold for the Commission to make further inquiry whether like or directly

competitive goods can be offered on equal terms under like conditions. If two goods are not like, the goods the exemption being sought should be excluded from the scope of antidumping investigation at the first place, rather than request exemption under subsection 8(7)(a) and 10(8)(a) of the Act.

In light of the above, Sanfang considers that both Donhad and Moly-cop's responses to the applications fail to rebut Sanfang's argument that the said goods cannot be offered by Australian industry on equal terms under like conditions in Australia having regard to the custom and usage of trade. In particular, both Donhad and Moly-cop simply conclude in their responses to the applications that their forged grinding balls and high chrome cast grinding balls the exemption being sought are like products, because they are functionally alike to meet the same ultimate purpose.

### **III. The custom and usage of trade of grinding balls**

There are three types of mills commonly used for ore mine, i.e. autogenous mill, semi-autogenous Grinding (SGA) mill and ball mill. Autogenous mills are so-called due to the self-grinding of the ore: a rotating drum throws larger rocks of ore in a cascading motion which causes impact breakage of larger rocks and compressive grinding of finer particles. It is similar in operation to a SAG mill as described below but does not use steel balls in the mill.

SAG mills are essentially autogenous mills, but utilize grinding balls to aid in grinding like in a ball mill. Attrition between grinding balls and ore particles causes grinding of finer particles. SAG mills are characterized by their large diameter and short length as compared to ball mills. The inside of the mill is lined with lifting plates to lift the material inside the mill, where it then falls off the plates onto the rest of the ore charge. A SAG mill is generally used as a primary or first stage grinding solution. SAG mills use a ball charge of 8 to 21%.

Ball mills is a typical type of fine grinder. A slightly inclined or horizontal rotating cylinder is partially filled with balls, which grind material to the necessary fineness by



friction and impact with the tumbling balls. Ball mills are characterized by their smaller diameter and longer length, and often have a length 1.5 to 2.5 times the diameter. Ball mills are commonly used in the manufacture of finer grinding stages of mineral processing. Ball mills normally operate with an approximate ball charge of 30%.

As Sanfang raised in its application as well as submissions during the antidumping investigation, and both Donhad and Moly-cop also consent in their responses to applications, that forged grinding balls and cast grinding balls in particular the high chromium cast grinding balls, though functionally alike, are different in many important aspects, including raw materials, production equipment and processes, chemical composition, and as a result the mechanical performances.

The key differences of mechanical performances between forged grinding balls and high chrome cast grinding balls are toughness (impact value), hardness (wear resistance) and corrosive resistance. Normally, the forged grinding balls have greater toughness and lower wear resistance and corrosive resistance, while the high chrome grinding balls are less toughness and have higher wear resistance and corrosive resistance. These differences of mechanical performances determine that these two types of grinding balls have different end use application, or as Moly-cop admits in the responses to the applications “different grinding balls and alloys compositions are used to suit the operating environment”.

For example, lager sized forged grinding balls have greater performance in SAG mills. This is because the SAG mills have large diameters that cause higher impact on grinding balls, which requires the grinding balls to be tougher to avoid spalling and breakage. While small sized high chrome cast grinding balls are superior in ball mills where the impact value is lower, and when the feed is harder and smaller, and/or in a higher corrosive environment (such as in wet milling). This is also elaborated by Moly-cop in its responses to applications: “High chrome cast media will typically yield a lower consumption rate in low wear speed/higher corrosion environments than forged steel media”.

In light of the above, as summarized by an importer/end user in the antidumping investigation proceeding, the custom and usage of trade for grinding balls is to find the most suitable specification of grinding media in terms of size, chemical composition, hardness and wear rate which meet the user's operational need, and also to identify the most cost effective grinding media consumption rate (kg/ton) for the ball mill.<sup>1</sup>

We now turn to the terms and conditions for the sales of grinding balls.

#### **IV. Terms and conditions for the sales of grinding balls**

The meaning of “*equal terms under like conditions*” under subsection 8(7)(a) and 10(8)(a) of the Act is not explained by the Act. Normally, the “terms and conditions” may include price, quantity, quality, payment terms and delivery terms. However, this scope may vary from one product to the other, thus it can only be defined through case-by-case analysis. In the current case, the “cost benefit analysis” could be one of the relevant “terms and conditions” alleged by both Donhad and Moly-cop. But the forged grinding balls cannot be provided by the Australian industry in the market on equal terms under like condition as the small sized high chrome cast grinding balls could provide.

First, the forged grinding balls manufactured by the Australian industry and high chrome cast grinding balls do not compete on price. This is because, as both Donhad and Moly-cop mention in their responses to the applications, the high chrome cast grinding balls attract a premium price because of the high chromium content. If they compete on prices only, the high chrome cast grinding balls could have been driven out of the market by the forged grinding balls.

Second, the large sized forged grinding balls (for example the diameter is beyond 50 mm) is not a proper substitute for small sized high chrome cast grinding balls (for example the diameter is below 50 mm) in the ball mill under certain operation

---

<sup>1</sup> Page 10, Importer Verification Report – CPM, INVESTIGATION 316, available at <http://www.adcommission.gov.au/cases/EPR%20301%20%20350/EPR%20316/025-%20Importer%20-%20Verification%20Report%20-%20Public%20Record.pdf>

environment. This is because the small sized high chrome cast grinding balls are normally used in low wear speed/higher corrosion environment to obtain the finer minerals, which is technically infeasible for large sized forged grinding balls to do so.

Third, the small sized forged grinding balls (for example the diameter is below 50 mm) cannot provide the same cost benefit result in low wear speed/higher corrosion environment as the small sized high chrome cast grinding balls do. This is because, as Donhad rightly points out in the responses to the applications that, “as the ball size gets smaller (and production rates drop) the cost [initial cost of grinding ball] gap closes”. However, the consumption of forged grinding balls in low wear speed/higher corrosion environment is significantly higher than high chrome cast grinding balls. Thus, Donhand concludes in its responses to the applications: “In situations where impact, abrasive and corrosive wear are lower, the white iron product [cast balls] can be economical”.

The evidences for the above discussed “terms and conditions” have been provided by Sanfang in its application, in particular the Attachment C [REDACTED], Attachment D [REDACTED], and Attachment E [REDACTED]. These evidences have proved that the hardness of forged grinding balls provided by the Australian industry is [REDACTED] than high chrome grinding balls, which cannot [REDACTED]. In addition, Sanfang’s small sized high chrome cast grinding balls [REDACTED]

## V. Conclusion

Although forged grinding balls and high chrome cast grinding balls are functionally alike to meet the same ultimate purpose, this does not mean that high chrome cast grinding balls, which do not manufactured by the Australian industry, can be offered by the Australian industry for sale in Australia to all purchasers on equal terms under like conditions having regard to the custom and usage of trade.



In particular, the small sized high chrome cast grinding balls, which the exemption is being sought, are normally used in low wear speed/higher corrosion environment to obtain the finer minerals. None of the forged grinding balls provided by the Australian industry could offer the same cost benefit result as the small sized high chrome cast grinding balls do. Therefore, the Australian industry fails to offer the like product or directly competitive product for sale in Australia to all purchasers on equal terms under like conditions having regard to the custom and usage of trade.

In addition, in order to reduce any unforeseeable impact that might cause to the Australian industry due to the exemption of certain small sized high chrome cast grinding balls from the current antidumping and countervailing duties, Sanfang would like to be voluntarily bound by the third criteria, i.e. only exports to the designated importer will be exempted from the duties.

Jian

**Jian Guan**  
**Senior Partner**



9/F, Tower C, Parkview Green FangCaoDi,  
No.9, Dongdaqiao Road, Chaoyang District, Beijing 100020, China



[www.globe-law.com](http://www.globe-law.com)

Beijing | Shanghai | Dalian | Hefei |