

***Case No COMP/M.4524 -
NEMAK / HYDRO
CASTINGS***

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004
MERGER PROCEDURE**

Article 6(1)(b) NON-OPPOSITION
Date: 23/02/2007

***In electronic form on the EUR-Lex website under document
number 32007M4524***



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 23/02/2007

SG-Greffe (2007) D/200874

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus [...]. Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying party:

Dear Sir/Madam,

**Subject: Case No. COMP/M.4524 – NEMAK / HYDRO CASTINGS
Notification of 23.01.2007 pursuant to Article 4 of Council Regulation
No 139/2004**

1. On 23.01.2007, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004¹ ("the EC Merger Regulation") by which the undertaking Tenedora Nemark, S.A. de C.V. ("Nemark") acquires the European casting operation of Norsk Hydro ASA ("Hydro Castings").
2. After examination of the notification, the Commission has concluded that the notified operation falls within the scope of the EC Merger Regulation, and does not raise serious doubts as to its compatibility with the common market and with the functioning of the EEA Agreement.

I. THE PARTIES

3. The purchaser, Nemark is a Mexico-based company, controlled by Alfa S.A.B. de C.V. (Mexico), internationally active in the production of aluminium castings for the automotive industry, with a strong focus on the production of cylinder heads and engine blocks. Within the EEA, Nemark achieved [the majority] of its turnover from the manufacture and supply of cylinder heads.
4. The target, Hydro Castings consists of four Europe-based companies of Norsk Hydro ASA that produce castings for the automotive industry, also with a focus on the

¹ OJ L 24, 29.1.2004 p. 1

production of cylinder heads and engine blocks. Hydro sales are mainly realised in Europe, where it achieved [the majority] of its turnover with engine blocks and cylinder heads.

II. THE OPERATION

5. According to the proposed transaction, Nematik acquires sole control by way of purchase of shares over Hydro's European casting operation carried out via four companies: Aluminium Alucast GmbH (Germany), Hydro Aluminium Mandl & Berger GmbH (Austria), Hydro Aluminium Győr Alumíniumöntöde Kft., (Hungary) and Hydro Aluminium Fundo AS (Sweden).
6. On this basis the Commission concludes that the proposed transaction constitutes a concentration within the meaning of Article 3(1) of the EC Merger Regulation.

III. COMMUNITY DIMENSION

7. Nematik's worldwide turnover amounted to 4,993 MEUR, its Community wide turnover was [...] MEUR in the 2005 financial year; the worldwide turnover of the Hydro Casting businesses amounted to [...] MEUR in the 2005 financial year, its Community-wide turnover was [...] MEUR in that period. None of the parties derived more than two-thirds of their aggregated Community-wide turnover within one Member State.
8. The transaction therefore has Community dimension within the meaning of Article 1(2) of the EC Merger Regulation.

IV. ASSESSMENT

A. Relevant product market

9. The proposed concentration will result in an overlap in the manufacture and supply of aluminium cylinder heads for the use in passenger cars and light commercial vehicles in the EEA².
10. According to the notifying party, the relevant product market is the market for cylinder heads for passenger cars and light commercial vehicles.³
11. The cylinder head is a key part to the performance of every internal combustion engine. It is a plate of metal, bolted to the top of the cylinder bank. Often the cylinder head is designed to accommodate the camshaft or another mechanism to transfer rotational mechanics from the crankshaft to linear mechanics to operate the valve. Internally, the cylinder head has passages called ports for the fuel/air mixture to travel to the inlet valves from the intake manifold, for exhaust gases to travel from the exhaust valves to

² Both parties are also active in the manufacture and supply of aluminium engine blocks for passenger cars and light commercial vehicles. However, Nematik is not supplying any engine blocks in the EEA. On a worldwide basis, the combined market share of the parties would be around [5-10]% ([5-10]% for Nematik and [0-5]% for Hydro Castings). Therefore the market for the manufacture and supply of engine blocks does not constitute an affected market.

³ Cylinder heads for heavy vehicles differ in size and material. For heavy vehicles only grey iron cylinder head can be used which is produced by a different group of manufacturers than the parties and their competitors. None of the parties supply grey iron cylinder heads or grey iron engine blocks.

the exhaust manifold, and for antifreeze (coolant) to cool the head and engine. Cylinder heads are made out of aluminium or grey iron cast.

12. The notifying party submits that there is one market including both aluminium and iron cylinder heads for passenger cars and light commercial vehicles. However, there are strong indications that grey iron cast cylinder heads do not form part of the relevant market.⁴ Indeed, within the EEA, aluminium has almost completely substituted iron to the extent that only about 1% of cylinder heads are of grey iron.⁵ This substitution took place for technical as well as environmental reasons⁶, despite the fact that aluminium cylinder heads cost 50-90% more than grey iron cylinder heads.⁷
13. The market investigation has confirmed that car manufacturers do not see grey iron cylinder heads as an actual or potential substitute for aluminium cylinder heads.⁸ Moreover, there is no supply-side substitutability⁹ between the two types of cylinder heads, as grey iron cylinder heads are produced by different manufacturers with a different profile.
14. Some respondents¹⁰ suggested during the Commission's market investigation that aluminium cylinder heads might be further subdivided according to engine-type used (diesel or petrol) or according to production processes.¹¹ However, it appears that cylinder heads for fuel engines and diesel engines are produced on the same production lines, and basically every cylinder head can be produced by using any of the existing casting technologies.¹² None of these technologies are proprietary, and most European suppliers use at least one, if not more of them.¹³ From a demand side perspective, a

4 In Case No. IV/M.139 VIAG/EB BRÜHL and in Case No. COMP/M.1189 TEKSID/NORSK HYDRO PRODUKSJON/MERDIAN the Commission has indicated that there might be separate market for grey and iron cylinder heads, however, left the question open.

5 Form CO, p. 27.

6 In particular, environmental regulations have driven the car manufacturers towards the use of aluminium in engines. Moreover, aluminum presents certain technical advantages, such as allowing for more fuel efficient engines and decreasing the weight of cars. It also has better transfer properties so that horsepower per engine liter is increased and allows more flexibility in the design.

7 At present, the average price of an aluminium cast cylinder head is approximately 60 to 80 EUR, whereas the average price of a grey iron cast cylinder head is approximately 35 to 50 EUR. (Form CO, p.26)

8 Article 11 letter of 25.01.2007 to car manufacturers, question 3 on product market definition.

9 Article 11 letter of 25.01.2007 to independent cylinder head suppliers, question 3 on product market definition and question 5 on supply-side substitutability.

10 Article 11 letter of 25.01.2007 to car manufacturers and independent cylinder head suppliers, question 4 on product market definition.

11 There are four main production processes to produce cylinder heads depending on the moulding material (steel or sand) and the filling method. The mostly used are gravity die casting (approximately 70%) and low pressure die casting (15-80%). (Submission of the notifying party of 13.02.2007, p.1.)

12 Submission of the notifying party of 13.02.2007 p.5.

13 Hydro has exclusive license to use the so-called "Rotacast" technology which is a variation of gravity die casting. (Submission of the notifying party of 13.02.2007, p.1.)

further subdivision appears to be even less justified, as cylinder heads are thoroughly specified and individually designed for each “engine program” where fuel types or production processes are only one of the specification elements.

15. Based on the arguments above, the Commission considers that the production and sale of aluminium cylinder heads for passenger cars and light commercial vehicles constitutes a separate relevant product market for the purpose of this decision.

B. Relevant geographic market

16. The notifying party argues that the market should be regarded as EEA-wide in scope. It bases its view on the fact that, within the EEA, customers buy independently from the location of the production facility, whereas actual imports to the EEA are very limited.
17. In previous decisions related to the manufacture and supply of cylinder heads, but also other automotive components¹⁴ the Commission considered that the market is at least EEA-wide, but left open the exact scope of the relevant geographic market.
18. The sales and quotation data¹⁵ that the Commission retrieved during its market investigation confirmed that car manufacturers in the EEA source the vast majority of aluminium cylinder heads for their assembly facilities in the EEA from cylinder head production facilities that are also located in the EEA. Given the low transportation costs in relation to the price of the product and the duration of transport, there are various examples of cylinder heads and engine blocks that are shipped throughout the EEA.
19. By contrast, there are still few imports from outside the EEA, as currently only approximately 3% of cylinder heads are shipped to the EEA. The importance of logistics explains to a large extent why car manufacturers tend not to import these products from outside the EEA.¹⁶ Indeed, transport duration may vary from 10 – 15 days to 5 weeks¹⁷, which endangers the security of supply and increases the risk of quality problems during the assembly process in the car manufacturer's plant. Furthermore, according to certain respondents, oversee transportation costs might be substantial in relation to the price of the product.
20. Based on the above facts and arguments, the geographic market for cylinder heads should be regarded for the purpose of this decision as being EEA-wide in scope.

C. Competitive Assessment

¹⁴ See for example Case No. COMP/M.1189 TEKSID/NORSK HYDRO PRODUKSJON/MERDIAN; Case No. COMP/M.1338 TEKSID/RENAULT; Case No. COMP/M.4213 CAG/MOTOROLA.

¹⁵ Article 11 letter of 25.01.2007 to car manufacturers, annex to question 14.

¹⁶ Article 11 letter of 25.01.2007 to car manufacturers, question 6 on geographic market definition.

¹⁷ Article 11 letter of 25.01.2007 to car manufacturers, question 7 on geographic market definition.

21. When looking at supplies of "independent" cylinder head manufacturers, the parties' combined market share on the EEA-wide market for the supply of aluminium cylinder heads for passenger cars and light commercial engines would amount to [30-40]%. Their major competitors are Montupet with a [20-30]% market share, Teksid ([25-35]%) and Honsel ([5-10]%). There are also smaller independent suppliers such as Mazzucconi ([0-5]%), Group Arche SIFA ([0-5]%), and Fonderie Alluminio ([0-5]%). During the market investigation, respondents indicated that both parties are close competitors but also valued Montupet and Honsel as effective competitors, notably in terms of technical abilities, quality and know-how. Teksid, Fonderie Alluminio, SIFA and Mazzucconi were generally ranked at a lower level.¹⁸
22. However, these market shares overstate the actual position of the parties on the market, as in this particular market, the internal foundries owned by the car manufacturers represent nearly 40% of the total European production. On the basis of total cylinder head production, the share of the merged entity would then be only around [20-30]% (for Nemak [5-15]% and for Hydro Castings [5-15]%), whereas Montupet would hold [10-20]%, Teksid [5-15]%, and Honsel with [0-5]% share.
23. More generally, the market investigation has shown that the car manufacturers' internal foundries exercise a significant competitive constraint on the independent cylinder head suppliers. Indeed, most of the car manufacturers apply a mixed sourcing model: between 50% and 90% of their cylinder head needs are covered by in-house production, whereas the remaining part of their needs is satisfied by independent suppliers. When ordering aluminium cylinder heads, car manufacturers treat their internal foundry during the negotiation period as any other external supplier. Internal foundries systematically participate in tenders placed by their respective car manufacturer and are considered to be as competitive as any other external supplier.¹⁹ Generally, internal foundries of the car manufacturers are equivalent to any independent supplier in terms of technical capabilities and are also competitive in price. In addition, internal foundries compete with independent suppliers of aluminium cylinder heads during the entire lifetime of the engine program. For example, a car manufacturer may shift a major portion of its cylinder head supplies for a certain engine program from an independent supplier to its own internal foundry. Even though the parties are considered as being close competitors and leading independent suppliers of cylinder heads in the EEA, car manufacturers still rank their respective internal foundries at the highest level. For these reasons, the independent cylinder head suppliers are thus subject to extensive competitive pressure from the car manufacturers' in-house production.
24. The market investigation²⁰ of the Commission also indicated that there will remain sufficient free capacity available on the market. Moreover, the production capacity is expected to increase to at least 20% of the total EEA market in the foreseeable future due to plans of certain market players to expand their capacity.²¹ As a result, all but one

¹⁸ Article 11 letter of 25.01.2007 to car manufacturers, question 13 on ranking current cylinder head suppliers.

¹⁹ Only one car manufacturer indicated that when selecting among tender participants, it takes into account that the internal foundry runs at full capacity.

²⁰ Article 11 letter of 25.01.2007 to car manufacturers, question 17 on internal foundries and Article 11 letter of 25.01.2007 to independent cylinder head suppliers, question 11 on capacity.

²¹ The increase in EEA capacity exceeds EEA 2% demand growth

car manufacturer indicated that sufficient competition would remain in the market after the transaction. With regard to innovation following the merger, certain respondents indicated that the merger might be even beneficial for technology improvement.

25. Finally, certain car manufacturers indicated that they would be able and willing to extend or even establish new production facilities in case of price increase which should exert a further credible threat on the merging entity.
26. Consequently, in view of the fact that the merged entity's share of production will remain well below [20-30]%, and considering the number and strength of the remaining competitors as well the remaining free capacity on the market, the Commission concludes that the transaction will not lead to a significant impediment of effective competition within the EEA.

V. CONCLUSION

27. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EC) No 139/2004.

For the Commission
signed
Neelie KROES
Member of the Commission