

Executive Summary

Anti-dumping complaint concerning imports of graphite electrodes originating in the People's Republic of China

I. The product concerned

I.1 Description

Graphite electrode is a ceramic-moulded or extruded column of graphite. At both ends of the cylinder, threaded tapered 'sockets' are machined so that two or more electrodes can be joined to build a column. A connecting part, also in graphite, is used to join two sockets. This part is referred to as 'nipple' or 'pin'. Both the graphite electrode and the nipple are usually supplied pre-set as a 'graphite electrode system'.

I.2 Production process

The manufacturing process of graphite electrodes includes six main processes: screening of raw materials (needle coke) and mixing with coal tar pitch, followed by extrusion of the electrode, baking the electrode, impregnating the electrode with a special pitch that improves strength, re-baking the electrode, graphitizing the electrode using electric resistance furnaces, and machining.

At the very beginning, the forming process is itself composed of several steps, namely grinding, mixing and extruding. Calcined coke is first crushed, screened and blended with coal tar pitch through a mixing process, with a ratio of coke to pitch of usually 80/20.

The mixed paste is then shaped into a cylindrical electrode through the extrusion or an alternative moulding process. The so-called "green electrodes" are then placed into large cans called "saggers" and baked in specifically designed furnaces at a temperature of at 1,000°C. Duration of the baking process depends on the desired grade/size of electrodes and usually lasts several weeks.

The first baking process converts the pitch into hard coke. During the baking process, the electrode pitch volatiles are removed, leaving porosities inside. To improve graphite electrode quality, the electrode is then impregnated with additional coal tar pitch to fill the porosities and baked a second time.

After impregnation and re-baking, the manufacturing process continues with graphitization as the electrodes are heated at 3,000°C in a special longitudinal furnace (Acheson furnaces or Length Wise Graphitisation (LWG) furnaces) to convert the carbon into graphite. The graphitization cycle removes additional impurities and improves the electrodes' key qualities: thermal and electrical conductivity, thermal shock resistance performance, lubricity, and abrasion resistance.

Plain graphite pieces are machined (outer diameter, and faces, sockets) and nipple is pre-set. The production route for nipple follows similar route but raw materials and detailed processing conditions are chosen to achieve specific graphite properties.

I.3 Uses

Graphite electrode is an indispensable consumable in the EAF steel production process. When used in the EAF, the electrodes form part of the roof structure of the furnace. After the furnace is filled with selected scrap, the electrodes are lowered until the tips almost touch the scrap. Electricity is passed through the electrodes generating sufficient heat (up to 3,500°C) to create an electric arc between the electrodes and the raw materials, and to melt scrap.

I.4 Definition of the product concerned and relevant customs classification

The product concerned should be defined as “*graphite electrodes of a kind used for electric furnaces, with an apparent density of 1,5 g/cm³ or more and an electrical resistance of 7,0 μ.Ω.m or less, and nipples used for such electrodes, whether imported together or separately originating in the People’s Republic of China*”.

The product concerned falls within the following codes of the combined nomenclature: ex 8545 11 00 and ex 8545 90 90.

II. Summary of the case

II.1 Complainants

In January 2021, Graphite Cova GmbH, Showa Denko Carbon Europe GmbH and Tokai Erft Carbon GmbH lodged a complaint under Article 5 of Regulation (EU) 2016/1036. The three complaining companies account for approximately [35-50]% of the EU production of graphite electrodes. The complaint is also supported by GrafTech International, thus leading to an overall level of support for the complaint of approximately [85-95]% of the total EU production.

The Complainants provided evidence that unfairly low-priced imports of the product concerned originating in the People’s Republic of China and dumped on the EU have caused material injury to the Union industry of the like product.

II.2 Dumping

The Complainants demonstrated that the Chinese market for graphite electrodes was distorted and that dumping should be determined on the basis of Article 2(6a) of Regulation 2016/1036. The Complainant demonstrated that Mexico was the appropriate representative country for the purposes of constructing the normal value. By comparing this normal value with the export price, the Complainant demonstrated dumping margins from 29% to 115%.

II.3 Injury and causation

If overall imports of the product concerned from China increased by 13% since 2016 until end of September 2020, the volume of ultra-high power (UHP) graphite electrodes - the most widely used grade of graphite electrodes in the EU - increased by 123%. This led to a consistent increase in the overall market share of imports from China, reaching only on its own a record level of 40% of the EU market in the period between October 2019 and end of September 2020.

The complaint also demonstrates the extensive undercutting by dumped imports of graphite electrodes from China per quarter in the period between October 2019 and end of September 2020

between [55-75]%. Underselling ranged between [45-85]% varying by quarter of the period of reference used in the complaint.

As a reaction to the pressure from dumped imports from China, the Union industry had to rapidly accept a decrease in its sales volumes, as well as a significantly decline of the profitability down to unsustainable levels further affecting production, investments and employment.

The Complainants demonstrated that there were no other factors adversely affecting the situation of the Union industry nor that any factor was such as to break the causation between the dumping and the injury.

III. List of known parties to the investigation

Exporting producers in the PRC

BAOFENG JINSHI NEW MATERIALS CO., LTD.
CHENGDU RONGGUANG CARBON CO., LTD. (SUBSIDIARY OF LIAONING FANGDA GROUP INDUSTRIAL CO., LTD.)
CIMM GROUP CO. LTD. (FORMERLY CHINA INDUSTRIAL MINERAI & METALS GROUP)
DANDONG XIN XING CARBON CO. LTD.
FANGDA CARBON NEW MATERIAL CO. LTD (SUBSIDIARY OF LIAONING FANGDA GROUP INDUSTRIAL CO., LTD.) (FORMER LANZHOU HAILONG NEW MATERIAL CO)
FUSHUN CARBON CO., LTD. (SUBSIDIARY OF LIAONING FANGDA GROUP INDUSTRIAL CO., LTD.) (FORMER FUSHUN CARBON PLANT)
FUSHUN ORIENTAL CARBON CO., LTD.
GUANGHAN SHIDA CARBON CO., LTD. (AKA SICHUAN GUANGHAN SHIDA CARBON CO., LTD.) (SUBSIDIARY OF SHIDA CARBON GROUP)
HEBEI JINSH CARBON NEW MATERIAL CO., LTD.
HEFEI CARBON CO., LTD. (SUBSIDIARY OF LIAONING FANGDA GROUP INDUSTRIAL CO., LTD.)
HENAN GENERAL MACHINERY IMP. & EXP. CO. LTD.
JILIN CARBON IMPORT AND EXPORT COMPANY (AKA SINOSTEEL JILIN CARBON CO., LTD.)
KAIFENG CARBON CO., LTD. (WITH SANJI CARBON AS SUBSIDIARY)
LINGHAI HONGFENG CARBON PRODUCTS CO., LTD.
NANTONG YANGZI CARBON CO., LTD. (AKA NANTONG YANGTZE CARBON CORP. LTD.)
SHANDONG RONGFU NEW MATERIAL TECHNOLOGY CO., LTD.
SHANGHAI YIDI PRECISE MACHINERY
SHANXI HONGTE COAL CHEMICAL CO., LTD.
SHANXI JINNENG GROUP CO., LTD. (AKA SHANGHAI JINNENG INTERNATIONAL TRADE CO., LTD.)
SHANXI JINNENG GROUP DATONG ENERGY DEVELOPMENT CO., LTD. (AKA DATONG CARBON) (SUBSIDIARY OF SHANXI JINNENG GROUP CO., LTD.)
SHIJIAZHANG HUANAN CARBON FACTORY (AKA HUANAN CARBON FACTORY)
SICHUAN SHIDA TRADING CO., LTD. (AKA SICHUAN GUANGHAN SHIDA CARBON CO., LTD.) (SUBSIDIARY OF SHIDA CARBON GROUP)
SINOMETAL MACHINERY CORP.
SINOSTEEL ENGINEERING & TECHNOLOGY CO., LTD. (FORMER SINOSTEEL JILIN CARBON CO., LTD.) (SUBSIDIARY OF SINOSTEEL CORP.)
TANGSHAN DONGRI NEW ENERGY MATERIALS COMPANY
XINGHE COUNTY MUZI CARBON CO. LTD. (AKA XINGHE COUNTY MUZI CARBON PLANT)
XUZHOU CARBON CO., LTD. (FORMERLY XUZHOU ELECTRODE FACTORY) (AKA CARBON INTERNATIONAL ; JL GROUP ; XUZHOU JIANGLONG CARBON PRODUCTS CO., LTD.) (AFFILIATE OF SHANGHAI CARBON INTERNATIONAL TRADE CO., LTD.)

List of know importers and users

BOEHLER EDELSTAHL GMBH & CO KG
BREITENFELD EDELSTAHL AG
MARIENHUETTE STAHL-UND-WALZWERK
TREIBACHER SCHLEIFMITTEL GMBH
VOESTALPINE GMBH
APERAM GENK STAINLESS INGANG 3
APERAM CHATELET
ARCELORMITTAL - STAINLESS BELGIUM NV/SA
DUFERCO BELGIUM S.A.
ESB SPRL ENGINEERING STEEL BELGIUM
INDUSTEEL BELGIUM
THY-MARCINELLE S.A.
STOMANA
STOMANA INDUSTRY AD
ABS SISAK D.O.O.
ARCELORMITTAL OSTRAVA A.S.
EVRAZ VITKOVICE STEEL A.S.
JAP INDUSTRIES
SKODA, PILSEN STEEL S.R.O.
TRINECKE ZELEZARNY / MORAVIA STEEL A.S.
VITKOVICE HEAVY MACHINERY A.S
VITKOVICE STEEL, A.S.
ZDAS A.S.
ZDASZDAR
ZELEZARNY VESELI, A.S.
OUTOKUMPU
OUTOKUMPU STAINLESS OY
OUTOTEK
OVAKO IMATRA OY AB
SSAB EUROPE OY, RAAHE
AKERS FRANCE SA
ALPA
APERAM ALLOYS IMPHY
ASCO INDUSTRIES
ASCOMETAL FOS
AUBERT & DUVAL
CELSA FRANCE S.A.S.
ERASTEEL
FERROPEM
FEURSMETAL
FONDERIE ET ACIERIE DE DENAIN
FWF
INDUSTEEL FRANCE
ITON SEINE
LME TRITH
PEUGEOT CITROEN
ROCKWOOL FRANCE S.A.S.
SAM MONTEREAU SAS
SAM NEUVES-MAISONS
UGINE & ALZ FRANCE
UGITECH
VALLOUREC TUBES FRANCE
WINOA
ARCELOR MITTAL BREMEN
ARCELOR MITTAL HAMBURG GMBH
ARCELOR MITTAL RUHRORT

B.E.S. BRANDENBURGER
BADISCHE STAHLWERKE GMBH
BENTELER STEEL/TUBE GMBH
BGH
BGH
BUDERUS EDELSTAHL GMBH
BWA TECHNOLOGY GMBH
DEUTSCHE EDELSTAHLWERKE GMBH
DEUTSCHE EDELSTAHLWERKE GMBH
EKO STAHL
ELEKTROSTAHLWERKE GRODITZ
ERVIN GERMANY GMBH
ESF ELBE-STAHLEWERKE FERALPI GMBH
ESF-RIESA
FÖRDER-UND ANLAGENTECHNIK
GEORGMARIENHUETTE GMBH
GROEDITZ SCHMIEDEWERKE GMBH
GRAPHITE MATERIALS
HENNIGSD HENNIGSDORFER H.E.S.
HENNIGSDORFER H.E.S.
HENSCHKE
LECH-STAHLEWERKE GMBH
LSW
OUTOKUMPU NIROSTA GMBH
PEINER TRÄGER GMBH
RW SILICIUM GMBH
SAARSTAHL AG
SALZGITTER FLACHSTAHL GMBH
STAHLWERK BOUS GMBH
STAHLWERK THUERINGEN GMBH
THYSSENKRUPP STEEL EUROPE AG
HÜTTENWERKE KRUPP MANNESMANN GMBH
TSW - TRIERER STAHLWERK GMBH
VDM METALS GMBH
HALYVOURGKI INC
HELLENIC HALYVOURGIA S.A.
SOVEL HELLENIC STEEL PROCESSING CO.
SIDENOR
OAM - OZDI ACELMUVEK KFT
ACCIAI SPECIALI TERNI SPA
ACCIAIERIA ARVEDI S.P.A.
ACCIAIERIA DU RUBIERA S.P.A.
ACCIAIERIA FONDERIA CIVIDALE S.P.A.
ACCIAIERIA VALSUGANA S.P.A.
ACCIAIERIE BERTOLI SAFAU S.P.A
ACCIAIERIE DI CALVISANO S.P.A.
ACCIAIERIE DI SICILIA S.P.A.
ACCIAIERIE VALBRUNA S.P.A.
ACCIAIERIE VENETE S.P.A.
ACCIAIERIE VENETE S.P.A.
ACCIAIERIE VENETE S.P.A.
AFV ACCIAIERIE BELTRAME S.P.A.
ALFA ACCIAI
ACCIAIERIE DI SICILIA S.P.A.
ASO SIDERURGICA S.R.L. UNIPERSONALE
BREDINA S.R.L.
COGNE ACCIAI SPECIALI S.P.A.
DALMINE S.P.A
FERALPI SIDERURGICA S.P.A.

FERRIERA VALSABBIA S.P.A.
FERRIERE NORD S.P.A.
ACCIAIERIE DI VERONA S.P.A.
SIDER POTENZA
FORONI S.P.A.
INDUSTRIE RIUNITE ODOLESI I.R.O. S.P.A.
ITALFOND S.P.A.
LUCCHINI RS S.P.A.
METALCAM S.P.A.
MISANO S.P.A
NLMK VERONA
NUNKI STEEL S.P.A.
O.R.I. MARTIN ACCIAIERIA E FERRERIA DI
OLIFER -ACP S.P.A.
A.C.P. SRL
POMETON S.P.A.
RIVA ACCIAIO S.P.A.
RIVA ACCIAIO SPA - STABILIMENTO DI CARONNO P.
RIVA ACCIAIO SPA
RUBIERA SPECIAL STEEL S.P.A.
SAN ZENO ACCIAI - DUFERCO S.P.A.
SIDERTRADING S:P.A.
STEFANA S.P.A.
TRAVI E PROFILATI DI PALLANZENO S.R.L.
JSC "LIEPAJAS METALURGS"
ARCELORMITTAL
NEDSTAAL STAAL BV.
TATA STEEL IJMUIDEN BV
ALCHEMIA S.A.
ARCELORMITTAL WARSZAWA SP. Z O.O.
CELSA "HUTA OSTROWIEC" SP. Z O.O.
CMC POLAND SP. Z O.O.
CMC ZAWIERCI S.A.
FERROSTAL LABEDY SP.Z.O.O.
HSW - HUTA STALI JAKOSCIOWYCH S.A.
HUTA STALI JAKOSCIOWYCH S.A.
ISD HUTA CZESTOCHOWA S.P.ZOO
SN MAIA - SIDERURGIA NACIONAL S.A.
SN SEIXAL
ARCELORMITTAL GALATI
COMBINATUL SIDERURGIC RESITA S.A.
DOOSAN IMGB S.A.
DUCTIL STEEL-MECHEL
EAST EUROPE METAL CONCEPT S.R.L.
TMK RESITA
MECHEL CAMPIA TURZII S.A.
MITTAL STEEL HUNEDOARA S.A.
S.C. SILCOTUB S.A.
SILCOTUB S.A. – JOINT STOCK COMPANY
TMK ARTROM S.A
PODBREZOVA
SLOVAKIA STEEL MILLS, A.S.
ZELEZIARNE, A.S.
ACRONI, D.O.O.
LITOSTROJ JEKLO D.O.O.
METAL RAVNE D.O.O
STORE STEEL D.O.O.
ACERIA DE ALAVA, S.A.
ACERINOX EUROPA, S.A.U.

ACEROS INOXIDABLES OLARRA,S.A.
ARCELOR MITTAL SESTAO, S.L.U.
ARCELORMITTAL ASTURIAS, S.A.
ARCELORMITTAL GIPUZKOA, S.L.
ARCELORMITTAL ZARAGOZA S.A.
CELSA BARCELONA
CIA.ESPANOLA DE LAMINACION,S.L
CONSTR.Y AUX.DE FERROCARRIL,SA
CORRUGADOS GETAFE S.L.
CORRUGADOS LASAO
FERROATLÁNTICA, S.L.-LA CORUÑA
GERDAU ACEROS ESPECIALES EUROPA, S.L.
SIDENOR ACEROS ESPECIALES S.L.
SIDENOR REINOSA
GLOBAL STEEL WIRE, S.A.
IBERTEC S.A.
INTER ALLOYS S.L.
MEGASA SIDERURGICA, S.L.
NERVACERO, S.A.
PRODUCTOS TUBULARES, S.A.
SIDERURGICA BALBOA, S.A.
SIDERURGICA SEVILLANA, S.A.
TUBOS REUNIDOS INDUSTRIAL, S.L.U.
TUBACEX TUBOS INOXIDABLES SA
ERASTEES KLOSTER AB
HOEGANAES HALMSTADVERKEN
OUTOKUMPU STAINLESS AB
OVAKO BAR AB
OVAKO HOFORS AB
SANDVIK MATERIALS TECHNOLOGY
AB SANDVIK MATERIALS TECHNOLOGY
SANDVIK SRP AB
SCANA BJOERNEBORG AB
SSAB EMEA AB
UDDEHOLMTOOLING AB