



CERTIFICATE

CQM has issued an IQNet recognized certificate that the organization:

Henan Zhongyuan Special Steel Equipment Manufacturing Co., Ltd.

for the following scope:

The energy management activities involved in production of special steel ingot/continuous casting billet, electroslag ingot and special steel parts for large equipment (limited mandrel, cast tube mold, die steel, metallurgical roll, high quality steel forging, oil drilling tool, wind turbine spindle, corrugated roll, hydraulic cylinder, fixed pressure vessel within the scope of qualification)

Information of sites refer to the attachment

Information of energy performance and boundaries refer to the attachment

has implemented and maintains a

Energy Management System

which fulfils the requirements of the following standard:

ISO 50001:2018

Issued on: 2022-05-09

First issued on: 2020-05-07

Expires on: 2023-05-06

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: CN-00220EN0117R0L



*Alex Stoichitoiu
President of IQNet*

*Ji XiaoDong
General Manager of CQM*



IQNet Partners*:

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO Costa Rica
IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
NYCE-SIGE México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com



THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

CQM has issued an IQNet recognized certificate that the organization:

Annex (1) to IQNet Certificate Number CN-00220EN0117R0L

Organization	Certification Address	Scope of the site
Henan Zhongyuan Special Steel Equipment Manufacturing Co., Ltd.	531 Industrial Park, Huling Industry Cluster District, Jiyuan City, Henan, P.R.China	The energy management activities involved in production of special steel parts for large equipment (limited mandrel, cast tube mold, die steel, metallurgical roll, oil drilling tool, wind turbine spindle, corrugated roll, hydraulic cylinder, fixed pressure vessel within the scope of qualification)
Henan Zhongyuan Special Steel Equipment Manufacturing Co., Ltd.	Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China	The energy management activities involved in production of special steel ingot/continuous casting billet, electroslag ingot and special steel parts for large equipment (die steel, high quality steel forging)

(This annex is effective only using with home page)

Issued on:2022-05-09

First issued on:2020-05-07

Expires on: 2023-05-06

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document



Alex Stoichitoiu
President of IQNet

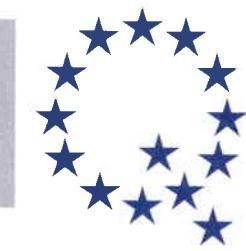
Ji XiaoDong
General Manager of CQM



IQNet Partners*

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
 CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
 FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO Costa Rica
 IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
 NYCE-SIGE México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
 SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
 IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com



IQNet

[®]

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

CQM has issued an IQNet recognized certificate that the organization:

Annex (3) to IQNet Certificate Number CN-00220EN0117R0L

Products or services/(Processes)	Comprehensive energy consumption for unit output of product/for unit output value	Reporting Period	Measurement boundary for energy consumption
Special steel ingot/continuous casting billet	136.28kgce/t	Jan, 2020-Dec, 2020	Output in reporting period: 201580t Physical location: Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China Main production system: Scrap steel as main material-EAF/IF-LF-VD/VOD-CCM bloom/ingot casting; Auxiliary production system: Equipment/facility maintenance, electric transformer and distribution, compressed air preparation, air supply (oxygen, argon, nitrogen), water supply, circulating water, fire fighting system, operation of environment protection facilities (waste gas and water), waste-heat utilization, etc.; Affiliate production system: Office, inspections and bathroom, etc.
Special steel parts for large equipment (limited mandrel, cast tube mold, die steel, metallurgical roll, high quality steel forging, oil drilling tool, wind turbine spindle, corrugated roll, hydraulic cylinder, fixed pressure vessel within the scope of qualification)	0.2462kgce/10,00 yuan	Jan, 2020-Dec, 2020	Output value in reporting period: 1,394,610,000 Yuan Physical location 531 Industrial Park, Huling Industry Cluster District, Jiyuan City, Henan, P.R.China. Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China Main production systems: Smelting, forging, heat treatment, surface treatment, machining, equipment debugging; Auxiliary production system: Equipment/facility maintenance, power transformation and distribution, air pressure preparation, gas supply (oxygen, argon, nitrogen), water supply, circulating water, fire control system, environmental protection facilities operation (waste gas, sewage), waste heat utilization, etc.; Affiliate production system: Office, inspection, bathroom, etc.
Electroslag ingot	365.27kgce/t	Jan, 2020-Dec, 2020	Output in reporting period: 25049t Physical location: Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China Main production system: Scrap steel as main material-IF- VOD-CCM bloom for ESR-electrode billet welding-electrode billet heating-ESR-ESR ingot annealing; Auxiliary production system: Equipment/facility maintenance, electric transformation and distribution, compressed air preparation, air supply (oxygen, argon, nitrogen), water supply, circulating water, fire fighting system, operation of environment protection facilities (waste gas and water), waste-heat utilization, etc.; Affiliate production system: Office, inspections and bathroom, etc.

(This annex is effective only using with home page)

Issued on: 2022-05-09

Expires on: 2023-05-06

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document



Alex Stoichitoiu
President of IQNet

Ji XiaoDong
General Manager of CQM



IQNet Partners*:

AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CISQ Italy
 CQC China CQM China CQS Czech Republic Cro Cert Croatia DQS Holding GmbH Germany FCAV Brazil
 FONDONORMA Venezuela ICONTEC Colombia Inspecta Sertifiointi Oy Finland INTECO Costa Rica
 IRAM Argentina JQA Japan KFQ Korea MIRTEC Greece MSZT Hungary Nemko AS Norway NSAI Ireland
 NYCE-SIGE México PCBC Poland Quality Austria Austria RR Russia SII Israel SIQ Slovenia
 SIRIM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia
 IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com



CERTIFICATE

能源管理体系认证证书

证书编号: 00220EN0117ROL

兹证明

河南中原特钢装备制造有限公司

统一社会信用代码: 9141900175225429XX
住所: 河南省济源市虎岭产业集聚区五三一工业园区

与其他场所共同构成的单一管理体系符合
GB/T 23331-2020/ISO 50001:2018

RB/T 103-2013

RB/T 119-2015

覆盖的范围

特殊钢钢锭/连铸坯、电渣锭和大型装备用特殊钢零部件（限动芯棒、铸管模、模具钢、冶金轧辊、优质钢锻件、石油钻具、风力发电机主轴、瓦楞辊、液压油缸、资质范围内固定式压力容器）的生产所涉及的能源
管理活动

覆盖的各场所及认证范围见附件
能耗绩效和边界见附件

(本证书信息可在国家认监委官方网站 www.cnca.gov.cn 或方圆标志认证集团官方网站上查询。年度监督审核的《确认证书》用以证实本证书的持续有效性。)

生效日期: 2020年05月07日
有效期至: 2023年05月06日
换证日期: 2022年05月09日



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C002-M



方圆标志认证集团
CHINA QUALITY MARK CERTIFICATION GROUP

地址:北京市海淀区增光路33号(100048) Address: No.33, Zengguang Road, Haidian District, Beijing, P.R. China(100048)

<http://www.cqm.com.cn>

AB 0022354



CERTIFICATE

Energy Management System Certificate

Certificate Number: 00220EN0117R0L

CQM hereby certifies that

Henan Zhongyuan Special Steel Equipment Manufacturing Co., Ltd.

Unified Social Credit Identifier: 9141900175225429XX
Domicile: 531 Industrial Park, Huling Industry Cluster District, Jiyuan City, Henan, P.R.China

with other sites constitute a single management system conform to

GB/T 23331-2020/ISO 50001:2018

RB/T 103-2013

RB/T 119-2015

This certificate is valid to the following scope:

The energy management activities involved in production of special steel
ingot/continuous casting billet, electroslag ingot and special steel parts for large
equipment (limited mandrel, cast tube mold, die steel, metallurgical roll, high quality
steel forging, oil drilling tool, wind turbine spindle, corrugated roll, hydraulic cylinder,
fixed pressure vessel within the scope of qualification)

Information of sites refer to the attachment

Information of energy performance and boundaries refer to the attachment

(The information of this certificate can be inquired on www.cnca.gov.cn or website of CQM. The continual validity of the certificate
can be checked by Certificate Confirmation of surveillance.)

Issued on: 2020-05-07
Expires on: 2023-05-06
Reissue on: 2022-05-09



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C002-M



方圆标志认证集团
CHINA QUALITY MARK CERTIFICATION GROUP

地址:北京市海淀区增光路33号(100048) Address: No.33, Zengguang Road, Haidian District, Beijing, P.R. China(100048)

<http://www.cqm.com.cn>

AB 0022353

CERTIFICATE

能源管理体系认证证书



证书编号: 00220EN0117ROL

附件(第1页 共1页)

场所名称	认证地址	场所覆盖的范围
河南中原特钢装备制造有限公司	河南省济源市虎岭产业集聚区五三一工业园区	大型装备用特殊钢零部件(限动芯棒、铸管模、冶金轧辊、石油钻具、风力发电机主轴、瓦楞辊、液压油缸、资质范围内固定式压力容器)的生产所涉及的能源管理活动
河南中原特钢装备制造有限公司	河南省济源市承留镇小寨村	特殊钢钢锭/连铸坯、电渣锭、大型装备用特殊钢零部件(模具钢、优质钢锻件)的生产所涉及的能源管理活动

(本附件应与主证书共同使用)

生效日期: 2020年05月07日

有效期至: 2023年05月06日

换证日期: 2022年05月09日



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C002-M



方圆标志认证集团
CHINA QUALITY MARK CERTIFICATION GROUP

地址:北京市海淀区增光路33号(100048) Address: No.33, Zengguang Road, Haidian District, Beijing, P.R. China(100048)

<http://www.cqm.com.cn>

AB 0022352

- IONet -
THE INTERNATIONAL CERTIFICATION NETWORK



CERTIFICATE

Energy Management System Certificate

Certificate Number:00220EN0117R0L

Attachment (Page 1 of 1)

Organization	Certification Address	Scope of the site
Henan Zhongyuan Special Steel Equipment Manufacturing Co., Ltd.	531 Industrial Park, Huling Industry Cluster District, Jiyuan City, Henan, P.R.China	The energy management activities involved in production of special steel parts for large equipment (limited mandrel, cast tube mold, die steel, metallurgical roll, oil drilling tool, wind turbine spindle, corrugated roll, hydraulic cylinder, fixed pressure vessel within the scope of qualification)
Henan Zhongyuan Special Steel Equipment Manufacturing Co., Ltd.	Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China	The energy management activities involved in production of special steel ingot/continuous casting billet, electroslag ingot and special steel parts for large equipment (die steel, high quality steel forging)

(The attachment should be used jointly with the main certificate)

Issued on: 2020-05-07
Expires on: 2023-05-06
Reissue on: 2022-05-09



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C002-M



方圆标志认证集团
CHINA QUALITY MARK CERTIFICATION GROUP

地址:北京市海淀区增光路33号(100048) Address:No.33,Zengguang Road,Haidian District,Beijing,P.R. China(100048)

<http://www.cqm.com.cn>

CQM is a member of the International Certification Network
— IQNet —
THE INTERNATIONAL CERTIFICATION NETWORK

AB 0022351



CERTIFICATE

能源管理体系认证证书

证书编号: 00220EN0117ROL

附件(第3页)

产品/服务(过程)	产品单位产量 /单位产值综合能耗	报告期	能耗核算边界
特殊钢钢锭/连铸坯	136.28kgce/t	2021年1月-2021年12月	报告期内产量: 201580t 物理位置: 河南省济源市承留镇小寨村 主要生产系统: 以废钢为主要原料-电炉/中频炉-精炼LF-VD/VOD-连铸/模铸成型; 辅助生产系统: 设备/设施检修、变配电、压空制备、供气(氧、氩、氮)、供水、循环水、消防系统、环保设施运行(废气、污水)、余热利用等; 附属生产系统: 办公、检验、浴室等。
大型装备用特殊钢零部件(限动芯棒、铸管模、模具钢、冶金轧辊、优质钢锻件、石油钻具、风力发电机主轴、瓦楞辊、液压油缸、资质范围内固定式压力容器)	0.2462kgce/万元	2021年1月-2021年12月	报告期内产值: 139461万元 物理位置: 河南省济源市虎岭产业集聚区五三一工业园区 河南省济源市承留镇小寨村 主要生产系统: 熔炼、锻造、热处理、表面处理、机械加工、装备调试; 辅助生产系统: 设备/设施检修、变配电、压空制备、供气(氧、氩、氮)、供水、循环水、消防系统、环保设施运行(废气、污水)、余热利用等; 附属生产系统: 办公、检验、浴室等。
电渣锭	365.27kgce/t	2021年1月-2021年12月	报告期内产量: 25049t 物理位置: 河南省济源市承留镇小寨村主要生产系统: 以废钢为主要原料-中频炉-VOD-连铸电极坯-电极坯焊接-电极坯预热、烘烤-电渣重熔-电渣锭退火; 辅助生产系统: 设备/设施检修、变配电、压空制备、供气(氧、氩、氮)、供水、循环水、消防系统、环保设施运行(废气、污水)、余热利用等; 附属生产系统: 办公、检验、浴室等。

(本附件应与主证书共同使用)

生效日期: 2022年05月09日
有效期至: 2023年05月06日



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C002-M



方圆标志认证集团
CHINA QUALITY MARK CERTIFICATION GROUP

地址:北京市海淀区增光路33号(100048) Address:No.33,Zengguang Road,Haidian District,Beijing,P.R. China(100048)

<http://www.cqm.com.cn>

AB 0022356



CERTIFICATE

Energy Management System Certificate

Certificate Number: 00220EN0117R0L

Attachment (Page 3)

Products or services/ (Processes)	Comprehensive energy consumption for unit output of product/for unit output value	Reporting Period	Measurement boundary for energy consumption
Special steel ingot/continuous casting billet	136.28kgce/t	Jan, 2020-Dec, 2020	Output in reporting period: 201580t Physical location: Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China Main production system: Scrap steel as main material-EAF/IF-LF-VD/VOD-CCM bloom/ingot casting; Auxiliary production system: Equipment/facility maintenance, electric transformer and distribution, compressed air preparation, air supply (oxygen, argon, nitrogen), water supply, circulating water, fire fighting system, operation of environment protection facilities (waste gas and water), waste-heat utilization, etc.; Affiliate production system: Office, inspections and bathroom, etc.
Special steel parts for large equipment (limited mandrel, cast tube mold, die steel, metallurgical roll, high quality steel forging, oil drilling tool, wind turbine spindle, corrugated roll, hydraulic cylinder, fixed pressure vessel within the scope of qualification)	0.2462kgce/10,00 0 yuan	Jan, 2020-Dec, 2020	Output value in reporting period: 1,394,610,000 Yuan Physical location: 531 Industrial Park, Huling Industry Cluster District, Jiyuan City, Henan, P.R.China; Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China Main production systems: Smelting, forging, heat treatment, surface treatment, machining, equipment debugging; Auxiliary production system: Equipment/facility maintenance, power transformation and distribution, air pressure preparation, gas supply (oxygen, argon, nitrogen), water supply, circulating water, fire control system, environmental protection facilities operation (waste gas, sewage), waste heat utilization, etc.; Affiliate production system: Office, inspection, bathroom, etc.
Electroslag ingot	365.27kgce/t	Jan, 2020-Dec, 2020	Output in reporting period: 25049t Physical location: Xiaozhai Village, Chengliu Town, Jiyuan City, Henan, P.R.China Main production system: Scrap steel as main material-IF-VOD-CCM bloom for ESR-electrode billet welding-electrode billet heating-ESR-ESR ingot annealing; Auxiliary production system: Equipment/facility maintenance, electric transformation and distribution, compressed air preparation, air supply (oxygen, argon, nitrogen), water supply, circulating water, fire fighting system, operation of environment protection facilities (waste gas and water), waste-heat utilization, etc.; Affiliate production system: Office, inspections and bathroom, etc.

(The attachment should be used jointly with the main certificate)

Issued on: 2022-05-09
Expires on: 2023-05-06



中国认可
管理体系
MANAGEMENT SYSTEM
CNAS C002-M



方圆标志认证集团
CHINA QUALITY MARK CERTIFICATION GROUP

地址:北京市海淀区增光路33号(100048) Address: No.33, Zengguang Road, Haidian District, Beijing, P.R. China(100048)

<http://www.cqm.com.cn>

AB 0022355