

MATERIAL MANUFACTURER **CERTIFICATE**

Certificate No .: 12823-2018-PC-RGC-DNV GL

This certificate consists of 3 pages

Initial date: 29th June 2018 Valid Until: 28th June 2024

This is to certify that the products(s)

Plates

with name and/or type designation(s)

Weldable Structural Steels

Manufactured by

Jiangsu Shagang Group Co., Ltd. Jinfeng Town, Zhangjiagang, Jiangsu Province, P.R.China.

has, on a voluntary basis, been assessed with respect to

the requirements specified in EN 10225-1:2019

and found to comply with the standard. Applications/Limitations: See page 2.

Further details are given overleaf

Place and date: Shanghai, 2022-04-29 For the issuing office DNV Business Assurance (China) Co.,Ltd.

Guo Hua Technical Reviewer



Certificate No.: 12823-2018-PC-RGC-DNV GL Place and date: Shanghai, 29th April 2022 Revision No: 1.0

Certificate history

Revision	Description	Issue Date	
0.0	Original Certificate	2018-06-29	
1.0	Renewal certificate	2022-04-29	

Products covered by this Certificate

Grade of Material	Steelmaking ¹⁾	Fine Grain Treatment	Delivery Condition ²⁾	Max. Thickness (mm)	Z-quality
S355MLO	BOC,CC	Al+Nb+Ti	М	80	Z35
S355NLO	BOC,CC	Al+Nb+Ti	N	100	Z35
S420MLO	BOC,CC	Al+Nb+Ti	М	80	Z35
S420QLO	BOC,CC	Al+Nb+Ti	QT	100	Z35
S460MLO	BOC,CC	Al+Nb+V+Ti	М	80	Z35
S460QLO	BOC,CC	Al+Nb+V+Ti	QT	100	Z35

Remarks:

¹⁾ BOC, CC: Basic Oxygen Converter; Continuous Casting

²⁾ N: Normalised; M: Thermomechanical rolling; QT: Quenching and Tempering

Site covered by this Certificate

Site Name	Address	Date	Report ref.
Jiangsu Shagang Group	Jinfeng Town, Zhangjiagang,	Oct, 2021	Type test report
Co., Ltd.	Jiangsu Province, P.R.China.		No.TP2110PG-01 rev.01

Applications/Limitations

- 1. This Material Manufacturer Certificate does not exempt any purchaser from his responsibility to ensure that this qualification is valid for his products within the requirements of EN 10225-1.
- 2. Samples for production testing shall realistically reflect the properties in the actual plates as per material standard/specification and purchaser requirements.
- 3. The re-qualification process shall be repeated if any change is made to essential variable, E.g. change in the forming process and a major change of manufacturing equipment, etc.
- 4. If production is carried out at different plants/locations, a separate qualification is required for each plant. The also applies to change of in-house to subcontractors or change of subcontractor for essential operations. E.g. heat treatment, etc.



Certificate No.: 12823-2018-PC-RGC-DNV GL Place and date: Shanghai, 29th April 2022 Revision No: 1.0

Terms and conditions

This Certificate is subject to the following terms and conditions:

- Product liability rests with Manufacturer in case of damages caused by defective products.
- The Certificate is only valid for the product(s) listed above.
- Manufacturer shall inform the local DNV office for any changes made with respect to the qualification and a visit to the manufacturer may be made when deemed necessary.

The following may render this Certificate invalid:

- Any deviation to application/limitation listed above.
- Changes in the manufacturing of the products.
- Changes or amendments to the referenced standard and manufacturing summary.

END OF CERTIFICATE



MATERIAL MANUFACTURER **CERTIFICATE**

Certificate No .: 12824-2018-PC-RGC-DNV GL

This certificate consists of 3 pages

Initial date: 29th June 2018 Valid Until: 28th June 2024

This is to certify that the products(s)

Plates

with name and/or type designation(s)

Weldable Structural Steels

Manufactured by

Jiangsu Shagang Group Co., Ltd. Jinfeng Town, Zhangjiagang, Jiangsu Province, P.R.China.

has, on a voluntary basis, been assessed with respect to

the requirements specified in NORSOK M-120:2021

and found to comply with the standard. Applications/Limitations: See page 2.

Further details are given overleaf

Place and date: Shanghai, 2022-04-29 For the issuing office DNV Business Assurance (China) Co.,Ltd.

Guo Hua **Technical Reviewer**



Certificate No.: 12824-2018-PC-RGC-DNV GL Place and date: Shanghai, 29th April 2022 Revision No: 1.0

Certificate history

Revision	Description	Issue Date	
0.0	Original Certificate	2018-06-29	
1.0	Renewal certificate	2022-04-29	

Products covered by this Certificate

Grade of Material	MDS	Steelmaking ¹⁾	Fine Grain Treatment	Delivery Condition ²⁾	Max. Thickness (mm)	Z- quality
S355MLO	MDS Y20&Y25	BOC,CC	Al+Nb+Ti	М	80	Z35
S355NLO	MDS Y20&Y25	BOC,CC	Al+Nb+Ti	N	100	Z35
S420MLO	MDS Y30&Y35	BOC,CC	Al+Nb+Ti	М	80	Z35
S420QLO	MDS Y30&Y35	BOC,CC	Al+Nb+Ti	QT	100	Z35
S460MLO	MDS Y40&Y35	BOC,CC	Al+Nb+V+Ti	М	80	Z35
S460QLO	MDS Y40&Y35	BOC,CC	Al+Nb+V+Ti	QT	100	Z35
S235JR	MDS Y01	BOC,CC	Al	AR	25	-
S355J0	MDS Y04	BOC,CC	Al+Nb+Ti	М	25	-
S355J2	MDS Y05	BOC,CC	Al+Nb+Ti	М	50	-
S355K2	MDS Y05	BOC,CC	Al+Nb+Ti	М	50	-
S420ML	MDS Y15	BOC,CC	Al+Nb+Ti	М	50	-

Remarks:

¹⁾ BOC, CC: Basic Oxygen Converter; Continuous Casting

²⁾ N: Normalised; M: Thermomechanical rolling; QT: Quenching and Tempering; AR: As rolled; CR: Controlled rolling.

Site covered by this Certificate

Site Name	Address	Date	Report ref.
Jiangsu Shagang Group Co., Ltd.	Jinfeng Town, Zhangjiagang, Jiangsu Province, P.R.China.	Oct, 2021	Type test report No.TP2110PG-01 rev.01 IRISAC211215 Rev.01 IRISAC220103 Rev.01

Applications/Limitations

- 1. This Material Manufacturer Certificate does not exempt any purchaser from his responsibility to ensure that this qualification is valid for his products within the requirements of NORSOK M-120.
- 2. Samples for production testing shall realistically reflect the properties in the actual plates as per material standard/specification and purchaser requirements.
- 3. The re-qualification process shall be repeated if any change is made to essential variable, E.g. change in the forming process and a major change of manufacturing equipment, etc.
- If production is carried out at different plants/locations, a separate qualification is required for each plant. The also applies to change of in-house to subcontractors or change of subcontractor for essential operations. E.g. heat treatment, etc.

Lack of fulfilment of conditions as set out in the Certification Agreement may render this Certificate invalid.

DNV BUSINESS ASSURANCE (CHINA) Co., LTD, House No.9, 1591 Hong Qiao Road, Shanghai 200336, P.R.China. www.dnv.com



Certificate No.: 12824-2018-PC-RGC-DNV GL Place and date: Shanghai, 29th April 2022 Revision No: 1.0

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