



Industrie Service

CERTIFICATE

The Certification Body - 0036 - of
TÜV SÜD Industrie Service GmbH

certifies that

Michigan Seamless Tube LLC
dba
MST Seamless Tube and Pipe
400 McMunn Street
South Lyon, MI 48178
U.S.A.

has implemented, operates and maintains a

**Quality Assurance System in accordance with the
Pressure Equipment Directive 97/23/EC (PED)
Annex I, Paragraph 4.3 and EN 764-5, article 4**

as Material Manufacturer for the scope of

Seamless steel tubes and pipes.

The scope of the approval is described in the annex to this certificate.

The manufacturer is, therefore, authorized to issue certificates of specific product control within the scope of the assessed quality system and in accordance with the Pressure Equipment Directive 97/23/EC and applied technical specifications. Possible additional requirements - specific to applied technical specifications to meet PED Annex I - are not affected.

This certificate is valid through November 2014.

The validity of this certificate is connected to a valid certification in accordance with ISO 9001:2008.

Certificate No.: 379/2009/MUC

Munich, January 01st, 2012



TÜV SÜD Industrie Service GmbH
Zertifizierungsstelle für Druckgeräte

(H. Müller)

Notified Body, No. 0036

TÜV SÜD Industrie Service GmbH, Department Material- and Weldingtechnology
Westendstr. 199, 80686 Munich



Industrie Services

Geltungsbereich der Überprüfung als Hersteller von Produkten nach DGR 97/23/EG, Anhang I, Abschnitt 4.3 /
Scope of Approval - Manufacturer of Base Materials used in accordance to PED, Annex I, Paragraph 4.3

Anlage zum Zertifikat Nr. / Annex to Certificate No.
379/2009/MUC von/dated 2012-01-01*)

| | | | | | | |
|----------------------------|---|-------------|-----------------------|--------------|--------------------|---|
| Hersteller / Name: | Michigan Seamless Tube LLC dba MST Seamless Tubes and Pipes | Herst.-Nr.: | Nationalität/ Country | Datum: Date: | Blatt-Nr. Page No. | Zertifizierungsstelle für Druckgeräte Benannte Stelle, Kennnummer / Notified Body, No. 0036 |
| Manufacturer: Str./Street: | 400 McMunn Street | Manuf.-No.: | USA | 01.01.2012 | 1 of 1 | Geschäftsfeld Anlagentechnik |
| Ort/City: | South Lyon, MI 48178 | | | | | |

| Id. Nr./ No. | Werkstoffbezeichnung/ Werkstoff-Nr. / Material Designation / | Werkstoff / Material | | Kurzzeichen/ Code | Prüfgegenstand/ Erzeugnis/Begriff Description Product Technology | Abmessungen Dimensions (mm) Dicker/Thickness Durchmesser/ diameter | | | Gewicht Weight max. | Bemerkungen Remarks | | |
|--------------|--|----------------------|-----------------|-------------------|--|--|--------|----------|---------------------|---------------------|--------|----------|
| | | Art. Spec. | Nr. No. | | | von from | bis to | von from | | | bis to | von from |
| 1 | | | | | | 8a | 6b | 7a | 7b | 8a | 8b | |
| 01 | P9 UNS K90941 P11 UNS K11597 P22 UNS K21590 | ASTM ASME | A 335 SA 335 | N/G | Seamless pipes | 2.7 | 18 | 21 | 115 | | | |
| 02 | A-1 | ASTM ASME | A 210 SA 210 | N/G | Seamless tubes | 2.1 | 16 | 19 | 130 | | | |
| 03 | C | ASME | SA 210 | G | Seamless tubes | 4 | 16 | 40 | 80 | | | |
| 04 | T9, T11, T22 | ASME | SA 213 | N/G | Seamless tubes | 2 | 18 | 19 | 115 | | | |
| 05 | | ASME | SA 192 | G | Seamless tubes | 2.4 | 14 | 19 | 102 | | | |
| 06 | Grade B | ASME | SA 106 | G | Seamless tubes | 2.5 | 8 | 19 | 80 | | | |
| 07 | T1, T1A | ASME | SA 209 | G | Seamless tubes | 2.3 | 12 | 25 | 80 | | | |
| 08 | T2, T5 | ASME | SA 213 | G | Seamless tubes | 2 | 16 | 25 | 80 | | | |
| 09 | T12 | ASME | SA 213 | G | Seamless tubes | 4 | 16 | 50 | 80 | | | |

If seamless tubes or pipes are manufactured outside the scope of this approval, a Material Test Certificate according to EN 10204, 3.2 including a singular expertise is necessary.

Bei der Verwendung der Werkstoffe nach Spalte 2-4 sind die Festlegungen und Grenzen des jeweiligen Regelwerks bzw. der Druckgeräterichtlinie zu beachten. Für die spezifischen Einsatzbedingungen der Werkstoffe ist die Zustimmung des Druckgeräteeherstellers bzw. der zustaerndigen benannten Stelle erforderlich.

For the use of the material acc. to column 2 till 4 the regulations and limits of the respective standards have to be observed. The specific material operating conditions have to be approved by the pressure equipment manufacturer or respectively by the notified body in charge.

Endzustand: A = Lösungsgelüht und abgeschreckt / solution annealed and quenched L = Lösungsgelüht/Solution annealed N = Normgelüht/normalized S = Spannungsarmgelüht/stress relieved TM = Thermo- behandelt/thermo- treated U = ungeglüht/ not annealed V = versickelquenchend and temperend CR = Temperaturerweitert verformungsform/ temperature controlled hot formed (control roll) G = weichtgelüht/tempered a = Werkstoffbezeichnung in Spalte 11/material designation in column 11 b = Lieferzustand in Spalte 11/delivery condition in column 11 c = Prüfgegenstand in Spalte 11/object in column 11 d = Abmessungen in den Techn. Regelwerksnormen/ dimensions acc. to technical rules e = Gewicht in den Techn. Regeln/ weight acc. to technical rules f = Nr. der Techn. Regeln in Spalte 11/technical rules reference column 11

*) Die Gültigkeit des Zertifikates ist an eine gültige Zertifizierung gemäß ISO 9001:2008 gebunden / The validity of this certificate is connected to a valid certification in accordance with ISO 9001:2008.