



P8

**Inspection Document
EN 10204
Prüfbescheinigung**

HILTI (CHINA) LTD.
Yongping Road, South,
Zhanjiang, Guangdong, PRC

Document No. *Dokument Nr.*

P8_2.2_034

Type of Inspection Document/Typ der Prüfbescheinigung

Test report/*Werkszeugnis* 2.2 ✓
Inspection certificate/*Abnahmeprüfzeugnis* 3.1

| Item-Nr. | Product designation | Customer ref. -Nr. | Batch-Nr. | Quantity |
|-----------------|---------------------------|------------------------|-----------------------|--------------|
| <i>Sach-Nr.</i> | <i>Produktbezeichnung</i> | <i>Kunden Ref. Nr.</i> | <i>Charge/Los Nr.</i> | <i>Menge</i> |
| Code art. | Référence produit | No. ref. de client | Commande No. | Quantité |
| 259952 | HAS-R M12x110/28 | | | |
| | | | | |
| | | | | |

Remarks/*Bemerkungen/Remarques*

We herewith certify, that the material described above complies with the terms of the order.

Hiermit bestätigen wir, dass die oben angeführte Lieferung den Vereinbarungen bei der Bestellung entspricht.

Nous certifions que la livraison est conforme aux stipulations de la commande.

Issuer/Aussteller
Department/Bereich
Contact/Kontakt

Amy Yuan
P8Q
(86) 759 3379226

This inspection document was generated automatically and is valid without signature.

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Ce test certificate a été créé automatiquement et est valable sans signature

Date/*Datum*: 6-Mar-2013



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| Item-Nr. | Product designation | Customer ref. -Nr. | Batch-Nr. | Quantity |
|-----------|---------------------|--------------------|----------------|----------|
| Sach-Nr. | Produktbezeichnung | Kunden Ref. Nr. | Charge/Los Nr. | Menge |
| Code art. | Référence produit | No. ref. de client | Commande No. | Quantité |
| 259952 | HAS-R M12x110/28 | | | |

| Item designation | HAS-R | Rod M12 | Nut M12 | Washer 13 | | |
|---------------------|-----------|---------|---------|-----------|--|--|
| Sachbezeichnung | M12x110/2 | | | | | |
| Reference composant | 8 | | | | | |

Inspection values/Prüfergebnisse

| Chemical composition | | set value | actual value | set value | actual value | set value | actual value | set value | actual value | set value | actual value |
|--------------------------------------|----|-----------------------------------------------------------------------|--------------|-------------|--------------|-------------------|-------------------|------------------------------------------------------------|--------------|-----------|--------------|
| Chem. Zusammensetzung | | | | | | | | | | | |
| C % | | 0.00-0.07 | 0.01 | 0.00-0.08 | 0.01-0.02 | 0.00-0.08 | 0.02 | | | | |
| Si % | | 0.00-1.00 | 0.48 | 0.00-1.00 | 0.51-0.55 | 0.00-1.00 | 0.43 | | | | |
| Mn % | | 0.00-2.00 | 1.09 | 0.00-2.00 | 1.39-1.41 | 0.00-2.00 | 1.45 | | | | |
| P % | | 0.000-0.045 | 0.027 | 0.000-0.050 | 0.030-0.032 | 0.000-0.050 | 0.031 | | | | |
| S % | | 0.000-0.030 | 0.013 | 0.000-0.030 | 0.001-0.002 | 0.000-0.030 | 0.003 | | | | |
| Cr % | | 16.50-18.50 | 16.77 | 16.00-18.50 | 17.24-17.26 | 16.00-18.50 | 17.15 | | | | |
| Mo % | | 2.00-2.50 | 2.03 | 2.00-3.00 | 2.04-2.11 | 2.00-3.00 | 2.06 | | | | |
| Ni % | | 10.00-13.00 | 11.14 | 10.00-14.00 | 10.14 | 10.00-14.00 | 10.12 | | | | |
| Cu % | | | | | | | | | | | |
| B % | | | | | | | | | | | |
| Al % | | | | | | | | | | | |
| N % | | 0.00-0.11 | 0.02 | | | | | | | | |
| Pb % | | | | | | | | | | | |
| Mech. properties | | | | | | | | | | | |
| Mechanische Eigensch. / Mecan. prop. | | | | | | | | | | | |
| N | | | | | | | | | | | |
| V | | | | | | | | | | | |
| Fp | | | | 59 | 59 | | | | | | |
| HV | | | | | | 140-250 | 145 | | | | |
| A | | min.20 | 25 | | | | | | | | |
| Z | | | | | | | | | | | |
| R_{p0.2} | | min.350 | 625 | | | | | | | | |
| R_m | | 700-850 | 840 | | | | | | | | |
| Layer thickness/Schichtdicke | | | | | | | | | | | |
| Epaisseur de couche extérieure | | | | | | | | | | | |
| d (Zn) | | | | | | | | | | | |
| N | kN | Tension load / Bruchlast Zug / charge de tension | | | | Z | % | Reduction of area / Einschnürung / contraction | | | |
| V | kN | Shear load / Querlast / charge de cisaillement | | | | R _{p0.2} | N/mm ² | Yield strength / Streckgrenze / limite d'elasticite | | | |
| F _p | N | Proof load / Prüfkraft / charge limite | | | | R _m | N/mm ² | Ultimate tensile strength / Zugfestigkeit / resistance a | | | |
| HV | - | Vickers hardness / Härte Vickers / druet Vickers | | | | d (Zn) | µm | Mean zinc thickness/ mittlere Schicht-dicke Zn / epaisseur | | | |
| A | % | Elongation after fracture / Bruch-dehnung / elongation apres fracture | | | | | | | | | |