**TAN-Nr.: TAN****Auftragsnummer:    /     /**

***TAN no.: Order code:***

**Checkliste B 006 Federringe/**

***Checklist B 006 Spring washers***

**Firma/ *Company:***

**Standort/ *Location:***

**Fertigung für Firma/ *Production for company:***

**Nicht zutreffende Punkte finden keine Betrachtung im Bewertungsfeld!/**

***Items that do not apply are not analysed in the assessment field!***

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| **1** | **Liegen die erforderlichen Normen und Bahnstandards in der aktuellen Ausgabe und in der Landessprache vor?/** ***Is the latest edition of the requisite standards and rail standards available in the national language?*** | **👍****☺** | **?****😐** | **👎☹** | **Bemerkungen/** ***Comments*** |
| [ ]  | DBS 918 006 Federringe/ *DBS 918 006 Spring steel washers* | **[ ]**  | **[ ]**  | **[ ]**  |       |
| [ ]  | EN 10 089 Warmgewalzte Stähle für Federn/ *EN 10 089 Hot-rolled steels for springs* | **[ ]**  | **[ ]**  | **[ ]**  |       |
| [ ]  | UIC 864/ *UIC 864* | **[ ]**  | **[ ]**  | **[ ]**  |       |
| [ ]  |       | **[ ]**  | **[ ]**  | **[ ]**  |       |

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| **2** | **Federringfertigung/** ***Spring washer production*** | **👍****☺** | **?****😐** | **👎☹** | **Bemerkungen/** ***Comments*** |
| [ ]  | Anlieferung als …/ *Delivery as …*[ ]  Rundmaterial/ *Round stock*[ ]  Vierkant/ *Square*[ ]        | [ ] [ ] [ ]  | [ ] [ ] [ ]  | [ ] [ ] [ ]  |                      |
| [ ]  | Profildraht/ *Profiled wire*[ ]  Glatt/ *Smooth*[ ]  Gerändelt/ *Knurled*[ ]  Kordiert/ *Knurled with different surface profiles according to drawing*[ ]        | [ ] [ ] [ ] [ ]  | [ ] [ ] [ ] [ ]  | [ ] [ ] [ ] [ ]  |                           |
| [ ]  | Materialvorbehandlung/ *Material pretreatment* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Maßnahmen gegen Beschädigung/ *Measures to protect against damage* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Chemische Analyse/ *Chemical analysis* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Kennzeichnungen/ *Markings* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Abmessungen/ *Dimensions* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Stichprobenprüfungen/ *Sample tests* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Überwachung der Maschinen/ *Machinery monitoring* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Reparaturen/ *Repairs* | [ ]  | [ ]  | [ ]  |       |
| [ ]  |       | [ ]  | [ ]  | [ ]  |       |

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| **3** | **Wärmebehandlung/** ***Heat treatment*** | **👍****☺** | **?****😐** | **👎☹** | **Bemerkungen/** ***Comments*** |
| [ ]  | Öfen/ *Furnaces*[ ]  Durchlauföfen/ *Continuous furnaces*[ ]  Kammeröfen/ *Chamber furnaces*[ ]        | [ ] [ ] [ ]  | [ ] [ ] [ ]  | [ ] [ ] [ ]  |                      |
| [ ]  | Prozess (Ofen)/ *Process (furnace)*[ ]  Wasser/ *Water*[ ]  Öl/ *Oil*[ ]        | [ ] [ ] [ ]  | [ ] [ ] [ ]  | [ ] [ ] [ ]  |                      |
| [ ]  | Härteprozess/ (830 – 860°C)*Hardening process* | [ ]  | [ ]  | [ ]  |        |
| [ ]  | Zwischenkühlprozess/ (20 – 40°C)*Intermediate cooling process*[ ]  Wasser/ *Water*[ ]  Öl/ *Oil*[ ]        | [ ] [ ] [ ]  | [ ] [ ] [ ]  | [ ] [ ] [ ]  |                       |
| [ ]  | Anlassprozess/ (350 – 550°C)*Tempering process* | [ ]  | [ ]  | [ ]  |        |
| [ ]  | Abkühlprozess/ *Cooling process*[ ]  Durchlauföfen/ *Continuous furnaces*[ ]  Kammeröfen/ *Chamber furnaces*[ ]        | [ ] [ ] [ ]  | [ ] [ ] [ ]  | [ ] [ ] [ ]  |                      |
| [ ]  | Überwachung/ *Monitoring* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Dokumentation/ *Documentation* | [ ]  | [ ]  | [ ]  |       |
| [ ]  |       | [ ]  | [ ]  | [ ]  |       |

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| **4** | **Korrosionsschutz/** ***Corrosion control*** | **👍****☺** | **?****😐** | **👎☹** | **Bemerkungen/** ***Comments*** |
| [ ]  | Rostschutz/ *Corrosion inhibitor* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Rostgrad zul. 3%/ *Corrosion grade perm. 3%* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Wasserstoff indizierte Versprödung/ *Hydrogen-induced embrittlement* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Beschichtung/ *Coating* | [ ]  | [ ]  | [ ]  |       |
| [ ]  |       | [ ]  | [ ]  | [ ]  |       |

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| **5** | **Prüfungen/ *Tests*** | **👍****☺** | **?****😐** | **👎☹** | **Bemerkungen/** ***Comments*** |
| [ ]  | Qualifizierungsprüfung/ *Qualification examination* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Prüflabor (Name)/ *Testing laboratory (name)*[ ]  extern/ *external*[ ]  intern/ *internal* | [ ] [ ]  | [ ] [ ]  | [ ] [ ]  |                 |
| [ ]  | Oberfläche (Sichtprüfung)/ *Surface (visual inspection)* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Kennzeichnung/ *Marking* | [ ]  | [ ]  | [ ]  |       |
| [ ]  |       | [ ]  | [ ]  | [ ]  |       |
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| [ ]  | **Laborprüfungen/ *Laboratory tests*** | **👍****☺** | **?****😐** | **👎☹** |  |
| [ ]  | Maßprüfung/ *Dimensional inspection* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Härteprüfung/ *Hardness test* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Mikrogefüge/ *Microstructure* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Entlastungsfederweg/ *Deflection upon load removal* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Verwindung/ *Twist* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Ausführungsgüte/ *Quality of workmanship* | [ ]  | [ ]  | [ ]  |       |
| [ ]  | Keine Kettenbildung/ *No chain formation* | [ ]  | [ ]  | [ ]  |       |
| [ ]  |       | [ ]  | [ ]  | [ ]  |       |

**Welches Herstellerzeichen verwendet die Firma?** (schwarz/weiß)/

***Which manufacturer's mark does the company use?*** *(black and white)*

Ggf. gesondert anfügen/ *Add separately if necessary*

**Weitere Bemerkungen:/**

***Additional comments:***

|  |  |  |
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| durchgeführt am/ *performed on/**(dd.mm.yyyy)* | durchgeführt in/ *performed in* | durch QPI/ *by quality test engineer* |
|       |       |  |