| **Bearbeitung:**  External Specification: | **prEN6118 Type 1, MIL-DTL-5541 Type 1 class 1A, without Cetyl** |
| --- | --- |

| Folgenden Anweisungen ist Folge zu leisten:  Follow Instructions below: |
| --- |
| 1. Vorsichtige Handhabung der Bauteile.   Carefull handling of components.   1. Bauteile nur mit sauberen Latex/Nitril Handschuhen gemäß VD-A44 handhaben.   Handle components with clean Latex/Nitril gloves only. (Follow instructions of VD-A44) |
| 1. Bei Abweichungen am Bauteil hinsichtlich Aussehen und Dimensionen ist die Abteilung PPS zu informieren.   In case of deviations on the component regarding to appearance and the dimensions, the PPS department must be informed. |

| **Tab. 1:** Bauteil-Dimensionen  Tab. 1: Partpart dimensions | |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Bauteillänge**  Part length | **mm** | **Kopfform**  Head form |  | **Fläche/Stück**  Surface/piece | **mm2** |
| **Stückgewicht**  Piece weight | **g** | **Gesamtgewicht**  Total weight | **kg** | **Gesamtfläche**  Total surface | **m2** |
| Soll **Ø** gem. Zeichnung  Part acc. to drawing | | Stichprobe **vor** der Beschichtung  Sample before coating | | Sollmaß **nach** dem Beschichten  Nominal dimension after coating | |
|  | | WE-Min [mm] | WE-Max [mm] | **UGW** Min [mm] | **OGW** Max [mm] |
| **Ø MP1** (Schaft mittig)  (shank center) | |  |  |  |  |
| **Ø MP2** (10 mm über Gewinde)  (10 mm over thread) | |  |  |  |  |
| **Ø MP3** (5 mm unter dem Kopf)  (5 mm under the head) | |  |  |  |  |

| **[WE]** | **Wareneingangskontrolle** Incomming goods inspection | | | | | | | Nachweis siehe ND-P83  For evidence see ND-P83 | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | | |
| 010 | Externe Anweisung: **--**  External procedure | Interne Anweisung: **VD-P26**  Internal procedure: | | | | | |
|  |  |  | | | | | |
| **[Q]** | **Qualitätssicherung Eingang**  Incomming quality assurance | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  | | | | | | |
| 015 | Externe Anweisung: **prEN6118**  External procedure: | Interne Anweisung: **VD-A410**  Internal procedure: | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: |  | |  | | Uhrzeit | |
|  | Punkte QS ausfüllen  Fill out items QS | **ND-P83** | | | | | |
| Kontrolle der Bauteile auf Beschädigung  Inspection for damages | **50 Bauteile**  50 Parts | | | | | |
| Durchmesserprüfung der Bauteile (Sinic)  Diameter inspection of parts and test parts (Sinic) | **50 Bauteile**  50 Parts | | | | | |
| Durchmesserprüfung Bauteile und Dokumentation in **Tab. 1**  Diameter check of the test parts on MP2 and documentation in Tab. 1 | | | | | | |
| **Anzahl geprüfter Bauteile:**  Amount of parts checked: |  | |  | | |  |
| **Beurteilung der Bauteile:**  Part evaluation: | **i.O**  passed | X | **n.i.O**  failed | X | |  |
|  | **Uhrzeit Ende AG:**  End of workstep: |  | |  | | | Uhrzeit |
|  |  |  | | | | | |
| **[P]** | **Alkalische Ultraschallentfettung** Ultra sonic degreasing | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  | | | | | | |
| 020 | Externe Anweisung: **prEN6118**  External procedure: | Interne Anweisung: **VD-P47**  Internal procedure: | | | | | |
|  | **Achtung! Ab 12 mm Ø oder einer Länge von 100 mm den Drehantrieb AUS - schalten!**  Attention! Switch the rotary actuator OFF | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: |  | |  | | | Uhrzeit |
|  | Zulässige Anlage:  Permitted equipment: | **TE1, UE1** | | | | | |
| **Ultraschall verwendet:**  Ultrasonic used: | **Ja**  Yes | X | **Nein**  No | X | |  |
| **Verwendete Anlage:**  Used equipment: |  | |  | | |  |
| **Transportbehälternummer dokumentieren:**  Document the transport container ID: |  | |  | | |  |
| **Uhrzeit Ende AG:**  End of workstep: |  | |  | | | Uhrzeit |
|  |  | | | | | |

| **[P]** | **Wasserbruchtest** Water break free test | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 025 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A20**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Hinweis: Kalibrierten Timer benutzen!**  Note: Use a calibrated timer! | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | |  | | | | | | | | | | Uhrzeit | | | | |
|  | Die Bauteile mit VE-Wasser benetzen.  Moisten the parts with demineraliesd water. | | | | | | | | | **≥ 30 sec.** | | | | | | | | | | | | | | | | | | | |
| Prüfmittel:  test equipment: | | | | | | | | | **Auge**  Eye | | | | | | | | | | | | | | | | | | | |
| **Timer Nr. dokumentieren:**  Document timer no: | | | | | | | | |  | | | | |  | | | | | | | | | |  | | | | |
| **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | | | | | | |  | | | | |  | | | | | | | | | |  | | | | |
| **Beurteilung der Bauteile**:  Part evaluation: | | | | | | | | | **i.O**  passed | | | X | | **n.i.O**  failed | | | | | | | X | | |  | | | | |
|  | **Auswertung:** Bei **n.i.O** Wiederholung der Entfettung.  Evaluation: If a Water break is visible repeat degreasing. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Drucklufttrocknen** Drying with compressed air | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 030 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A8, VD-P48**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Geprüfter Druckluftentnahmepunkt (DLEP):**  Tested compressed air extraction point: | | | | | | | | |  | | | | | |  | | | | | | | | |  | | | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | | | | |  | | | | | |  | | | | | | | | | Uhrzeit | | | | |
|  |  | | |  | | | | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Thermisches Trocknen** Thermal drying | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | | MA-Stempel  Employee stamp |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 035 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-P48**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Hinweis: Kalibrierten Timer benutzen!**  Note: Use a calibrated timer! | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | | | | | |  | | | | | | | | | Uhrzeit | |
|  | Zulässiger Ofen:  Permitted oven: | | | | | | | | | **O 6, O 8** | | | | | | | | | | | | | | | | | | | |
|  | Empfohlene Trocknungsdauer:  Recommended drying time: | | | | | | | | | **≥ 20 min** | | | | | | | | | | | | | | | | | | | |
|  | Maximal zulässige Temperatur:  Maximum Permissible temperature: | | | | | | | | | **100 ± 5 °C** | | | | | | | | | | | | | | | | | | | |
|  | **Verwendeter Ofen:**  Used oven: | | | | | | | | |  | | | | | | | | |  | | | | | | | |  | | |
|  | **Timer Nr. dokumentieren:**  Document timer no: | | | | | | | | |  | | | | | | | | |  | | | | | | | |  | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | | | | |  | | | | | | | | |  | | | | | | | | Uhrzeit | | |
|  |  | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Werkerselbstkontrolle** Worker self check | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | | MA-Stempel  Employee stamp |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 040 | Externe Anweisung: **prEN6118**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A21**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | | | | | |  | | | | | | | | | Uhrzeit | |
|  | Prüfgegenstand:  Test item: | | | | | | | | | **5 Bauteile**  5 Parts | | | | | | | | | | | | | | | | | | | |
|  | Bauteile auf Beschädigungen und vollständige Trocknung prüfen.  Check parts for damage and complete drying. | | | | | | | | | | | | | | | | | | | | | | | | |  | | | |
| **Beurteilung der Bauteile:**  Part evaluation: | | | | | | | | | **i.O**  passed | | X | | | **n.i.O**  failed | | | | | | | | X | | |  | | | |
| **Transportbehälternummer dokumentieren:**  Document the transport container ID: | | | | | | | | |  | |  | | |  | | | | | | | |  | | |  | | | |
| **Uhrzeit Ende AG:**  End of workstep: | | | | | | | | |  | | | | |  | | | | | | | | | | | Uhrzeit | | | |
|  |  | | | | | |  | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Al2O3-Aktivierung** Al2O3-Grit Blasting | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | | MA-Stempel  Employee stamp |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 045 | Externe Anweisung: **prEN6118**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A8, VD-A423**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | |  | | | | | | | | | | | Uhrzeit | | | |
|  | **Geprüfter Druckluftentnahmepunkt (DLEP):**  Tested compressed air extraction point: | | | | | | | | |  | | | | |  | | | | | | | | | | |  | | | |
|  | Zulässige Strahlanlage:  Permitted blasting equipment | | | | | | | | | **EK 4, EK 7** | | | | | | | | | | | | | | | | | | | |
|  | Zulässiges Strahlmittel:  Permitted blasting media: | | | | | | | | | **F120** | | | | | | | | | | | | | | | | | | | |
|  | Zulässiger Druck:  Permitted pressure: | | | | | | | | | **4,5 – 5,5 bar** | | | | | | | | | | | | | | | | | | | |
|  | Abstand Düse-Bauteil:  Distance nozzle part: | | | | | | | | | **20 ± 10 cm** | | | | | | | | | | | | | | | | | | | |
|  | **Verwendete Anlage:**  Used equipment: | | | | | | | | |  | | | | |  | | | | | | | | | | |  | | | |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Druckluftreinigen** Cleaning with compressed air | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 050 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A8, VD-A42**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | | | | |  | | | | | | | | |  | | | | | | | | | Uhrzeit | |
|  |  | | | | |  | | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Werkerselbstkontrolle** Worker self check | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 055 | Externe Anweisung: **prEN6118**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A21**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | | | |  | | | | | | | | | | Uhrzeit | | |
|  | Prüfgegenstand:  Test item: | | | | | | | | | **5 Bauteile**  5 Parts | | | | | | | | | | | | | | | | | | | |
|  | Strahlbild: Bauteile müssen eine gleichmäßig matte Oberfläche aufweisen.  Blasted Surface: Surface must have a continuous mat appearance. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Verunreinigung: Bauteile dürfen keinerlei Verunreinigung aufweisen.  Soiling**:** Parts may not be soiled after blasting is completed. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | Beschädigungen: Schäden an Bauteilen sind nicht zulässig.  Damages are not permissible | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | | | | | | |  | | | |  | | | | | | | | | | | | |  | | |
|  | **Transportbehälternummer dokumentieren:**  Document the transport container ID: | | | | | | | | |  | | | |  | | | | | | | | | | | | |  | | |
|  | **Beurteilung der Bauteile:**  Part evaluation: | | | | | | | | | **i.O**  passed | X | | | **n.i.O**  failed | | | | | | | X | | | | | |  | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | | | | |  | | | |  | | | | | | | | | | | | | Uhrzeit | | |
|  |  | | | | | | | | |  | | | | | | | | | | | | | | | | | | | |
| **[P]** | **IVD-Al-Beschichtung** IVD-Al coating | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 060 | Externe Anweisung: **prEN6118**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A412**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of Workstep: | | | | | | | | |  | | | | | | | |  | | | | | | | | | Uhrzeit | | |
|  | **Zulässige Anlagen:**  Permitted systems: | | | | | | | | | **IVD 1, IVD 3, IVD 4** | | | | | | | | | | | | | | | | | | | |
|  | **Verwendete IVD-Anlage:**  Used IVD equipment: | | | | | | | | |  | | | | | | | |  | | | | | | | | |  | | |
|  | **Fahrtennummer:**  Paint preparation number: | | | | | | | | |  | | | | | | | |  | | | | | | | | |  | | |
|  | **Uhrzeit Ende AG:**  End of Workstep: | | | | | | | | |  | | | | | | | |  | | | | | | | | | Uhrzeit | | |
|  |  | | | | | | |  | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Entnahme** Part withdrawl | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 065 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A412**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | | | | |  | | | | | | | | | Uhrzeit | | |
|  | **Transportbehälternummer dokumentieren:**  Document the transport container ID: | | | | | | | | |  | | | | | | | |  | | | | | | | | |  | | |
|  | **Uhrzeit Ende AG:**  End of Workstep: | | | | | | | | |  | | | | | | | |  | | | | | | | | | Uhrzeit | | |
|  |  | |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Werkerselbstkontrolle** Worker self check | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 070 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A21**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of Workstep: | | | | | | | | |  | | | | | | |  | | | | | | | | | | Uhrzeit | | |
|  | Prüfgegenstand:  Test item: | | | | | | | | | **10 Bauteile**  10 Parts | | | | | | | | | | | | | | | | | | | |
|  | Bauteile müssen eine gleichmäßige Beschichtung ohne Fehlstellen aufweisen. Minimale Kontaktstellen von Bauteilaufnahmen sind zulässig sofern die Beschichtung geschlossen ist.  Parts shall have a uniform coating without any flaws. Contact points caused by jigs are permissible as long as the coating layer is closed. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | | | | | | |  | | | | | | | |  | | | | | | | | |  | | |
|  | **Beurteilung der Bauteile:**  Part evaluation: | | | | | | | | | **i.O**  passed | | | X | | | | | **n.i.O**  failed | | | | | | X | | |  | | |
|  | **Uhrzeit Ende AG:**  End of Workstep: | | | | | | | | |  | | |  | | | | |  | | | | | |  | | | Uhrzeit | | |
|  |  | | | |  | | | | | | | | | | | | | | | | | | | | | | | | |
| **[P]** | **Glaskugelstrahlen der Prüfteile** Glass bead peening of test parts | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp | | |
|  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 075 | Externe Anweisung: **--**  External procedure: | | | | | | | | | Interne Anweisung: **VD-A8, VD-A424**  Internal procedure: | | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | | | | |  | | | | | | | | | |  | | | | | | | | | Uhrzeit |
|  | Prüfgegenstand:  Test specimen: | | | | | | | | | **10 Bauteile**  10 Parts | | | | | | | | | | | | | | | | | | | |
|  | **Geprüfter Druckluftentnahmepunkt (DLEP):**  Tested compressed air extraction point: | | | | | | | | |  | | | | | | | | | |  | | | | | | | | |  |
|  | Zulässige Strahlanlage:  Permitted blasting equipment: | | | | | | | | | **GP 1, GP 4, GP 5, GP6** | | | | | | | | | | | | | | | | | | | |
|  | Zulässiger Druck **GP 1, GP 5, GP6**:  Permitted pressure GP 1, GP 5, GP6: | | | | | | | | | **0,8 – 1,2 bar** | | | | | | | | | | | | | | | | | | | |
|  | Zulässiger Druck **GP 4**  Permitted pressure GP 4: | | | | | | | | | **2,6 - 3,2 bar** | | | | | | | | | | | | | | | | | | | |
|  | **Verwendete Anlage:**  Used equipment: | | | | | | | | |  | | | | | | | | |  | | | | | | | | | |  |
|  |  | | | | | | | |  | | | | | | | | | | | | | | | | | | | | |

| **[P]** | **Zwischenkontrolle Durchmesser** Intermediate check diameter | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | | | | | | |
| 080 | Externe Anweisung: **--**  External procedure: | Interne Anweisung: **VD-A410**  Internal procedure: | | | | | | | | | | | | |
|  | Prüfmethode:  Test method: | **Mikrometerschraube**  Micrometer screw | | | | | | | | | | | | |
|  | Prüfgegenstand:  Test specimen: | **10 Bauteile**  10 Parts | | | | | | | | | | | | |
|  | **PM Nummer Prüfmittel:**  PM number of Test equipment: |  | | | |  | | | | | |  | | |
|  | Temperatur der Bauteile:  Temperature of parts: | **RT** | | | | | | | | | | | | |
|  | Mindestens 3 Messungen je Bauteil  Minimum of 3 measurements per part | **BT** | **MP1** | | | | **MP2** | | | | | | **MP3** | |
|  | Nach jeder Messung das Bauteil um 120° drehen. | 1 |  | | | |  | | | | | |  | |
|  | Turn the part 120° after each measurement  Messwerte **(mm)** in der Tabelle dokumentieren.  Document measured values in the table. | 2 |  | | | |  | | | | | |  | |
|  |  | 3 |  | | | |  | | | | | |  | |
|  |  | 4 |  | | | |  | | | | | |  | |
|  |  | 5 |  | | | |  | | | | | |  | |
|  |  | 6 |  | | | |  | | | | | |  | |
|  |  | 7 |  | | | |  | | | | | |  | |
|  |  | 8 |  | | | |  | | | | | |  | |
|  |  | 9 |  | | | |  | | | | | |  | |
|  |  | 10 |  | | | |  | | | | | |  | |
|  | **Beurteilung der Bauteile nach Tab. 1:**  Part evaluation according to Table1: | **i.O**  passed | X | | | **n.i.O**  failed | | | X | | |  | | |
|  | **Uhrzeit Ende AG:**  End of workstep: |  |  | | |  | | |  | | | Uhrzeit | | |
|  |  |  | | | | | | | | | | | | |
| **[P]** | **Zwischenkontrolle Durchmesser** Intermediate control diameter | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  | | | | | | | | | | | | | |
| 085 | Externe Anweisung: **NASM 1312-12**  External procedure: | Interne Anweisung: **VD-A410, ND-P63**  Internal procedure: | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: |  | | |  | | | | | | Uhrzeit | | | |
|  | Prüfmethode:  Test method: | **Mikrometerschraube**  Micrometer screw | | | | | | | | | | | | |
|  | Prüfgegenstand:  Test specimen: | **10 Bauteile**  10 Parts | | | | | | | | | | | | |
|  | **PM Nummer Prüfmittel:**  PM number of Test equipment: |  | | | |  | | | |  | | | | |
|  | **Prüfbericht erstellen nach Kundenvorlage „ND-P63\_Prüfbericht fastener“ Speichern, Drucken und Abstempeln.**  Create test report according to customer template “Test report fastener Save, print and stamp. | | | | | | | | | | | | | |
|  | Die nach Prüfbericht geforderte Anzahl Bauteile messen und im Entschichtungskorb ablegen.  Measure the number of parts required according to the test report and place in the decoating basket. | | | | | | | | | | | | | |
|  | Beschichtung der Bauteile vollständig entfernen. **Reihenfolge der Bauteile nicht ändern!**  Completely remove the coating of the parts. Do not change the order of the parts! | | | | | | | | | | | | | |
|  | Bauteile in der gleichen Reihenfolge wie zuvor messen und die Schichtdicke ermitteln.  Measure the parts in the same order as before and determine the layer thickness. | | | | | | | | | | | | | |
|  | **Achtung!** Die entschichteten Bauteile in einer beschrifteten Tüte der Position beilegen.  Attention! The decoated parts in a labelled bag must be enclosed with the position. | | | | | | | | | | | | | |
|  | **Anzahl geprüfter Bauteile:**  Amount of parts checked: |  | | | |  | | | | |  | | | |
|  | **Beurteilung der Bauteile:**  Part evaluation: | **i.O**  passed | | X | | **n.i.O**  failed | | X | | |  | | |  |
|  | **Uhrzeit Ende AG:**  End of workstep: |  | |  | |  | |  | | | Uhrzeit | | | |
|  |  |  | | | | | | | | | | | | |

| **[P]** | **Glaskugelstrahlen** Glass bead peening | | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | | | | | | | | | | | |
| 090 | Externe Anweisung: **--**  External procedure: | | | | | | Interne Anweisung: **VD-A8, VD-A424**  Internal procedure: | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | |  | | | | | |  | | | | | | Uhrzeit |
|  | **Offenzeit:** Glaskugelstrahlen - Passivierung  Open time: glass bead blasting - passivation | | | | | | **≤ 24 h** | | | | | |  | | | | | |  |
|  | **Geprüfter Druckluftentnahmepunkt (DLEP):**  Tested compressed air extraction point: | | | | | |  | | | | | |  | | | | | |  |
|  | Zulässige Strahlanlage:  Permitted blasting equipment: | | | | | | **GP 1, GP 4, GP 5, GP6** | | | | | | | | | | | | |
|  | Zulässiger Druck **GP 1, GP 5, GP6**:  Permitted pressure GP 1, GP 5, GP6: | | | | | | **0,8 – 1,2 bar** | | | | | | | | | | | | |
|  | Zulässiger Druck **GP 4**  Permitted pressure GP 4: | | | | | | **2,6 - 3,2 bar** | | | | | | | | | | | | |
|  | **Verwendete IVD-Anlage:**  Used IVD equipment: | | | | | |  | | | | |  | | | | | |  | |
|  |  | | | | |  | | | | | | | | | | | | | |
| **[P]** | **Druckluftreinigen** Cleaning with compressed air | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | |
| 095 | Externe Anweisung: **--**  External procedure: | | | | | | Interne Anweisung: **VD-A8, VD-A42**  Internal procedure: | | | | | | | | | | | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | |  | | | | | |  | | | | | | Uhrzeit |
|  |  | |  | | | | | | | | | | | | | | | | |
| **[P]** | **Werkerselbstkontrolle** Worker self check | | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  | | | | | | | | | | | | | | | | | | |
| 100 | Externe Anweisung: **prEN6118**  External procedure: | | | | | | Interne Anweisung: **VD-A21**  Internal procedure: | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | |  | | |  | | | | | | | Uhrzeit | | |
|  | Prüfgegenstand:  Test specimen: | | | | | | **10 Bauteile**  10 Parts | | | | | | | | | | | | |
|  | Bauteile müssen eine gleichmäßige Beschichtung ohne Fehlstellen aufweisen.  Parts must have uniform appearance without any flaws. | | | | | | | | | | | | | | | | | | |
|  | **Beurteilung der Bauteile:**  Part evaluation: | | | | | | **i.O**  passed | X | **n.i.O**  failed | | | | | X | |  | | | |
|  | **Transportbehälternummer dokumentieren:**  Document the transport container ID: | | | | | |  | |  | | | | | | |  | | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | |  | |  | | | | | | | Uhrzeit | | | |
|  |  |  | | | | | | | | | | | | | | | | | |
| **[P]** | **Passivieren** Chromate passivation | | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  | | | | | | | | | | | | | | | | | | |
| 105 | Externe Anweisung: **MIL-DTL-5541**  External procedure: | | | | | | Interne Anweisung: **VD-A412**  Internal procedure: | | | | | | | | | | | | |
|  | **Hinweis: Kalibrierten Timer benutzen!**  Note: Use a calibrated timer! | | | | | | | | | | | | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | |  | | | |  | | | | | | Uhrzeit | | |
|  | Bauteile müssen eine gleichmäßige Beschichtung ohne Fehlstellen aufweisen.  Parts must have uniform appearance without any flaws. | | | | | | | | | | | | | | | | | | |
|  | Farbe:  Colour: | | | | | | **Hellgelb bis Goldgelb**  Light yellow to golden yellow | | | | | | | | | | | | |
|  | Zulässiges Behandlungsbad:  Permitted treatment bath: | | | | | | **1.1, 1.2, 1.3** | | | | | | | | | | | | |
|  | Zulässige Temperatur Bad 1.1:  Permissible temperature: bath 1.1: | | | | | | **21 – 38 °C** | | | | | | | | | | | | |
|  | Tauchzeit Bad 1.1:  Immersion time bath 1.1: | | | | | | **15 – 75 sec** | | | | | | | | | | | | |
|  | Spülzeit je Spülbecken:  Rinse time per bath: | | | | | | **15 – 75 sec** | | | | | | | | | | |  | |
|  | **Timer Nr. dokumentieren:**  Document timer no: | | | | | |  | | |  | | | | | | | |  | |
|  | **Tauchzeit Bad 1.1:**  Immersion time bath 1.1: | | | | | |  | | |  | | | | | | | |  | |
|  | **Spülzeit 1.2:**  Rinse time 1.2: | | | | | |  | | |  | | | | | | | |  | |
|  | **Spülzeit 1.3:**  Rinse time 1.3: | | | | | |  | | |  | | | | | | | |  | |
|  | **Dauer Spritzspülen:**  Duration of spray rinsing: | | | | | |  | | |  | | | | | | | |  | |
|  | **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | | | |  | | |  | | | | | | | |  | |
|  | **Beurteilung der Bauteile:**  Part evaluation: | | | | | | **i.O**  passed | X | | **n.i.O**  failed | | | | | X | | |  | |
|  |  | | | |  | | | | | | | | | | | | | | |
| **[P]** | **Drucklufttrocknen** Drying with compressed air | | | | | | | | | | | | | | | | | | |
|  |  | | | | | | | | | | | | | | | | | | |
| 110 | Externe Anweisung: **--**  External procedure: | | | | | | Interne Anweisung: **VD-A8, VD-P48**  Internal procedure: | | | | | | | | | | | | |
|  | **Geprüfter Druckluftentnahmepunkt (DLEP):**  Tested compressed air extraction point: | | | | | |  | | |  | | | | | | |  | | |
|  | **Uhrzeit Ende AG:**  End of workstep: | | | | | |  | | |  | | | | | | | Uhrzeit | | |
|  |  | | |  | | | | | | | | | | | | | | | |

|  | **[P]** | **Thermisches Trocknen** Thermal drying | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | | | | | | | | | | | | | | | | |
|  | 115 | Externe Anweisung: **--**  External procedure: | | | | Interne Anweisung: **VD-P48**  Internal procedure: | | | | | | | | | | | | |
|  |  | **Hinweis: Kalibrierten Timer benutzen!**  Note: Use a calibrated timer! | | | | | | | | | | | | | | | | |
|  |  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | |  | | | | | |  | | | | | Uhrzeit | |
|  |  | Farbe:  Colour: | | | | **Hellgelb bis Goldgelb**  Light yellow to golden yellow | | | | | | | | | | | | |
|  |  | **Zulässige Anlagen:**  Permitted systems: | | | | **Zentrifuge**  Centrifuge | | | X | | | | | | **Ofen**  Oven | | | X |
|  |  | **Bauteile < 12 mm Ø in der Zentrifuge**  Parts up to 12 mm Ø in the centrifuge | | | |  | | | | | | | | | | | | |
|  |  | Zulässige Zentrifuge:  Permissible centrifuge: | | | | **Z 1** | | | | | | | | | | | | |
|  |  | Empfohlenen Trocknungsdauer:  Recommended drying time: | | | | **5 – 8 min** | | | | | | | | | | | | |
|  |  | **Trocknungsdauer:**  Drying time: | | | | **Zentrifuge**  Centrifuge | | | min | | | | | |  | | |  |
|  |  | **Bauteile ≥ 12 mm Ø im Ofen**  Parts ≥12 mm Ø in the oven | | | |  | | | | | | | | | | | | |
|  |  | Zulässiger Ofen:  Permitted oven: | | | | **O 3, O5** | | | | | | | | | | | | |
|  |  | Empfohlene Trocknungsdauer:  Recommended drying time: | | | | **≥ 20 min** | | | | | | | | | | | | |
|  |  | Zulässige Temperatur:  Permissible temperature: | | | | **50 ±5 °C** | | | | | | | | | | | | |
|  |  | **Timer Nr. dokumentieren:**  Document timer no: | | | |  | | | | | | | | | | |  | |
|  |  | **Uhrzeit Ende AG:**  End of workstep: | | | |  | | | | | | | | | | | Uhrzeit | |
|  |  |  | | |  | | | | | | | | | | | | | |
| **[P]** | | **Werkerselbstkontrolle** Worker self check | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  | |  | | | | | | | | | | | | | | | | | |
| 120 | | Externe Anweisung: **prEN6118**  External procedure: | | | | Interne Anweisung: **VD-A21**  Internal procedure: | | | | | | | | | | | | | |
|  | | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | |  | | | | | |  | | | | | Uhrzeit | | |
|  | | Prüfgegenstand:  Test specimen: | | | | **10 Bauteile**  10 Part | | | | | | | | | | | | | |
|  | | Bauteile müssen eine gleichmäßige Beschichtung ohne Fehlstellen aufweisen.  Parts must have uniform appearance without any flaws. | | | | | | | | | | | | | | | | | |
|  | | Farbe:  Color: | | | | **Hellgelb bis Goldgelb**  Light yellow to golden yellow | | | | | | | | | | |  | | |
|  | | **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | |  | | | |  | | | | | | |  | | |
|  | | **Beurteilung der Bauteile:**  Part evaluation: | | | | **i.O**  passed | X | | | **n.i.O**  failed | | | X | | | |  | | |
|  | | **Transportbehälternummer dokumentieren:**  Document the transport container ID: | | | |  | | | |  | | | | | | |  | | |
|  | | **Uhrzeit Ende AG:**  End of workstep: | | | |  | | | |  | | | | | | | Uhrzeit | | |
|  | |  |  | | | | | | | | | | | | | | | | |
| **[Q]** | | **Endkontrolle Sichtprüfung/ EMPB erstellen** Final visual Inspection / Write FAIR | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  | |  | | | | | | | | | | | | | | | | | |
| 125 | | Externe Anweisung: **prEN6118 , DIN EN 9102**  External procedure: | | | | Interne Anweisung: **VD-A109, VD-A443**  Internal procedure: | | | | | | | | | | | | | |
|  | | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | |  | | | | |  | | | | | Uhrzeit | | | |
|  | | Prüfgegenstand:  Test specimen: | | | | **50 Bauteile**  50 Parts | | | | | | | | | | | | | |
|  | | Bauteile müssen eine gleichmäßige Beschichtung ohne Fehlstellen aufweisen.  Parts must have uniform appearance without any flaws. | | | | | | | | | | | | | | | | | |
|  | | Keine Fehler wie: Kratzer, Narben, Blasen, Streifen, Vertiefungen, Fremdkörper, Partikelanhäufungen, Inhomogenitäten oder sonstige Oberflächenfehler  No failures like: Scratches, scars, blisters, stripes, indentations, foreign bodies, particle clusters, inhomogeneities or other surface defects | | | | | | | | | | | | | | | | | |
|  | | **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | |  | | | | |  | | | | |  | | | |
|  | | **Beurteilung der Bauteile:**  Part evaluation: | | | | **i.O**  passed | | X | | | **n.i.O**  failed | | | X | |  | | | |
|  | | **EMPB notwendig?**  FAIR necessary? | | | | **Ja**  Yes | | X | | | **Nein**  No | | | X | |  | | | |
|  | | **EMPB Dokumentation erstellt?**  FAIR documentation created? | | | | **Ja**  Yes | | X | | | **Nein**  No | | | X | |  | | | |
|  | |  | |  | | | | | | | | | | | | | | | |

| **[Q]** | | **Endkontrolle Durchmesser** Final diameter control | | | | | | | | | | | | | | | | | | | | | | Datum  Date | | MA-Stempel  Employee stamp |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | | | | | | | | | | | | | | | | | | | | | |
| 130 | | Externe Anweisung: **prEN6118**  External procedure: | | | | | | Interne Anweisung: **VD-A410**  Internal procedure: | | | | | | | | | | | | | | | |
|  | | Prüfmethode:  Test method: | | | | | | **Mikrometerschraube**  Micrometer screw | | | | | | | | | | | | | | | |
|  | | Prüfgegenstand:  Test specimen: | | | | | | **50 Bauteile**  50 Parts | | | | | | | | | | | | | | | |
|  | | Temperatur der Bauteile:  Temperature of parts: | | | | | | **RT** | | | | | | | | | | | | | | | |
|  | | Durchmesserprüfung der Bauteile (Sinic)  Diameter inspection of parts and test parts (Sinic) | | | | | |  | | | | | | | | | | | | | | | |
|  | | **PM Nummer Prüfmittel:**  PM number of Test equipment: | | | | | |  | | | | | |  | | | | | | |  | | |
|  | | **Anzahl geprüfter Bauteile:**  Amount of parts checked: | | | | | |  | | | | | |  | | | | | | |  | | |
|  | | **Beurteilung der Bauteile nach Tab.1:**  Part evaluation according to Table1: | | | | | | **i.O**  passed | X | | | | | **n.i.O**  failed | | | X | | | |  | | |
|  | |  | | | | |  | | | | | | | | | | | | | | | | |
| **[Q]** | | **Endkontrolle Schichtdicke** Final control thicknes | | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | | | | | | |
| 135 | | Externe Anweisung: **--**  External procedure: | | | | | | Interne Anweisung: **VD-A410, ND-P63**  Internal procedure: | | | | | | | | | | | | | | | |
|  | | Überprüfung der Schichtdickenergebnisse aus dem **ND-P63\_Prüfbericht fastener und Abstempeln.**  Checking the coating thickness results to the customer’s template. “Test report fastener “and stamp. | | | | | | | | | | | | | | | | | | | | | |
|  | | **Beurteilung der Schichtdicke:**  Thicknes evaluation: | | | | | | **i.O**  passed | | X | | | | | **n.i.O**  failed | | X | | |  | | |  |
|  | |  | | | |  | | | | | | | | | | | | | | | | | |
| **[Q]** | | **Endkontrolle Haftungstest** Final adhesion Inspection | | | | | | | | | | | | | | | | | | | | | |
|  | |  | | | | | | | | | | | | | | | | | | | | | |
| 140 | | Externe Anweisung: **--**  External procedure: | | | | | | Interne Anweisung: **VD-A365, Waiver20**  Internal procedure: | | | | | | | | | | | | | | | |
|  | | Prüfgegenstand:  Test specimen: | | | | | | **5 Bauteile**  5 Part s | | | | | | | | | | | | | | | |
|  | | Prüfmethode:  Test method: | | | | | | **Ritztest**  Scratchtest | | | | | | | | | | | | | | | |
|  | | Betrachtung:  Examination: | | | | | | **mit 4x Vergrößerung**  with 4x magnification | | | | | | | | | | | | | | | |
|  | | Durchführung: Beschichtung mit einer scharfen Klinge bis zum Grundmaterial einritzen.  Es ist nur ein Schnitt pro Testteil vorzunehmen.  Procedure: Scratch coating with sharp edge. Cut must penetrate the coating down to substrate. Only one cut per test specimen. | | | | | | | | | | | | | | | | | | | | | |
|  | | Eine Trennung der Schicht vom Grundmaterial, Abschälung oder Blasenbildung ist nicht zulässig.  Separation of the layer from the base material, peeling or blistering is not permitted. | | | | | | | | | | | | | | | | | | | | | |
|  | | **Beurteilung der Bauteile:**  Part evaluation: | | | | | | **i.O**  passed | X | | | **n.i.O**  failed | | | | X | | |  | | | | |
|  | | **Uhrzeit Ende AG:**  End of workstep: | | | | | |  |  | | |  | | | |  | | | Uhrzeit | | | | |
|  | |  | |  | | | | | | | | | | | | | | | | | | | |
|  | **[Q]** | **Endkontrolle** Final inspection Shop paper control | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | |
|  | 145 | Externe Anweisung: **--**  External procedure: | | | | | | Interne Anweisung: **--**  Internal procedure: | | | | | | | | | | | | | | | | |
|  |  | **Uhrzeit Beginn AG:**  Beginning of workstep: | | | | | |  | | |  | | | | | | | | | Uhrzeit | | | | |
|  |  | Der AP ist auf vollständig abgearbeitete Arbeitsgänge zu überprüfen.  Check shop paper for complete and correct flow down. | | | | | | | | | | | | | | | | | | | | | | |
|  |  | Wurden die Kundendokumente ausgefüllt,  kopiert und beigelegt?  Have the customer documents been filled-out, copied and enclosed? | | | | | | | | | **Ja**  Yes | | | | | X | | **Nein**  No | | | | X | | |
|  |  | Gibt es Anmerkungen, welche an den Bereich PPS weitergeleitet werden müssen?  Are there any remarks that need to be forwarded to the Production Planing department? | | | | | | | | | **Ja**  Yes | | | | | X | | **Nein**  No | | | | X | | |
|  |  | Hinweis: Auffälligkeiten und nicht korrekt ausgefüllte Arbeitsschritte bei  der Endkontrolle vom AP sind immer den Bereichsverantwortlichen mitzuteilen.  Note: Any anomalies and not correct flowed down worksteps must be reported to superior | | | | | | | | | | | | | | | | | | | | | | |
|  |  | **Uhrzeit Ende AG:**  End of workstep: | | | | | |  | | |  | | | | | | | | | Uhrzeit | | | | |
|  |  |  |  | | | | | | | | | | | | | | | | | | | | | |
|  | **[WA]** | **Verpacken** Packaging | | | | | | | | | | | | | | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
|  |  |  | | | | | | | | | | | | | | | | | | | | | | |
|  | 150 | Externe Anweisung:  External procedure: | | | | | | Interne Anweisung: **VD-A428**  Internal procedure: | | | | | | | | | | | | | | | | |
|  |  | **Uhrzeit Beginn AG:**  Beginning of workstep | | | | | |  | | | | |  | | | | | | Uhrzeit | | | | | |
|  |  | FU Und AP zusammenheften.  FU And AP Staple Together | | | | | | | | | | | | | | | | | | | | | | |
|  |  | Originalverpackung verwenden.  Sofern diese nicht verwendet wird bitte Grund in Kommentarfeld eintragen.  Use original Packaging. If other packaging is used describe the reason in comment section. | | | | | | | | | | | | | | | | | | | | | | |
|  |  | **Uhrzeit Ende AG:**  End of workstep: | | | | | |  | | | | |  | | | | | | Uhrzeit | | | | | |
|  |  |  | | |  | | | | | | | | | | | | | | | | | | | |

| **[WA]** | **Versandbereitschaft herstellen** Prepare for disbatching | | | | | | | | | | Datum  Date | MA-Stempel  Employee stamp |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | | |
| 155 | Externe Anweisung: **--**  External procedure: | | Interne Anweisung: **VD-P26**  Internal procedure: | | | | | | | |
|  | **Uhrzeit Beginn AG:**  Beginning of workstep: | |  | |  | | | Uhrzeit | | |
|  | Vollständigkeit der Papiere prüfen  Paperwork check | |  | | | | | | | |
|  | Ordnungsgemäße Verpackung der Bauteile kontrollieren  Check for correct packaging | | | | | | | | | |
|  | **Transportorganisation durch:**  Transport organization by: | | **AC**  AC | X | | **Kunde**  Customer | X | |  |  |
|  | **Uhrzeit Ende AG:**  End of workstep: | |  | | |  | | | Uhrzeit | |
|  |  |  | | | | | | | | |

| **Bemerkungsfeld** Comments section | | |
| --- | --- | --- |
| AG Nr.  Workstep number | Bemerkung  Comment | MA-Stempel  Employee stamp |
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**Revisionsliste der mitgeltenden Dokumente**

List of revisions of applicable documents

| **Dokumenten-Nr.:**  Document Number | **Revision**  Revision | **Internes/ externes Dokument**  Internal/ external Document |
| --- | --- | --- |
| DIN EN 9102 | 2016-12 | External |
| MIL-DTL-5541 | Rev. F | External |
| prEN6118 | 2024-07 | External |
| NASM-1312-12 | Rev. 5 | External |
| VD-A8 | Rev. 3 | Internal |
| VD-A20 | Rev. 4 | Internal |
| VD-A21 | Rev. 3 | Internal |
| VD-A42 | Rev. 1 | Internal |
| VD-A44 | Rev. 2 | Internal |
| VD-A109 | Rev. 6 | Internal |
| VD-A365 | Rev. 5 | Internal |
| VD-A410 | Rev. 0 | Internal |
| VD-A412 | Rev. 15 | Internal |
| VD-A423 | Rev. 6 | Internal |
| VD-A424 | Rev. 3 | Internal |
| VD-A428 | Rev. 3 | Internal |
| VD-A443 | Rev. 3 | Internal |
| ND-P83 | Rev. 4 | Internal |
| ND-P63 | Rev. 5 | Internal |
| VD-P26 | Rev. 1 | Internal |
| VD-P47 | Rev. 5 | Internal |
| VD-P48 | Rev. 2 | Internal |

