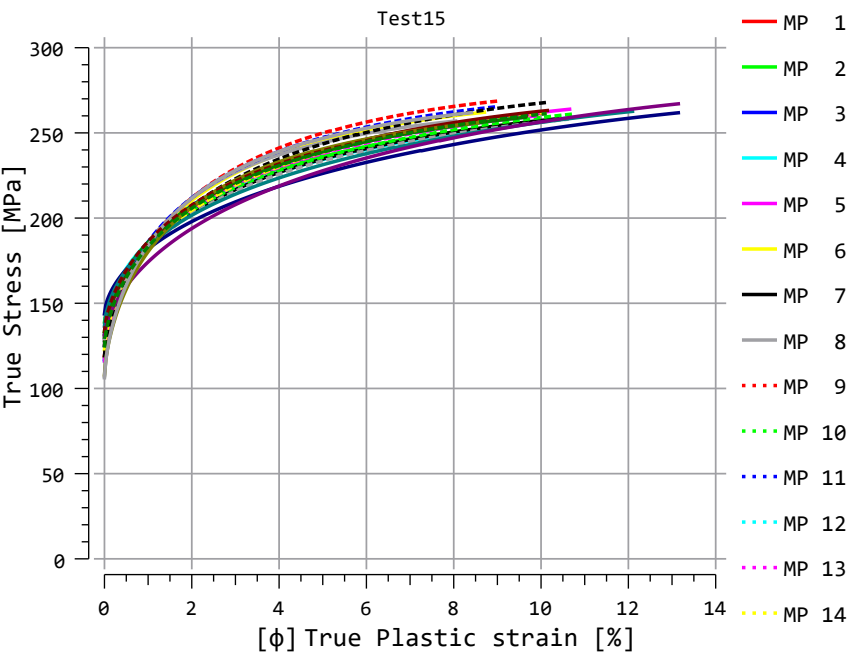


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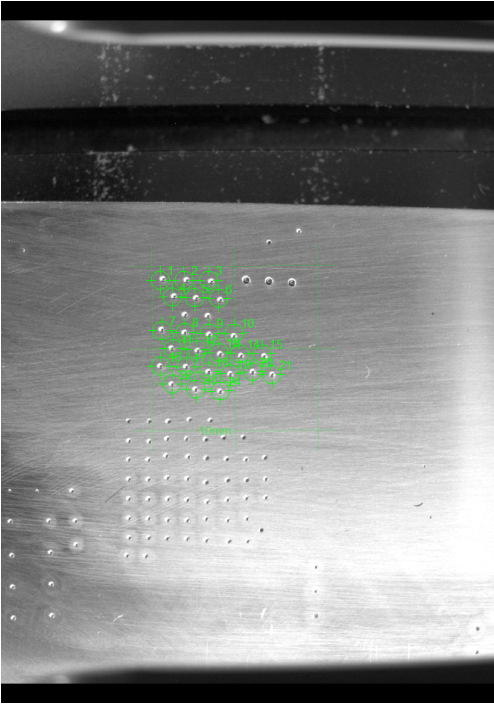
Test Data:

|                       |                 |                     |  |
|-----------------------|-----------------|---------------------|--|
| Date:                 | 10.09.2024      | Tested by:          |  |
| Indenter Type:        | Typ-A           | Customer:           |  |
| Material:             | Al - Unverified | Contact Person:     |  |
| Material Card:        | Standard        | Ord. Number:        |  |
| Name1:                | Test15          | Aim of Measurement: | Measurements on material provided by the customer for the determination of the YS' 0.2% - Yield stress, UTS' - Ultimate tensile stress and ductility. Caution: The ductility does not correspond to the elongation at break from the tensile test. |
| Name2:                |                 |                     |  |
| Name3:                |                 |                     |  |
| Specimen Material:    |                 |                     |  |
| Specimen Thickness:   |                 |                     |  |
| Specimen Preparation: |                 |                     |  |
| Note:                 |                 |                     |  |

Flowcurves:



Overview of the Measurement Points:



Characteristic values:

| MP | Nam. 1 | Nam. 2 | Nam. 3 | Material        | Load | YS' 0.2% [MPa] | YS' 1.0% [MPa] | UTS' [MPa] | D [%] | Min [µm] | Hardness [H <sub>T</sub> ] | Date        | Time     | S    |
|----|--------|--------|--------|-----------------|------|----------------|----------------|------------|-------|----------|----------------------------|-------------|----------|------|
| 1  | Test15 |        |        | Al - Unverified | 30kg | 149            | 181            | 237        | 10.6  | -155.2   | 440.4                      | 10-Sep-2024 | 12:17:06 | 13.0 |
| 2  | Test15 |        |        | Al - Unverified | 30kg | 153            | 183            | 232        | 10.0  | -156.7   | 438.9                      | 10-Sep-2024 | 12:18:08 | 13.0 |
| 3  | Test15 |        |        | Al - Unverified | 30kg | 149            | 183            | 237        | 10.5  | -156.5   | 439.1                      | 10-Sep-2024 | 12:19:03 | 13.0 |
| 4  | Test15 |        |        | Al - Unverified | 30kg | 155            | 184            | 233        | 11.4  | -155.4   | 440.2                      | 11-Sep-2024 | 10:27:38 | 12.0 |
| 5  | Test15 |        |        | Al - Unverified | 30kg | 151            | 182            | 237        | 11.2  | -155.3   | 440.3                      | 11-Sep-2024 | 10:42:10 | 12.0 |
| 6  | Test15 |        |        | Al - Unverified | 30kg | 144            | 182            | 240        | 9.1   | -156.1   | 439.4                      | 11-Sep-2024 | 10:43:24 | 13.0 |
| 7  | Test15 |        |        | Al - Unverified | 30kg | 150            | 180            | 233        | 10.9  | -156.7   | 438.8                      | 11-Sep-2024 | 13:20:39 | 12.0 |
| 8  | Test15 |        |        | Al - Unverified | 30kg | 140            | 183            | 237        | 8.4   | -155.9   | 439.7                      | 11-Sep-2024 | 14:20:10 | 13.0 |

|      |        |                    |      |     |     |     |      |        |       |             |          |      |
|------|--------|--------------------|------|-----|-----|-----|------|--------|-------|-------------|----------|------|
| 9    | Test15 | Al -<br>Unverified | 30kg | 143 | 182 | 246 | 9.4  | -154.1 | 441.5 | 11-Sep-2024 | 14:21:13 | 12.0 |
| 10   | Test15 | Al -<br>Unverified | 30kg | 156 | 183 | 235 | 11.3 | -155.7 | 439.9 | 11-Sep-2024 | 14:22:13 | 12.0 |
| 11   | Test15 | Al -<br>Unverified | 30kg | 145 | 184 | 243 | 9.5  | -153.3 | 442.4 | 12-Sep-2024 | 13:31:06 | 11.0 |
| 12   | Test15 | Al -<br>Unverified | 30kg | 144 | 181 | 236 | 10.1 | -156.5 | 439.0 | 12-Sep-2024 | 16:04:22 | 13.0 |
| 13   | Test15 | Al -<br>Unverified | 30kg | 143 | 179 | 235 | 10.5 | -156.4 | 439.2 | 12-Sep-2024 | 16:25:24 | 12.0 |
| 14   | Test15 | Al -<br>Unverified | 30kg | 146 | 179 | 237 | 10.8 | -156.1 | 439.5 | 12-Sep-2024 | 16:27:32 | 12.0 |
| 15   | Test15 | Al -<br>Unverified | 30kg | 144 | 180 | 242 | 10.6 | -155.6 | 440.0 | 12-Sep-2024 | 16:28:29 | 12.0 |
| 16   | Test15 | Al -<br>Unverified | 30kg | 151 | 180 | 232 | 11.2 | -158.2 | 437.3 | 18-Sep-2024 | 09:13:51 | 12.0 |
| 17   | Test15 | Al -<br>Unverified | 30kg | 152 | 182 | 238 | 10.7 | -155.6 | 440.0 | 18-Sep-2024 | 09:14:16 | 12.0 |
| 18   | Test15 | Al -<br>Unverified | 30kg | 153 | 184 | 235 | 10.1 | -155.8 | 439.8 | 18-Sep-2024 | 10:12:52 | 12.0 |
| 19   | Test15 | Al -<br>Unverified | 30kg | 159 | 180 | 230 | 14.0 | -157.6 | 437.9 | 18-Sep-2024 | 10:13:47 | 13.0 |
| 20   | Test15 | Al -<br>Unverified | 30kg | 156 | 182 | 233 | 12.9 | -155.7 | 439.9 | 18-Sep-2024 | 10:14:43 | 12.0 |
| 21   | Test15 | Al -<br>Unverified | 30kg | 147 | 172 | 234 | 14.0 | -156.5 | 439.1 | 18-Sep-2024 | 10:16:44 | 12.0 |
| 22   | Test15 | Al -<br>Unverified | 30kg | 137 | 178 | 235 | 8.9  | -157.6 | 437.9 | 18-Sep-2024 | 10:17:42 | 12.0 |
| 23   | Test15 | Al -<br>Unverified | 30kg | 138 | 182 | 241 | 8.8  | -155.4 | 440.2 | 18-Sep-2024 | 10:18:43 | 11.0 |
| 24   | Test15 | Al -<br>Unverified | 30kg | 154 | 184 | 236 | 10.2 | -155.8 | 439.8 | 18-Sep-2024 | 10:19:35 | 12.0 |
| MW 1 | Test15 | Al -<br>Unverified | 30kg | 148 | 181 | 236 | 10.6 | -156.0 | 439.6 | 10-Sep-2024 | 12:17:06 | 12.2 |

Mittelwerte: MW 1 out MP: 1;2;3;4;5;6;7;8;9;10;11;12;13;14;15;16;17;18;19;20;21;22;23;24 |

Legend: Nam. - Name | MP - Measuring Point | YS' 0.2% -Yield Stress | YS' 1.0% -Yield Stress at 1.0% strain | UTS' -Ultimate Tensile Stress | D - Ductility | Min - Minimum | Hardness [H<sub>T</sub>] (Load Level) = 600 - Min[μm] | S - Skewness

Note:Our test equipment uses mathematical approximations to determine the mechanical properties. Transferability to the tensile test is the responsibility of the customer.