

H2Tank2Go[®]

Feststoff-Wasserstoff-Tank, angetrieben von RT-MH Hydrolium[®]

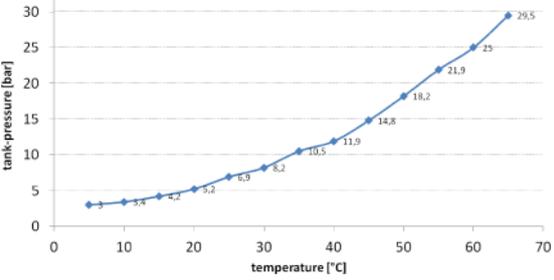
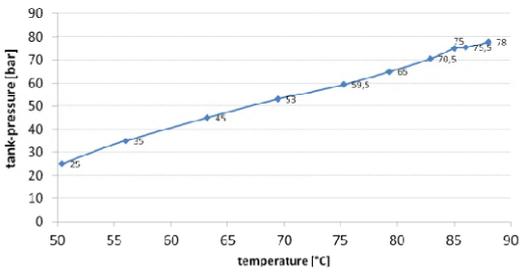
Kernstück von Power to Gas to Fuel - P2G2F[®]

Betankung zu Hause oder Wechsel im Baumarkt / Tank-Tauschautomat

Nanostrukturen für Null-Emission Zukunft Transportation & Energie

| H2Tank2Go [®] | auf einen Blick |
|---|---|
|  | <ul style="list-style-type: none"> • großer Energiespeicher auf kleinem Volumen • sicherer H₂-Speicher durch Feststoffabsorber • virtuell druckloss, MOT-Genehmigungsphase • sekundenschneller Tankwechsel durch click'n'go[®] • flexibler Multi-Tank-Betrieb, genial einfach • für mobile & stationäre Anwendung, existierende Infrastruktur • nachhaltig, sauber und kosteneffizient |

| Technische Daten | | Handhabung & Anwendung |
|---|--|--|
| H ₂ -capacity (50 g garantiert, Ziel 100 g) | 50 g, 556 NL, 1,67 kWh |  |
| Betriebstemperatur | 0 - 80°C | |
| REC Beladung max. Druck | 15 bar 30 bar |  |
| Betriebsdruck | < 10 bar | |
| Abmessungen | Ø70 x 330 mm | |
| Gesamtgewicht -volumen | 4,2 kg 0,95 l | |
| Schnellwechselventil | Zoz-H2G1 | |
| Toleranz Berstscheibe | 84 - 96 bar (at 20°C) 78 - 90 bar (at 85°C) | |
| Werkstoff Ventil | brass | |
| Werkstoff Behälter | VA-Stahl | |
| Werkstoff Metallhydrid | Hydrolium [®] | |
| Speicherkapazität (Hydrolium [®]) | ca. 1,8 wt% | |
| REC H ₂ Qualität für Beladung | 3.0 (oder besser) | |
| Lebensdauer (richtiges Handling angenommen) | > 20 Jahre | 2 Stk. auf Kickboard isigo [®] H2.0, 6 in ZEV Koffer oder Kleinflugzeug |

| Druckkurve ohne "on-top Druck" | Druckkurve mit „on-top Druck“ von 15 bar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------------------|---|---|----|-----|----|-----|----|-----|----|-----|----|-----|----|------|----|------|----|------|----|------|----|------|----|----|----|------|---|------------------|---------------------|----|----|----|----|----|----|----|----|----|------|----|----|----|------|----|------|----|----|
|  <table border="1"> <caption>Data for 'Druckkurve ohne "on-top Druck"'</caption> <thead> <tr> <th>temperature [°C]</th> <th>tank-pressure [bar]</th> </tr> </thead> <tbody> <tr><td>5</td><td>3</td></tr> <tr><td>10</td><td>3.4</td></tr> <tr><td>15</td><td>4.2</td></tr> <tr><td>20</td><td>5.2</td></tr> <tr><td>25</td><td>5.9</td></tr> <tr><td>30</td><td>8.2</td></tr> <tr><td>35</td><td>10.5</td></tr> <tr><td>40</td><td>11.9</td></tr> <tr><td>45</td><td>14.8</td></tr> <tr><td>50</td><td>18.2</td></tr> <tr><td>55</td><td>21.9</td></tr> <tr><td>60</td><td>25</td></tr> <tr><td>65</td><td>29.5</td></tr> </tbody> </table> | temperature [°C] | tank-pressure [bar] | 5 | 3 | 10 | 3.4 | 15 | 4.2 | 20 | 5.2 | 25 | 5.9 | 30 | 8.2 | 35 | 10.5 | 40 | 11.9 | 45 | 14.8 | 50 | 18.2 | 55 | 21.9 | 60 | 25 | 65 | 29.5 |  <table border="1"> <caption>Data for 'Druckkurve mit „on-top Druck“ von 15 bar'</caption> <thead> <tr> <th>temperature [°C]</th> <th>tank-pressure [bar]</th> </tr> </thead> <tbody> <tr><td>50</td><td>25</td></tr> <tr><td>55</td><td>35</td></tr> <tr><td>60</td><td>45</td></tr> <tr><td>65</td><td>53</td></tr> <tr><td>70</td><td>59.5</td></tr> <tr><td>75</td><td>65</td></tr> <tr><td>80</td><td>70.5</td></tr> <tr><td>85</td><td>75.5</td></tr> <tr><td>90</td><td>78</td></tr> </tbody> </table> | temperature [°C] | tank-pressure [bar] | 50 | 25 | 55 | 35 | 60 | 45 | 65 | 53 | 70 | 59.5 | 75 | 65 | 80 | 70.5 | 85 | 75.5 | 90 | 78 |
| temperature [°C] | tank-pressure [bar] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 3.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 4.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 5.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 25 | 5.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 30 | 8.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 35 | 10.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 40 | 11.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45 | 14.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 18.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | 21.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 65 | 29.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| temperature [°C] | tank-pressure [bar] | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 50 | 25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | 35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 60 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 65 | 53 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 70 | 59.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 75 | 65 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 80 | 70.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 85 | 75.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 90 | 78 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Beladung mit Wasserstoff, Wärmeabfuhr, on-top-Druckablas |
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| Beladung empfohlen bei 15 bar Wasserstoffdruck. Für Wärmeabfuhr währenddessen ist ein Eintauchen des H2Tank2Go [®] im Wasserbad ausreichend. Für eine bessere Handhabung der Schnellwechselventile (click'n'go) ist es empfohlen den „on-top“-Überdruck von 15 bar direkt nach der Beladung abzulassen. Um die H ₂ -Desorption auch bei höherem Verbrauch konstant zu halten, sollte die Tankhülstentemperatur über 50°C gehalten werden (z. B. heißes Wasserbad oder Abwärme von der Brennstoffzelle verwenden usw.). |