LEISTER
PLASTIC WELDING

# Useful welding parameter for HD-PE, LD-PE and PVC Membranes

Please note: The final welding parameter will vary depending on the ambient temperature and the material quality.
Test welds need to be carried out. All Pressure values are cold settings before heating.
These tables are to be used as a guide only. Leister takes no responsibility for poor quality welding!

| Combi wedge | | HD-PE (mm) | | | | | | | LD-PE (mm) | | | | | PVC (mm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0.3 | 0.5 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 | 0.3 | 0.5 | 1.0 | 1.5 | 2.0 | 0.8 | 1.0 | 1.5 | 2.0 | 2.5 | 3.0 |
| **TWINNY T7** | Short | 400° C<br>7.0 m/min.<br>70% Air vol.<br>400 N | 500° C<br>6.0 m/min.<br>80% Air vol.<br>600 N | 560° C<br>3.0 m/min.<br>100% Air vol.<br>750 N | 560° C<br>2.2 m/min.<br>100% Air vol.<br>800 N | | | | 400° C<br>7.0 m/min.<br>70% Air vol.<br>400 N | 500° C<br>6.0 m/min.<br>80% Air vol.<br>500 N | 560° C<br>3.0 m/min.<br>100% Air vol.<br>600 N | 560° C<br>2.5 m/min.<br>100% Air vol.<br>700 N | 560° C<br>2.0 m/min.<br>100% Air vol.<br>800 N | 500° C<br>5.5 m/min.<br>80% Air vol.<br>300 N | 560° C<br>4.0 m/min.<br>100% Air vol.<br>400 N | 560° C<br>3.0 m/min.<br>100% Air vol.<br>500 N | 560° C<br>2.0 m/min.<br>100% Air vol.<br>600 N | 560° C<br>1.5 m/min.<br>100% Air vol.<br>650 N | 560° C<br>1.2 m/min.<br>100% Air vol.<br>750 N |
| | Long | | | 560° C<br>4.0 m/min.<br>100% Air vol.<br>750 N | 560° C<br>3.0 m/min.<br>100% Air vol.<br>800 N | 560° C<br>2.5 m/min.<br>100% Air vol.<br>850 N | | | | | 560° C<br>4.5 m/min.<br>100% Air vol.<br>600 N | 560° C<br>3.5 m/min.<br>100% Air vol.<br>700 N | 560° C<br>3.0 m/min.<br>100% Air vol.<br>800 N | | 560° C<br>5.0 m/min.<br>100% Air vol.<br>400 N | 560° C<br>4.0 m/min.<br>100% Air vol.<br>500 N | 560° C<br>3.0 m/min.<br>100% Air vol.<br>600 N | 560° C<br>2.0 m/min.<br>100% Air vol.<br>650 N | 560° C<br>1.5 m/min.<br>100% Air vol.<br>750 N |
| **TWINNY T5** | Short | 400° C<br>5.5 m/min.<br>70% Air vol. | 500° C<br>4.5 m/min.<br>80% Air vol. | 560° C<br>2.5m/min.<br>100% Air vol. | 560° C<br>1.5 m/min.<br>100% Air vol. | | | | 400° C<br>5.5 m/min.<br>70% Air vol. | 500° C<br>4.5 m/min.<br>80% Air vol. | 560° C<br>2.5 m/min.<br>100% Air vol. | 560° C<br>2.0 m/min.<br>100% Air vol. | 560° C<br>1.5 m/min.<br>100% Air vol. | 500° C<br>4.5 m/min.<br>80% Air vol. | 560° C<br>3.5 m/min.<br>100% Air vol. | 560° C<br>2.5 m/min.<br>100% Air vol. | 560° C<br>1.8 m/min.<br>100% Air vol. | 560° C<br>1.2 m/min.<br>100% Air vol. | 560° C<br>0.8 m/min.<br>100% Air vol. |
| | Long | | | 560° C<br>3.0 m/min.<br>100% Air vol. | 560° C<br>2.0 m/min.<br>100% Air vol. | 560° C<br>1.5 m/min.<br>100% Air vol. | | | | | 560° C<br>3.5 m/min.<br>100% Air vol. | 560° C<br>2.5 m/min.<br>100% Air vol. | 560° C<br>2.0 m/min.<br>100% Air vol. | | 560° C<br>4.0 m/min.<br>100% Air vol. | 560° C<br>3.0 m/min.<br>100% Air vol. | 560° C<br>2.0 m/min.<br>100% Air vol. | 560° C<br>1.5 m/min.<br>100% Air vol. | 560° C<br>1.0 m/min.<br>100% Air vol. |

| Wedge | | | | | | | | | | | | | | | Steel wedge required | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **COMET 700** | 90 mm | | | 400° C<br>5.0 m/min.<br>700 N | 400° C<br>4.5 m/min.<br>900 N | 400° C<br>4.0 m/min.<br>900 N | 400° C<br>3.5 m/min.<br>1000 N | | | | 350° C<br>5.5 m/min.<br>700 N | 380° C<br>5.0 m/min.<br>750 N | 380° C<br>4.5 m/min.<br>800 N | | 400° C<br>4.0 m/min.<br>550 N | 400° C<br>3.2 m/min.<br>600 N | 400° C<br>3.0 m/min.<br>650 N | 400° C<br>2.7 m/min.<br>700 N | 400° C<br>2.5 m/min.<br>750 N |
| | 60 mm | | 400° C<br>5.0 m/min.<br>600 N | 400° C<br>4.5 m/min.<br>700 N | 400° C<br>3.5 m/min.<br>800 N | 400° C<br>3.0 m/min.<br>900 N | | | | 300° C<br>5.0 m/min.<br>650 N | 350° C<br>4.5 m/min.<br>700 N | 380° C<br>4.0 m/min.<br>750 N | 380° C<br>3.5 m/min.<br>800 N | | 400° C<br>3.0 m/min.<br>550 N | 400° C<br>2.7 m/min.<br>600 N | 400° C<br>2.5 m/min.<br>650 N | 400° C<br>2.3 m/min.<br>700 N | 400° C<br>2.0 m/min.<br>750 N |
| **COMET 500** | 60 mm | | 400° C<br>4.0 m/min.<br>max. pressure | 400° C<br>3.5 m/min.<br>max. pressure | 400° C<br>3.0 m/min.<br>max. pressure | 400° C<br>2.5 m/min.<br>max. pressure | | | | 300° C<br>4.5 m/min.<br>¾ pressure | 350° C<br>4.0 m/min.<br>¾ pressure | 380° C<br>3.5 m/min.<br>¾ pressure | 380° C<br>3.0 m/min.<br>¾ pressure | | 400° C<br>3.0 m/min.<br>½ pressure | 400° C<br>2.7 m/min.<br>½ pressure | 400° C<br>2.5 m/min.<br>½ pressure | 400° C<br>2.3 m/min.<br>½ pressure | 400° C<br>2.0 m/min.<br>½ pressure |
| **GEOSTAR G7** | 230 V/2800 W | | | 380° C<br>7.0 m/min.<br>900 N | 400° C<br>6.0 m/min.<br>1050 N | 400° C<br>5.0 m/min.<br>1200 N | 400° C<br>3.5 m/min.<br>1300 N | 400° C<br>2.5 m/min.<br>1400 N | | | 380° C<br>7.0 m/min.<br>900 N | 380° C<br>6.0 m/min.<br>1050 N | 380° C<br>5.0 m/min.<br>1200 N | | | | | | |
| **GEOSTAR G5** | 230 V/2800 W | | | 380° C<br>3.6 m/min.<br>900 N | 400° C<br>3.0 m/min.<br>1050 N | 400° C<br>2.5 m/min.<br>1200 N | 400° C<br>1.8 m/min.<br>1300 N | 400° C<br>1.3 m/min.<br>1400 N | | | 380° C<br>3.5 m/min.<br>900 N | 380° C<br>3.0 m/min.<br>1050 N | 380° C<br>2.5 m/min.<br>1200 N | | 400° C<br>3.5 m/min.<br>600 N | 400° C<br>3.2 m/min.<br>700 N | 400° C<br>3.0 m/min.<br>750 N | 400° C<br>2.7 m/min.<br>800 N | 400° C<br>2.5 m/min.<br>850 N |
| **GEOSTAR G5** | 120 V/1800 W | | | 380° C<br>3.5 m/min.<br>900 N | 400° C<br>2.9 m/min.<br>1050 N | 400° C<br>2.4 m/min.<br>1200 N | 400° C<br>1.6 m/min.<br>1300 N | 400° C<br>1.2 m/min.<br>1400 N | | | 380° C<br>3.0 m/min.<br>900 N | 380° C<br>2.5 m/min.<br>1050 N | 380° C<br>2.0 m/min.<br>1200 N | | 400° C<br>3.5 m/min.<br>600 N | 400° C<br>3.2 m/min.<br>700 N | 400° C<br>3.0 m/min.<br>750 N | 400° C<br>2.7 m/min.<br>800 N | 400° C<br>2.5 m/min.<br>850 N |

Leister PW GEO Welding Parameters for Welders V-2022_Metric