

Lasting Connections

# BÖHLER WELDING FILLER MATERIAL – SELECTION



# BÖHLER SELECTION – AWS COVERED ELECTRODES, TIG RODS, SOLID WIRES AND CORED WIRES

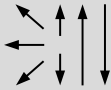
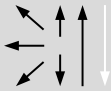
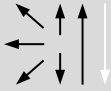
Under the product name BÖHLER AWS we offer a selection of high quality, easy to deal with and highly competitive welding consumables. They come in our blue Böhler packaging, known for quality products inside, easy to select the right type from the outside.

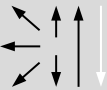
For the MIG wires you can select between Böhler BS300 steel basket spool and S300 Plastic spool, depending on your customers' needs. All welding consumables of this range are

approved by several certified bodies as TÜV and DB. They all carry our CE mark.

For more demanding applications requiring specific approvals or drum solutions you always have the choice within the world wide unique product portfolio of top-products is available in addition, coming with the outstanding support of our application and material specialists.

## STICK ELEKTRODES

| Product Name<br>EN ISO<br>AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Ø / L<br>[mm]                                                              | Articel-<br>No.                                    | Wst.-<br>Nr. | Weight<br>[kg]                         | Welding<br>Positions                                                                | Approvals                                                                                       | Customer Benefits/<br>Advantages                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------|--------------|----------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS E6013</b><br><br>EN ISO: E 42 0 RC 1 1<br>AWS: E6013                                                                                                                                                                                                                                                                                                                                                                                                                          | 2.0 x 300<br>2.5 x 300<br>2.5 x 350<br>3.2 x 350<br>4.0 x 350<br>5.0 x 450 | 81517<br>82210<br>81518<br>81520<br>81523<br>81524 |              | 4.1<br>4.0<br>5.0<br>5.0<br>5.0<br>6.9 |    | TÜV (12680),<br>ABS, DNV, CE                                                                    | » Excellent gap bridging and<br>arc stiking                                                                                                                                                                         |
| Rutile-cellulosic electrode with good weld ability in all positions including vertical down. Excellent gap-bridging and arc-striking ability. For tack welding and load fit ups. General purpose for industry and trade, assembly and shop welding.                                                                                                                                                                                                                                         |                                                                            |                                                    |              |                                        |                                                                                     |                                                                                                 |                                                                                                                                                                                                                     |
| <b>BÖHLER AWS E7018-1</b><br><br>EN ISO: E 42 5 B 4 2 H5<br>AWS: E7018-1H4                                                                                                                                                                                                                                                                                                                                                                                                                  | 2.0 x 250<br>2.5 x 300<br>2.5 x 350<br>3.2 x 350<br>4.0 x 450<br>5.0 x 450 | 81499<br>82205<br>81500<br>81501<br>81502<br>81503 |              | 2.8<br>3.4<br>4.1<br>4.2<br>5.9<br>5.6 |  | TÜV (12451), ABS,<br>BV (Ø2.0-5.0 mm),<br>DNV,<br>GL (Ø2.0-5.0 mm),<br>CWB (Ø2.0-6.0 mm),<br>CE | » For high carbon steels, buffer<br>layers and positional welding<br>» High recovery of 110 %                                                                                                                       |
| <b>BÖHLER AWS E7018-1</b><br>Dry System<br><br>EN ISO: E 42 5 B 4 2 H5<br>AWS: E7018-1H4                                                                                                                                                                                                                                                                                                                                                                                                    | 2.5 x 350<br>3.2 x 450<br>4.0 x 450<br>5.0 x 450                           | 34507<br>34606<br>34607<br>34615                   |              |                                        |  | TÜV (12451), ABS,<br>BV (Ø2.0-5.0 mm),<br>DNV,<br>GL (Ø2.0-5.0 mm),<br>CWB (Ø2.0-6.0 mm),<br>CE | » Low hydrogen content of weld<br>metal guaranteed – necessary<br>to avoid hydrogen induced<br>cracking<br>» No cost for klimatised storage<br>and handling or re-drying<br>» Simple distribution to the<br>welders |
| Basic coated electrode engineered for high-quality welds. Excellent strength and toughness properties. Also suitable for welding steels with low purity and high carbon content. Metal recovery > 110 %. Good weldability in out-of-position work except for vertical-down. Suitable for welding in steel construction, boiler and container fabrication, vehicle construction, shipbuilding, and machine construction as well as for buffer layers when building up on high carbon steels. |                                                                            |                                                    |              |                                        |                                                                                     |                                                                                                 |                                                                                                                                                                                                                     |
| <b>BÖHLER AWS E308L-17</b><br><br>EN ISO: E 19 9 L R 3 2<br>AWS: E308L-17                                                                                                                                                                                                                                                                                                                                                                                                                   | 2.5 x 300<br>3.2 x 350<br>4.0 x 350                                        | 75299<br>75300<br>75301                            |              | 3.9<br>4.4<br>4.6                      |  | TÜV (10647),<br>GL (4306),<br>ABS, CE                                                           | » For welding of stainless steel<br>1.4306/304L or 304LN.<br>» Max. service temperature 350 °C<br>» Good weldability in all<br>positions, self releasing slag                                                       |
| Low carbon, core wire alloyed austenitic electrode with rutile coating used for 304L/304LN steel grades as well as higher carbon grades or ferritic 13 % chromium steels. Outstanding welding characteristics, fine rippled weld-bead surface, excellent weld ability on AC. High hot cracking resistance of the weld metal. Excellent out-of-position welds, self-detaching slag with no residues, and moisture resistant coating. Resistant to intergranular corrosion up to 350 °C.      |                                                                            |                                                    |              |                                        |                                                                                     |                                                                                                 |                                                                                                                                                                                                                     |

| Product Name<br>EN ISO<br>AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Ø / L<br>[mm]                       | Articel-<br>No.         | Wst.-<br>Nr. | Weight<br>[kg]    | Welding<br>Positions                                                              | Approvals                             | Customer Benefits/<br>Advantages                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------|--------------|-------------------|-----------------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS E309L-17</b><br><br>EN ISO: E 23 12 L R 3 2<br>AWS: E309L-17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2.5 x 300<br>3.2 x 350<br>4.0 x 350 | 75305<br>75306<br>75308 | 1.4332       | 4.1<br>4.5<br>4.6 |  | ABS, CE                               | » For joining austenitic to carbon steel and bufferlayers<br>» Operating temperature from -60 °C to 300 °C<br>» AC and DC operation. Good weldability in all positions, self releasing slag |
| Rutile electrode of type E 23 12 L / 309L providing increased delta ferrite contents (FN ~17) in the weld deposit for safe and crack resistant dissimilar joint welds and surfacing. BÖHLER AWS E309L-17 is noted for its superior welding characteristics and metallurgy. It can be used on AC and DC. Other advantages include high current carrying capacity, minimum spatter formation, self-releasing slag, smooth and clean weld profile, safety against formation of porosity due to the moisture resistant coating and its packaging into hermetically sealed tins. Operating temperature from -60 °C to +300 °C and for weld claddings up to +400 °C. |                                     |                         |              |                   |                                                                                   |                                       |                                                                                                                                                                                             |
| <b>BÖHLER AWS E316L-17</b><br><br>EN ISO: E 19 12 3 L R 3 2<br>AWS: E316L-17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 2.5 x 300<br>3.2 x 350<br>4.0 x 350 | 75312<br>75313<br>75314 | 1.4430       | 4<br>4.5<br>4.7   |  | TÜV (10648),<br>GL (4571),<br>ABS, CE | » For welding of stainless steel 1.4404/316L<br>» Max. service temperature 400 °C<br>» AC and DC operation. Good weldability in all positions, self releasing slag                          |
| Rutile electrode, core wire alloyed stainless steel. Preferably used for 1.4435 / 316L steel grades. BÖHLER AWS E316L-17 is an acknowledged world leader, noted for its superior welding characteristics and metallurgy. It can be used on AC or DC. Other advantages include high current capacity, minimum spatter formation, self-releasing slag, smooth and clean weld profile, safety against formation of porosity due to moisture resistant coating and packaging into hermetically sealed tins. The fully alloyed core wire ensures the most reliable corrosion resistance. Resistant to intergranular corrosion up to +400 °C.                        |                                     |                         |              |                   |                                                                                   |                                       |                                                                                                                                                                                             |

## TIG RODS, STAINLESS (MARKING ON BOTH SIDES AND BOTH ENDS)

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                                                                                                                         | Ø / L<br>[mm]                                                                    | Articel-<br>No.                                    | Wst.-<br>Nr. | Weight<br>[kg] | Approvals                             | Customer Benefits/<br>Advantages                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------|--------------|----------------|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS ER307</b><br><br>EN ISO 14343-A: W 18 8 Mn<br>EN ISO 14343-B: SSZ307<br>AWS: A 5.9: ER307(mod.)                                                                                                                                                                                                                                                                                                                                                                       | 1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000                             | 14527<br>14573<br>14540<br>32669                   | 1.4370       | 4 x 5 kg       | TÜV (18919),<br>DB (43.132.60),<br>CE | » For joining unalloyed/low-alloy or Cr-steels/cast steel grades to austenitic steels<br>» Application temperature max. 300 °C |
| TIG rod of G 18 8 Mn / ER307 (mod.) type for joining and surfacing applications with heat resistant Cr-steels and heat resistant austenitic steels. Well-suited for fabricating dissimilar austenitic-ferritic joints at a max. application temperature of 300 °C. For joining unalloyed / low-alloyed or Cr-steels to austenitic steels. Low heat input required in order to avoid brittle martensitic transition zones.                                                           |                                                                                  |                                                    |              |                |                                       |                                                                                                                                |
| <b>BÖHLER AWS ER308L</b><br><br>EN ISO 14343-A: W 19 9 L<br>EN ISO 14343-B: SS308L<br>AWS: A 5.9: ER308L                                                                                                                                                                                                                                                                                                                                                                            | 1.0 x 1000<br>1.2 x 1000<br>1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000 | 40677<br>40679<br>85565<br>13751<br>85566<br>85567 | 1.4316       | 4 x 5 kg       | TÜV (12939),<br>DB (43.132.40),<br>CE | » Max. service temperature 350 °C<br>» High toughness down to -196 °C                                                          |
| TIG rod of W 19 9 L / ER308L type for joining and surfacing applications with matching and similar stabilized and non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 18/8 CrNi(N)-steels and cast steel grades. The wire shows very good wetting characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 350 °C.                |                                                                                  |                                                    |              |                |                                       |                                                                                                                                |
| <b>BÖHLER AWS ER308LSi</b><br><br>EN ISO 14343-A: W 19 9 LSi<br>EN ISO 14343-B: SS308LSi<br>AWS: A 5.9: ER308LSi                                                                                                                                                                                                                                                                                                                                                                    | 1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000                             | 30878<br>30882<br>30880<br>30881                   | 1.4316       | 4 x 5 kg       | CE                                    | » Max. service temperature 350 °C<br>» High toughness down to -196 °C                                                          |
| TIG rod of G 19 9 L Si / ER308LSi type for joining and surfacing applications with matching and similar stabilized and non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 18Cr8Ni(N)-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 350 °C. |                                                                                  |                                                    |              |                |                                       |                                                                                                                                |

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                                                                                                              | Ø / L<br>[mm]                                                                    | Articel-<br>No.                                    | Wst.-<br>Nr. | Weight<br>[kg] | Approvals                             | Customer Benefits/<br>Advantages                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------|--------------|----------------|---------------------------------------|------------------------------------------------------------------|
| <b>BÖHLER AWS ER309L</b><br><br>EN ISO 14343-A: W 23 12 L<br>EN ISO 14343-B: SS309L<br>AWS: A 5.9: ER309L                                                                                                                                                                                                                                                                                                                                                                | 1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000                             | 85568<br>13755<br>85569<br>85570                   | 1.4332       | 4 x 5 kg       | TÜV (12941),<br>CE                    | » Service temperature -80 °C to 300 °C                           |
| TIG rod of type 309L / 23 12 L for welding dissimilar joints with an average ferrite content 16 FN. Well suited for depositing intermediate layers when welding clad materials. Due to the high ferrite content, the weld metal is less susceptible to hot-cracking. Suitable for service temperatures between -80 °C and 300 °C.                                                                                                                                        |                                                                                  |                                                    |              |                |                                       |                                                                  |
| <b>BÖHLER AWS ER316L</b><br><br>EN ISO 14343-A: W 19 12 3 L<br>EN ISO 14343-B: SS316L<br>AWS: A 5.9: ER316L                                                                                                                                                                                                                                                                                                                                                              | 1.0 x 1000<br>1.2 x 1000<br>1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000 | 32674<br>32680<br>85571<br>13769<br>85572<br>85573 | 1.4430       | 4 x 5 kg       | TÜV (12940),<br>DB (43.132.41),<br>CE | » Max. service temperature 400 °C<br>» High toughness at -196 °C |
| TIG rod of W 19 12 3 L / ER316L type for joining and surfacing application with matching and similar non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 17Cr-12Ni-2Mo-steels and cast steel grades. Excellent weld metal toughness down to -196 °C. Resistant to intergranular corrosion. Resistant to intergranular corrosion up to 400 °C.                    |                                                                                  |                                                    |              |                |                                       |                                                                  |
| <b>BÖHLER AWS ER316LSi</b><br><br>EN ISO 14343-A: W 19 12 3 L Si<br>EN ISO 14343-B: SS316LSi<br>AWS: A 5.9: ER316LSi                                                                                                                                                                                                                                                                                                                                                     | 1.6 x 1000<br>2.0 x 1000<br>2.4 x 1000<br>3.2 x 1000                             | 31112<br>31169<br>31196<br>31381                   | 1.4430       | 4 x 5 kg       | CE                                    | » Max. service temperature 400 °C<br>» High toughness at -196 °C |
| TIG rod of G 19 12 3 L Si / ER316LSi type for joining and surfacing application with matching and similar non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 17Cr-12Ni2Mo-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 400 °C. |                                                                                  |                                                    |              |                |                                       |                                                                  |

## SOLID WIRES, STAINLESS

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                                                                                                                            | Ø<br>[mm]                       | Articel-<br>No.                           | Wst.-<br>Nr. | Spool<br>Weight<br>[kg]       | Approvals                             | Customer Benefits/<br>Advantages                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------|--------------|-------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS ER307</b><br><br>EN ISO 14343-A: G 18 8 Mn<br>AWS: A 5.9: ER307 (mod.)                                                                                                                                                                                                                                                                                                                                                                                                   | 0.8<br>1.0<br>1.2<br>1.6        | 14543<br>14544<br>14545<br>14546          | 1.4370       | BS300 / 15<br>wire basket     | TÜV (18920),<br>DB (43.132.59),<br>CE | » For joining unalloyed/low-alloy or<br>Cr-steels / cast steel grades to<br>austenitic steels<br>» Max. service temperature 300 °C |
| Solid wire of G 18 8 Mn / ER307 (mod.) type for joining and surfacing applications with heat resistant Cr-steels and heat resistant austenitic steels. Well-suited for fabricating dissimilar austenitic-ferritic joints at a max. application temperature of 300 °C. For joining unalloyed / low-alloyed or Cr-steels to austenitic steels. Low heat input required in order to avoid brittle martensitic transition zones.                                                           |                                 |                                           |              |                               |                                       |                                                                                                                                    |
| <b>BÖHLER AWS ER308LSi</b><br><br>EN ISO 14343-A: G 19 9 L Si<br>EN ISO 14343-B: SS308LSi<br>AWS: A 5.9: ER308LSi                                                                                                                                                                                                                                                                                                                                                                      | 0.8<br>0.9<br>1.0<br>1.2<br>1.6 | 86278<br>86279<br>86280<br>86281<br>86282 | 1.4316       | BS300 / 15<br>wire basket     | TÜV (12936),<br>DB (43.132.38),<br>CE | » Max. service temperature 350 °C<br>» High toughness down to -196 °C                                                              |
| Solid wire of G 19 9 L Si / ER308LSi type for joining and surfacing applications with matching and similar stabilized and non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 18Cr8Ni(N)-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 350 °C. |                                 |                                           |              |                               |                                       |                                                                                                                                    |
| <b>BÖHLER AWS ER308LSi</b><br><br>EN ISO 14343-A: G 19 9 L Si<br>EN ISO 14343-B: SS308LSi<br>AWS: A 5.9: ER308LSi                                                                                                                                                                                                                                                                                                                                                                      | 0.8<br>0.9<br>1.0<br>1.2<br>1.6 | 24636<br>86513<br>86514<br>86515<br>86516 | 1.4316       | S300 / 15<br>Plastic<br>spool | TÜV (12936),<br>DB (43.132.38),<br>CE | » Max. service temperature 350 °C<br>» High toughness down to -196 °C                                                              |
| Solid wire of G 19 9 L Si / ER308LSi type for joining and surfacing applications with matching and similar stabilized and non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 18Cr8Ni(N)-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 350 °C. |                                 |                                           |              |                               |                                       |                                                                                                                                    |

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Ø<br>[mm]                       | Articel-<br>No.                           | Wst.-<br>Nr. | Spool<br>Weight<br>[kg]       | Approvals                             | Customer Benefits/<br>Advantages                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------|--------------|-------------------------------|---------------------------------------|------------------------------------------------------------------|
| <b>BÖHLER AWS ER309LSi</b><br><br>EN ISO 14343-A: G 23 12 LSi<br>EN ISO 14343-B: SS309LSi<br>AWS: A 5.9: ER309LSi                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.8<br>0.9<br>1.0<br>1.2<br>1.6 | 86272<br>86274<br>86275<br>86276<br>86277 | 1.4332       | BS300 / 15<br>Wire basket     | TÜV (12938),<br>CE                    | » Service temperature -60 °C to 300 °C                           |
| Solid wire of G 23 12 L Si / ER309LSi type for joining unalloyed and low-alloyed steels and cast steel grades or stainless heat resistant Cr-steels and cast steel grades to austenitic steels and cast steel grades. Well suited for depositing intermediate layers when welding clad materials. Favorably high Cr and Ni contents, low C content. For depositing intermediate layers when welding the side of plates clad with low-carbon non-stabilized or stabilized austenitic CrNiMo(N) austenitic metals. Application temperature max. 300 °C. |                                 |                                           |              |                               |                                       |                                                                  |
| <b>BÖHLER AWS ER309LSi</b><br><br>EN ISO 14343-A: G 23 12 LSi<br>EN ISO 14343-B: SS309LSi<br>AWS: A 5.9: ER309LSi                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.8<br>0.9<br>1.0<br>1.2<br>1.6 | 24637<br>86508<br>86509<br>86510<br>86511 | 1.4332       | S300 / 15<br>Plastic<br>spool | TÜV (12938),<br>CE                    | » Service temperature -60 °C to 300 °C                           |
| Solid wire of G 23 12 L Si / ER309LSi type for joining unalloyed and low-alloyed steels and cast steel grades or stainless heat resistant Cr-steels and cast steel grades to austenitic steels and cast steel grades. Well suited for depositing intermediate layers when welding clad materials. Favorably high Cr and Ni contents, low C content. For depositing intermediate layers when welding the side of plates clad with low-carbon non-stabilized or stabilized austenitic CrNiMo(N) austenitic metals. Application temperature max. 300 °C. |                                 |                                           |              |                               |                                       |                                                                  |
| <b>BÖHLER AWS ER316LSi</b><br><br>EN ISO 14343-A: G 19 12 3 LSi<br>EN ISO 14343-B: SS316LSi<br>AWS: A 5.9: ER316LSi                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.8<br>0.9<br>1.0<br>1.2<br>1.6 | 86256<br>86257<br>86258<br>86259<br>86260 |              | BS300 / 15<br>Wire basket     | TÜV (12937),<br>DB (43.132.39),<br>CE | » Max. service temperature 400 °C<br>» High toughness at -196 °C |
| Solid wire of G 19 12 3 L Si / ER316LSi type for joining and surfacing application with matching and similar non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 17Cr-12Ni2Mo-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 400 °C.                                                                           |                                 |                                           |              |                               |                                       |                                                                  |
| <b>BÖHLER AWS ER316LSi</b><br><br>EN ISO 14343-A: G 19 12 3 LSi<br>EN ISO 14343-B: SS316LSi<br>AWS: A 5.9: ER316LSi                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.8<br>0.9<br>1.0<br>1.2<br>1.6 | 24639<br>86503<br>86504<br>86505<br>86506 |              | S300 / 15<br>Plastic<br>spool | TÜV (12937),<br>DB (43.132.39),<br>CE | » Max. service temperature 400 °C<br>» High toughness at -196 °C |
| Solid wire of G 19 12 3 L Si / ER316LSi type for joining and surfacing application with matching and similar non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 17Cr-12Ni2Mo-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 400 °C.                                                                           |                                 |                                           |              |                               |                                       |                                                                  |

## SOLID WIRES, STAINLESS, ECOdrum 100

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                                                                                                                            | Ø<br>[mm]  | Articel-<br>No. | Wst.-<br>Nr. | ECOdrum<br>100<br>[kg] | Approvals                             | Customer Benefits/<br>Advantages                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------|--------------|------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS ER307</b><br><br>EN ISO 14343-A: G 18 8 Mn<br>AWS: A 5.9: ER307 (mod.)                                                                                                                                                                                                                                                                                                                                                                                                   | 1.0<br>1.2 | 39431<br>39432  | 1.4370       | 100                    | TÜV (18920),<br>DB (43.132.59),<br>CE | » Reduced stopps by reducing spoolchanges<br>= higher productivity<br>» Continious wire feeding = less wear of<br>feeding components<br>» Closed system = protection against dust |
| Solid wire of G 18 8 Mn / ER307 (mod.) type for joining and surfacing applications with heat resistant Cr-steels and heat resistant austenitic steels. Well-suited for fabricating dissimilar austenitic-ferritic joints at a max. application temperature of 300 °C. For joining unalloyed / low-alloyed or Cr-steels to austenitic steels. Low heat input required in order to avoid brittle martensitic transition zones.                                                           |            |                 |              |                        |                                       |                                                                                                                                                                                   |
| <b>BÖHLER AWS ER308LSi</b><br><br>EN ISO 14343-A: G 19 9 LSi<br>EN ISO 14343-B: SS308LSi<br>AWS: A 5.9: ER308LSi                                                                                                                                                                                                                                                                                                                                                                       | 1.0<br>1.2 | 39433<br>39440  | 1.4316       | 100                    | TÜV (12936),<br>DB (43.132.38),<br>CE | » Reduced stopps by reducing spoolchanges<br>= higher productivity<br>» Continious wire feeding = less wear of<br>feeding components<br>» Closed system = protection against dust |
| Solid wire of G 19 9 L Si / ER308LSi type for joining and surfacing applications with matching and similar stabilized and non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 18Cr8Ni(N)-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 350 °C. |            |                 |              |                        |                                       |                                                                                                                                                                                   |

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Ø<br>[mm]  | Article-<br>No. | Wst.-<br>Nr. | ECodrum<br>100<br>[kg] | Approvals                             | Customer Benefits/<br>Advantages                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------|--------------|------------------------|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS ER309LSi</b><br><br>EN ISO 14343-A: G 23 12 LSi<br>EN ISO 14343-B: SS309LSi<br>AWS: A 5.9: ER309LSi                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.0<br>1.2 | 39446<br>39447  | 1.4332       | 100                    | TÜV (12938),<br>CE                    | » Reduced stopps by reducing spoolchanges = higher productivity<br>» Continuous wire feeding = less wear of feeding components<br>» Closed system = protection against dust |
| Solid wire of G 23 12 L Si / ER309LSi type for joining unalloyed and low-alloyed steels and cast steel grades or stainless heat resistant Cr-steels and cast steel grades to austenitic steels and cast steel grades. Well suited for depositing intermediate layers when welding clad materials. Favorably high Cr and Ni contents, low C content. For depositing intermediate layers when welding the side of plates clad with low-carbon non-stabilized or stabilized austenitic CrNiMo(N) austenitic metals. Application temperature max. 300 °C. |            |                 |              |                        |                                       |                                                                                                                                                                             |
| <b>BÖHLER AWS ER316LSi</b><br><br>EN ISO 14343-A: G 19 12 3 LSi<br>EN ISO 14343-B: SS316LSi<br>AWS: A 5.9: ER316LSi                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1.0<br>1.2 | 39452<br>39453  | 1.4430       | 100                    | TÜV (12937),<br>DB (43.132.39),<br>CE | » Reduced stopps by reducing spoolchanges = higher productivity<br>» Continuous wire feeding = less wear of feeding components<br>» Closed system = protection against dust |
| Solid wire of G 19 12 3 L Si / ER316LSi type for joining and surfacing application with matching and similar non-stabilized austenitic CrNi(N) and CrNiMo(N)-steels and cast steel grades. Corrosion resistance similar to matching low-carbon and stabilized austenitic 17Cr-12Ni2Mo-steels and cast steel grades. The wire shows very good wetting and feeding characteristics, with excellent weld metal toughness down to -196 °C. Application temperature max. 400 °C.                                                                           |            |                 |              |                        |                                       |                                                                                                                                                                             |

## SOLID WIRES, NON-ALLOYED, SPOOLS

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                       | Ø<br>[mm]                | Article-<br>No.                  | Spool<br>Weight<br>[kg]    | Approvals                                                 | Customer Benefits/<br>Advantages                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------|----------------------------|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER SG2</b><br><br>EN ISO 14343-A: G 42 3 M21 3Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 0.8<br>1.0<br>1.2        | 81819<br>81823<br>81825          | BS300 / 15<br>Wire basket  | TÜV (13009),<br>DB (42.236.01),<br>CE                     | » Stable arc and simple handling = less add on times<br>» Good wire feeding properties and easy welding in all applications = less time loss      |
| Copper-coated solid wire or welding rods suited for universal application in boiler and vessel fabrication and in structural steel engineering. Largely spatter-free metal transfer both when using gas mixtures and carbon dioxide. Thanks to its high current carrying capacity this filler metal is also optimally suited for welding thick-walled sheet and plate structures. |                          |                                  |                            |                                                           |                                                                                                                                                   |
| <b>BÖHLER SG2</b><br><br>EN ISO 14343-A: G 42 3 M21 3Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 0.8<br>1.0<br>1.2<br>1.6 | 71663<br>71664<br>71665<br>71666 | S300 / 15<br>Plastic spool | TÜV (12936),<br>DB (43.132.38),<br>CE                     | » Stable arc and simple handling = less add on times<br>» Good wire feeding properties and easy welding in all applications = less time loss      |
| Copper-coated solid wire or welding rods suited for universal application in boiler and vessel fabrication and in structural steel engineering. Largely spatter-free metal transfer both when using gas mixtures and carbon dioxide. Thanks to its high current carrying capacity this filler metal is also optimally suited for welding thick-walled sheet and plate structures. |                          |                                  |                            |                                                           |                                                                                                                                                   |
| <b>BÖHLER SG3</b><br><br>EN ISO 14343-A: G 46 4 M21 4Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 0.8<br>1.0<br>1.2<br>1.6 | 34334<br>34339<br>34344<br>34345 | BS300 / 15<br>Wire basket  | TÜV(18699),<br>DB (42.236.02),<br>CE, ABS, CWB,<br>DNV GL | » Clean and constant wire surface, less contact tip wear = less maintenance<br>» Constant coppering, low spatter level = less post weld treatment |
| Copper-coated solid wire suited for universal application in boiler and vessel fabrication and in structural steel engineering. Largely spatter-free metal transfer both when using gas mixtures and carbon dioxide. Thanks to its high current carrying capacity this filler metal is also optimally suited for welding thick-walled sheet and plate structures.                 |                          |                                  |                            |                                                           |                                                                                                                                                   |
| <b>BÖHLER SG3</b><br><br>EN ISO 14343-A: G 46 4 M21 4Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 0.8<br>1.0<br>1.2        | 84789<br>84792<br>84793          | S300 / 15<br>Plastic spool | TÜV(18699),<br>DB (42.236.02),<br>CE, ABS, CWB,<br>DNV GL | » Clean and constant wire surface, less contact tip wear = less maintenance<br>» Constant coppering, low spatter level = less post weld treatment |
| Copper-coated solid wire suited for universal application in boiler and vessel fabrication and in structural steel engineering. Largely spatter-free metal transfer both when using gas mixtures and carbon dioxide. Thanks to its high current carrying capacity this filler metal is also optimally suited for welding thick-walled sheet and plate structures.                 |                          |                                  |                            |                                                           |                                                                                                                                                   |

## SOLID WIRES, NON-ALLOYED, DRUM SOLUTIONS

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                                                                                                                                                                                                                       | Ø<br>[mm]                | Article-<br>No.                  | Drum<br>250<br>[kg] | Approvals                                                 | Customer Benefits/<br>Advantages                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------|---------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER SG2</b><br><br>EN ISO 14343-A: G 42 3 M21 3Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 0.8<br>1.0<br>1.2<br>1.6 | 86523<br>84691<br>84692<br>30730 | BASEdrum<br>250     | TÜV (13009),<br>DB (42.236.01),<br>CE                     | » Reduced stopps by reducing spoolchanges<br>= higher productivity<br>» Continuous wire feeding = less wear of<br>feeding components<br>» Closed system = protection against dust |
| Copper-coated solid wire or welding rods suited for universal application in boiler and vessel fabrication and in structural steel engineering. Largely spatter-free metal transfer both when using gas mixtures and carbon dioxide. Thanks to its high current carrying capacity this filler metal is also optimally suited for welding thick-walled sheet and plate structures. |                          |                                  |                     |                                                           |                                                                                                                                                                                   |
| <b>BÖHLER SG3</b><br><br>EN ISO 14343-A: G 46 4 M21 4Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 0.8<br>1.0<br>1.2        | 86872<br>34352<br>34353          | BASEdrum<br>250     | TÜV(18699),<br>DB (42.236.02),<br>CE, ABS, CWB,<br>DNV GL | » Reduced stopps by reducing spoolchanges<br>= higher productivity<br>» Continuous wire feeding = less wear of<br>feeding components<br>» Closed system = protection against dust |
| <b>BÖHLER SG3</b><br><br>EN ISO 14343-A: G 46 4 M21 4Si1<br>AWS: A 5.18: ER70S-6                                                                                                                                                                                                                                                                                                  | 1.0<br>1.2               | 40026<br>40029                   | ECOdrum<br>250      | TÜV(18699),<br>DB (42.236.02),<br>CE, ABS, CWB,<br>DNV GL | » Reduced stopps by reducing spoolchanges<br>= higher productivity<br>» Continuous wire feeding = less wear of<br>feeding components<br>» Closed system = protection against dust |
| Copper-coated solid wire suited for universal application in boiler and vessel fabrication and in structural steel engineering. Largely spatter-free metal transfer both when using gas mixtures and carbon dioxide. Thanks to its high current carrying capacity this filler metal is also optimally suited for welding thick-walled sheet and plate structures.                 |                          |                                  |                     |                                                           |                                                                                                                                                                                   |

## CORED WIRE, NON-ALLOYED, SPOOLS

| Product Name<br>EN ISO Classification<br>AWS Classification                                                                                                                      | Ø<br>[mm]         | Article-<br>No.         | Spool<br>Weight<br>[kg]             | Approvals                   | Customer Benefits/<br>Advantages                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------------|-------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BÖHLER AWS E71T1-M/C</b><br><br>EN ISO 14343-A: T46 2 P C1 1 H5,<br>T46 2 P M21 1 H10<br>AWS: A 5.36: E71T1-C1A2-CS1-H8,<br>E71T1-M211A2-CS1-H8                               | 1.2<br>1.2<br>1.2 | 39319<br>39336<br>39322 | BS300 / 16<br>S200 / 5<br>S300 / 15 | TÜV, DB, CE,<br>DNV GL, ABS | » Simple handling and high<br>productivity in vertical up<br>and over-head positions<br>» Easy slag removal                              |
| Rutile cored wire characterized by highest productivity and provides significant savings in time and economical aspects when used for positional welding.                        |                   |                         |                                     |                             |                                                                                                                                          |
| <b>BÖHLER AWS E70C-6M</b><br><br>EN ISO 14343-A: T42 2 M M21 3 H5<br>AWS: A 5.18: E70T15-M21A2-CS1-H4                                                                            | 1.2<br>1.2<br>1.2 | 39345<br>39348<br>39354 | BS300 / 16<br>S300 / 15<br>S200 / 5 | TÜV, DB, CE                 | » High productivity in PA, PB welding<br>positions<br>» Low spatter level and flat weld bead<br>appearance reduce post weld<br>treatment |
| Metal cored wire characterized by minimum oxide residue, minimal spatter formation and low hydrogen content. This filler material is ideal for horizontal and flat fillet welds. |                   |                         |                                     |                             |                                                                                                                                          |

