NEXT GENERATION
FOR DTH DRILLING

SPIRALFLUSH®

Welding instructions – casing systems

Mincon™

The Driller's Choice Worldwide

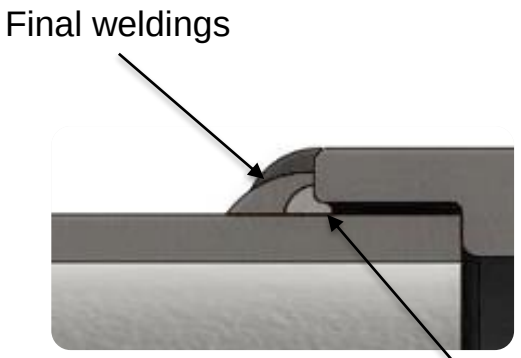
minconnordic@mincon.com | www.mincon.com

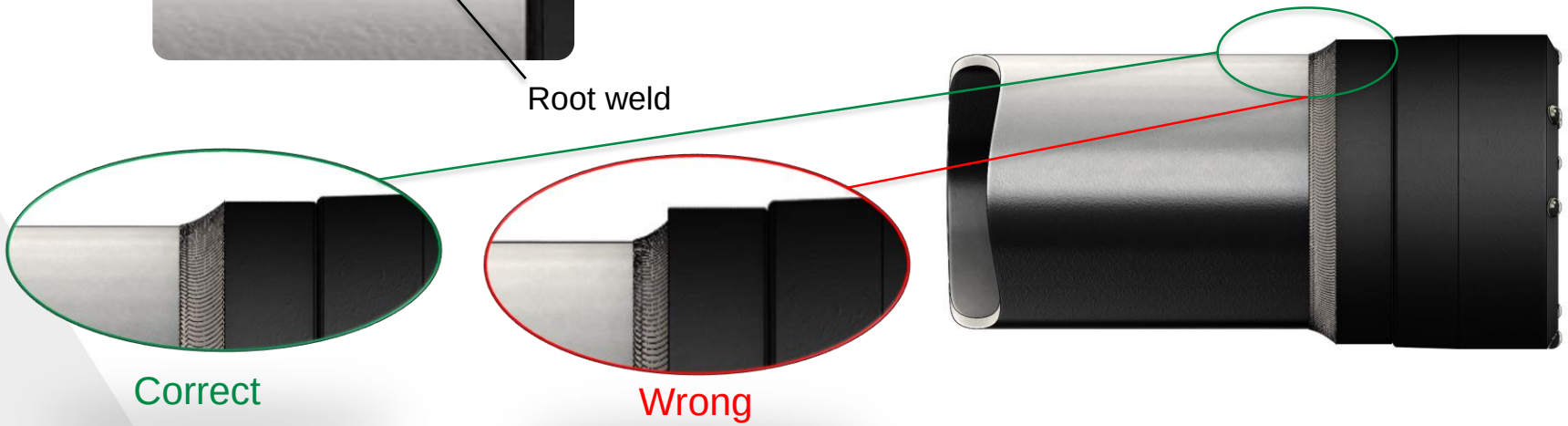
Welding the casing shoe

Integrated Large ID, all diameters
Forepoling, all diameters

Welding rod:
AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00
Preheating is highly recomended. (180°C welded areas)

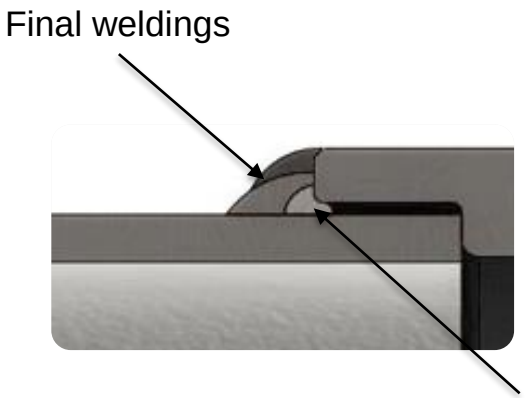
1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Make sure connection is fully welded as presented below





Welding the casing shoe OLD MODEL

Integrated thick wall, diameters < 323mm

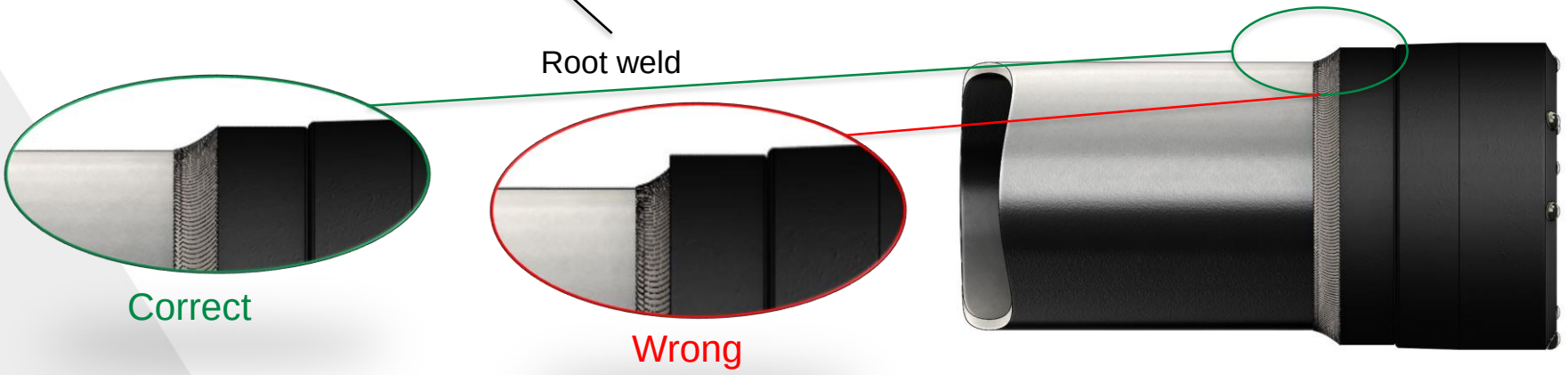


Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Make sure connection is fully welded as presented below



Welding the casing shoe NEW MODEL

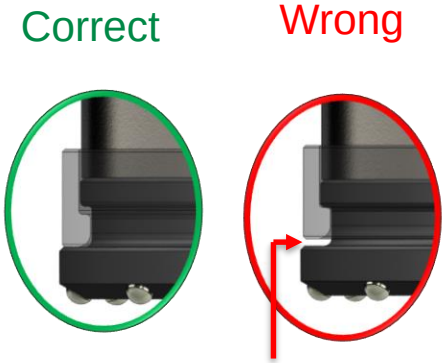
Integrated thick wall, diameters 114-273mm

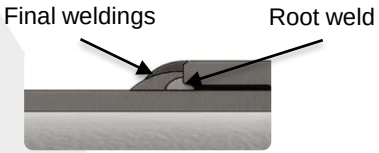
Welding rod:

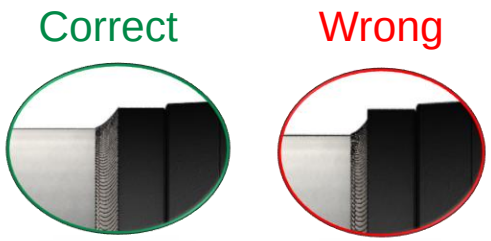
AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Make sure cap between ring bit and casing shoe is closed
3. Place the ring bit against the casing (note 2. cap closed)
4. Weld root weld and grind it clean
5. Weld final welding/s to required dimensions
6. Make sure connection is fully welded as presented below

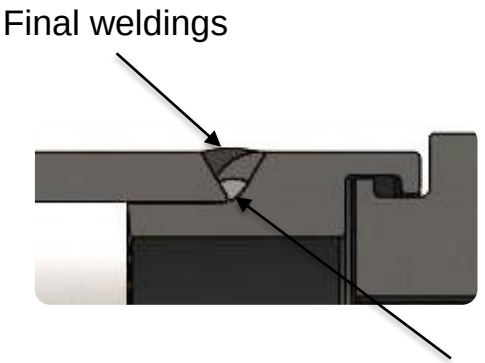






Welding the casing shoe

Integrated thick wall, diameters ≥ 323mm

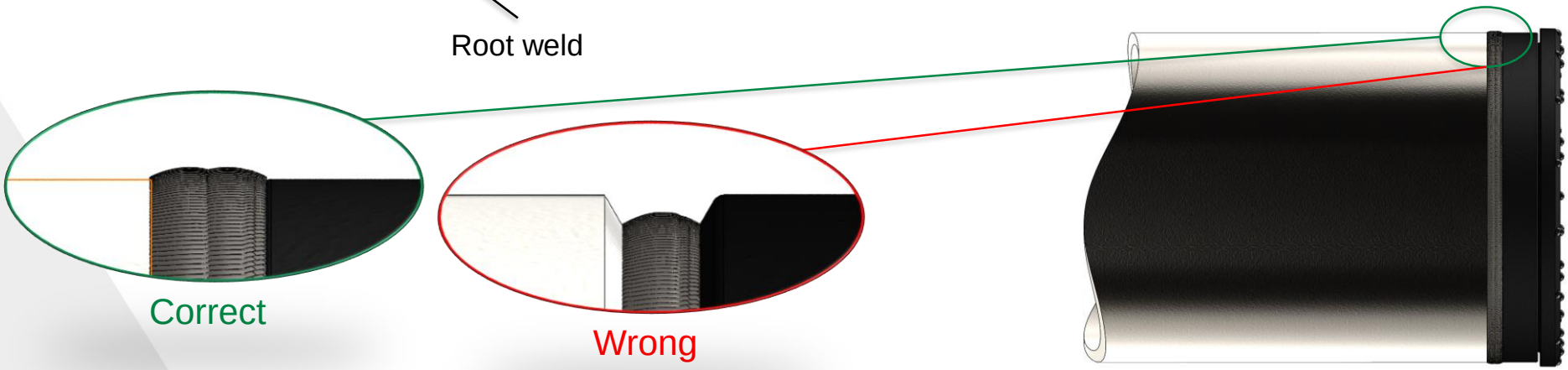


Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

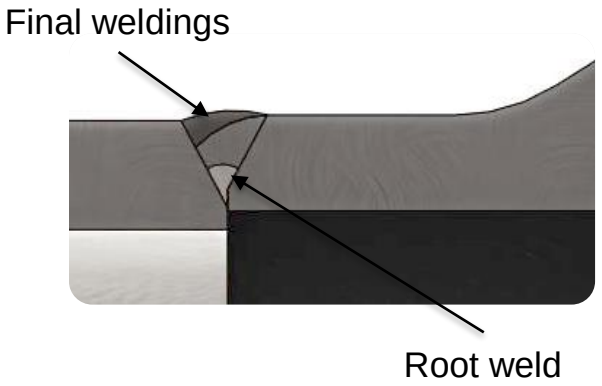
Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Make sure connection is fully welded as presented below



Welding the casing shoe

Retrievable, all diameters

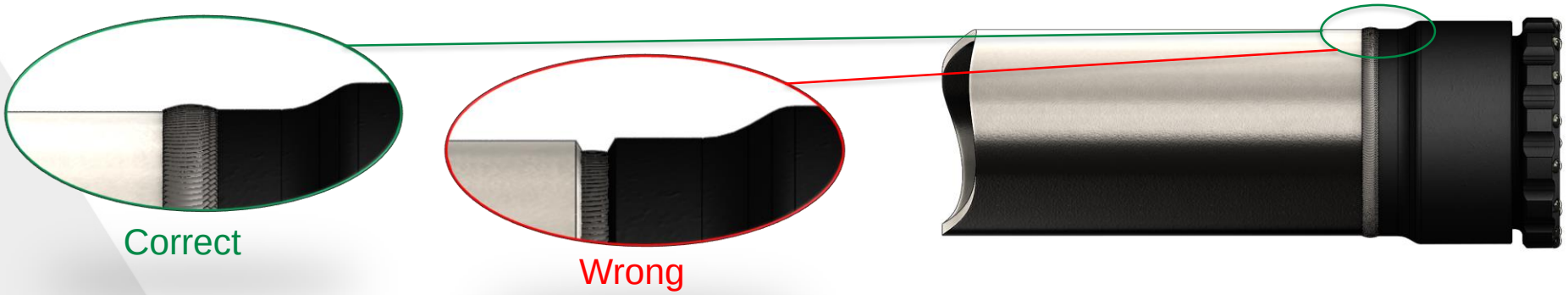


Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

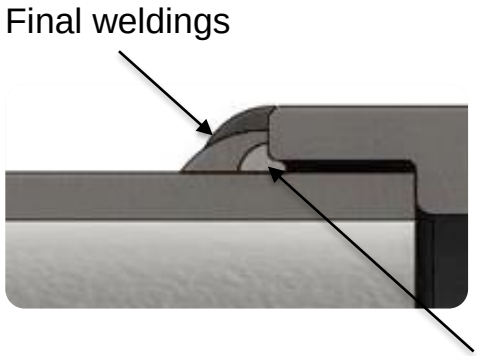
Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Make sure connection is fully welded as presented below



Welding the casing shoe

Retrievable, slip on type ring set

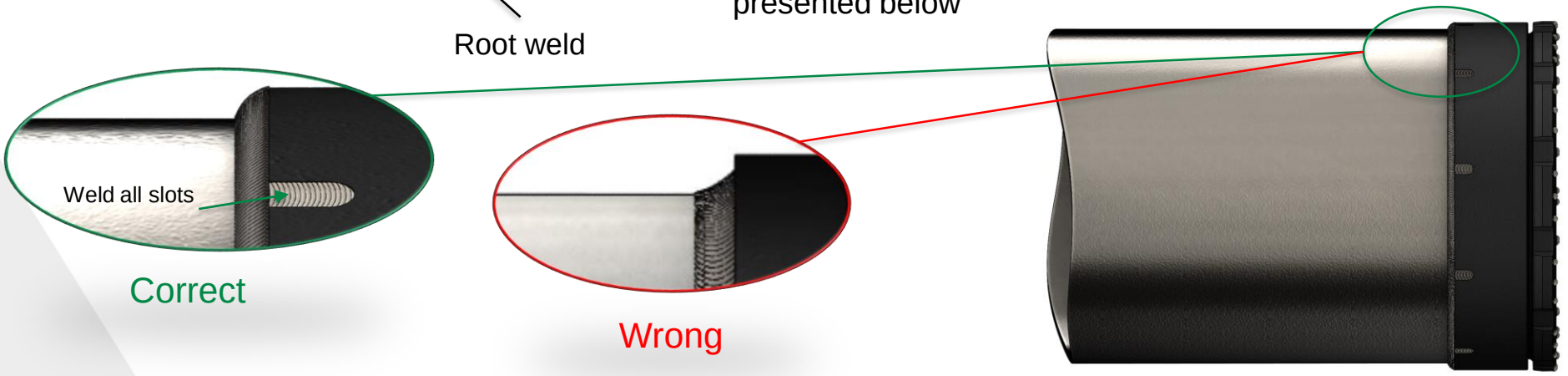


Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Weld casing shoe slots also
5. Make sure connection is fully welded as presented below



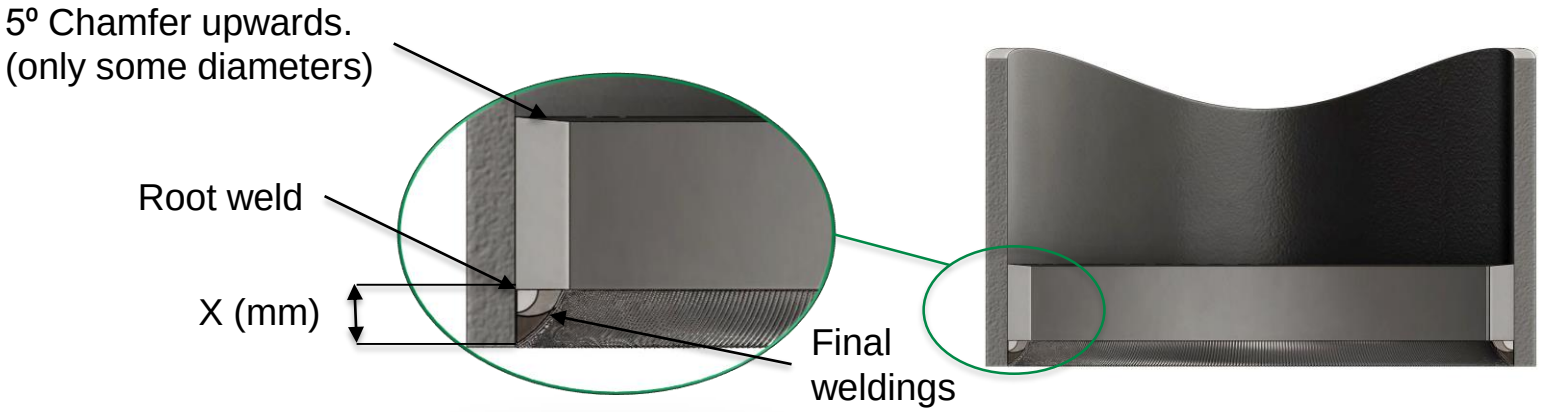
Welding the casing shoe

Solitary & Solitary O-pile, all diameters

Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00
Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Check right intalling depth (x) from table 1.
3. If there is a 5º chamfer on the other side of casing shoe, istall casing shoe in to the casing chamfer upwards
4. Weld root weld and grind it clean
5. Weld final welding/s to required dimensions
6. Make sure connection is fully welded as presented below



Welding the casing shoe

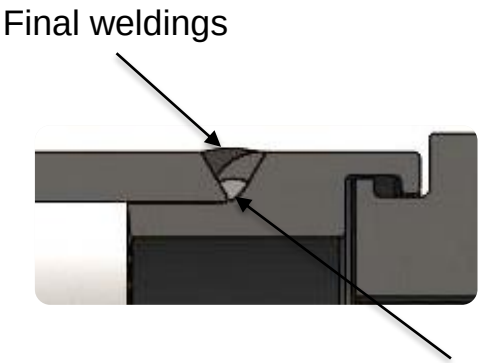
Solitary & Solitary O-pile, all diameters

Casing diameter *mm/(inches)*	**Installing depth (x)** *mm/(inches)*
114.3 (4 1/2")	10 (3/8")
139.7 (5 1/2")	15 (5/8")
168.3 (6 5/8")	15 (5/8")
177.8 (7")	15 (5/8")
219.1 (8 5/8")	15 (5/8")
273 (10 3/4")	15 (5/8")
323.9 (12 3/4")	15 (5/8")
406.4 (16")	15 (5/8")
457.2 (18")	15 (5/8")
508.0 (20")	15 (5/8")
609.6 (24")	20 (3/4")
711.2 (28")	20 (3/4")
812.8 (32")	20 (3/4")
914.4 (36")	20 (3/4")
1016.0 (40")	20 (3/4")
1219.2 (48")	30 (1 1/4")
1320.8 (52")	30 (1 1/4")
1422.4 (56")	30 (1 1/4")
1524 (60")	30 (1 1/4")

Table 1. Casing shoe installing depth

Welding the casing shoe

Integrated O-pile

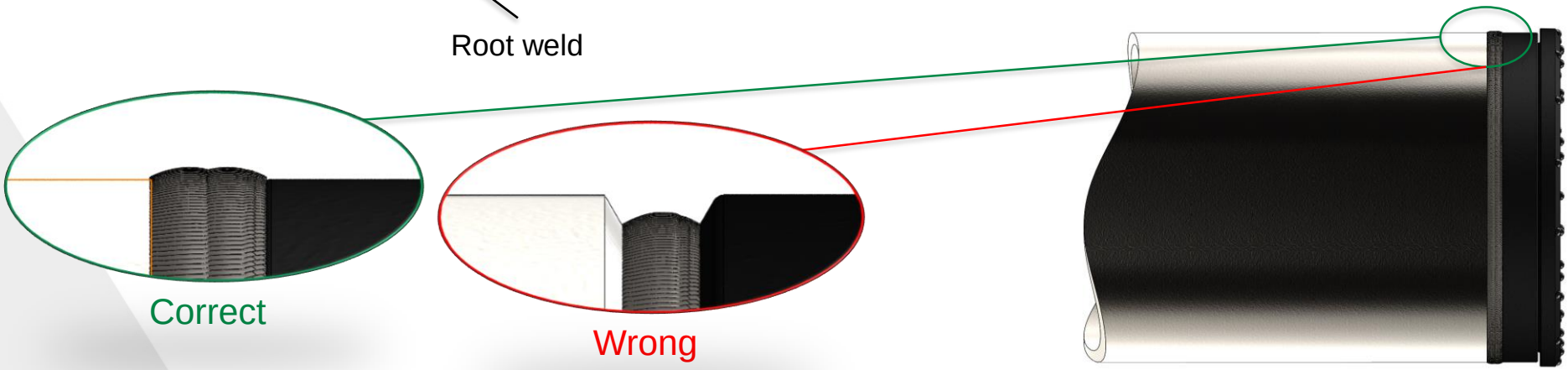


Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

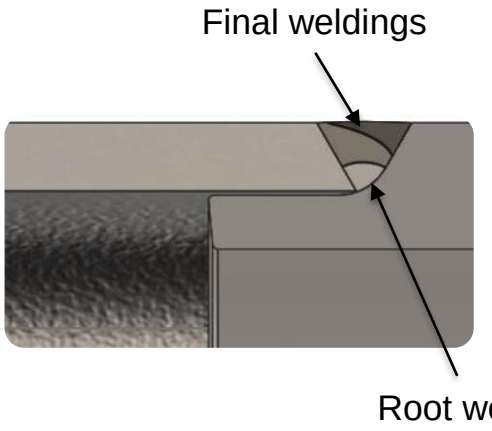
Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Make sure connection is fully welded as presented below



Welding the casing shoe

Horizontal casing shoe with shoulder

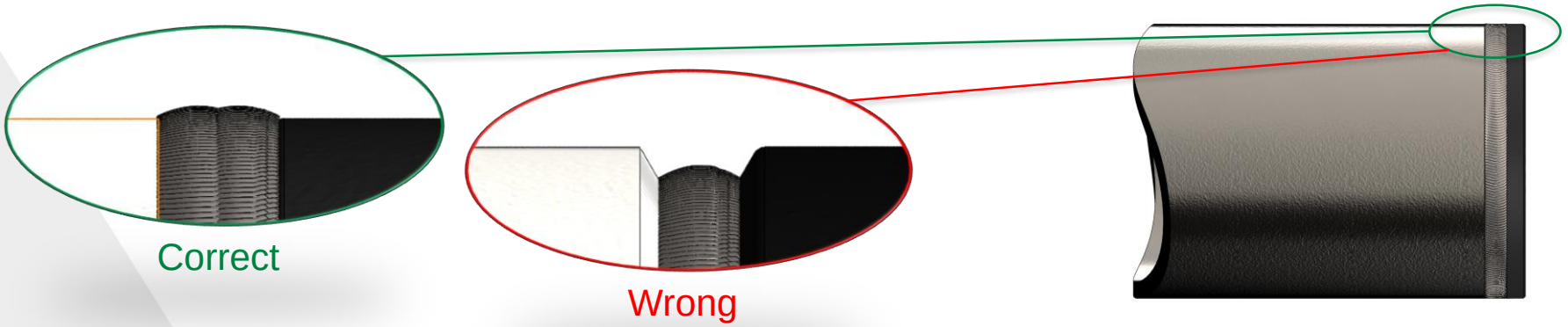


Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Weld root weld and grind it clean
3. Weld final welding/s to required dimensions
4. Make sure connection is fully welded as presented below
5. Optional: install locally made sleeve (page 11)



Welding the casing shoe

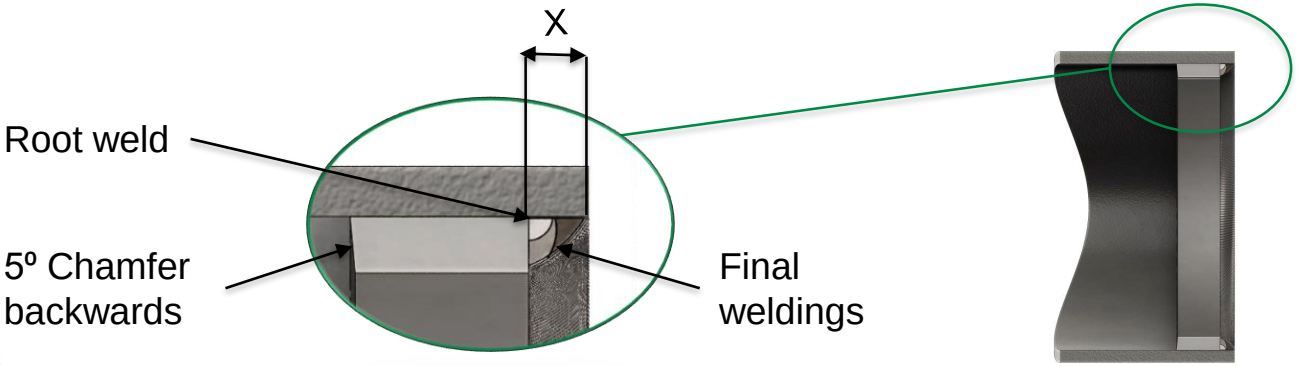
Horizontal, casing shoes without shoulder

Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Check right intalling depth (x) from table 2.
3. Istall casing shoe in to the casing 5º chamfer upwards
4. Weld root weld and grind it clean
5. Weld final welding/s to required dimensions
6. Make sure connection is fully welded as presented below
7. Optional: install locally made sleeve (page 11)



Welding the casing shoe

Horizontal, casing shoes without shoulder

Casing diameter *mm/(inches)*	**Installing depth (x)** *mm/(inches)*
406.4 (16")	15 (5/8")
457.2 (18")	15 (5/8")
508.0 (20")	15 (5/8")
609.6 (24")	20 (3/4")
711.2 (28")	20 (3/4")
812.8 (32")	20 (3/4")
914.4 (36")	20 (3/4")
1016.0 (40")	20 (3/4")
1219.2 (48")	30 (1 1/4")
1320.8 (52")	30 (1 1/4")
1422.4 (56")	30 (1 1/4")
1524 (60")	30 (1 1/4")

Table 2. Casing shoe installing depth

Welding the casing shoe

Horizontal systems, sleeve installation

Welding rod:

AWS:E7018 DIN: E5153810 e.g. ESAB: OK 48.00

Preheating is highly recomended. (180°C welded areas)

1. First grind all surfaces that are to be welded
2. Install sleeve according to a drawing
3. Make sure there is 10mm gap between sleeve front end and ring bit
4. Weld root weld and grind it clean
5. Weld final welding/s