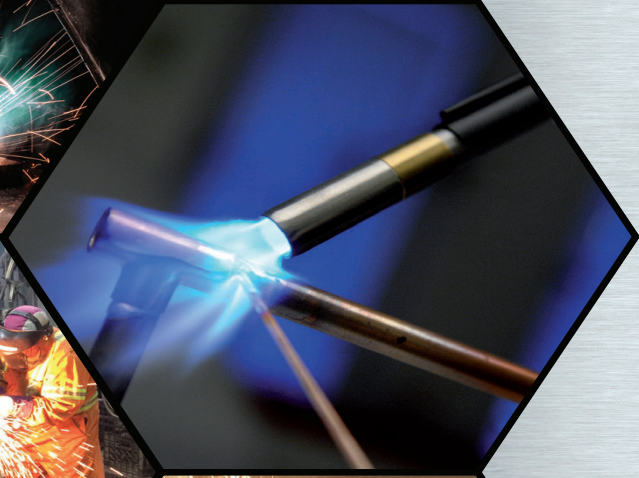


THE ESSENTIALS FOR WELDING AND BRAZING





SPECIALIZED WELDING AND BRAZING ALLOYS AND TECHNOLOGY

Founded in 1979 as Soudotec Inc. by maintenance and repair welding specialists, FSH Welding Canada, now part of the Selectarc Group, is uniquely positioned as a manufacturer of specialized welding and brazing alloys.

FSH Welding Canada's mission is to provide, through efficient service, top quality, state-of-the-art welding and brazing products in the production and maintenance-repair field, through its highly qualified personnel, to the full satisfaction of its customers.

Investissement
 Fabricación
 Dynamisme Développement
 Team Qualité
 R&D Savoir-faire
 Progrès Know-How Progresso
 Excellence Innovation
 Partenariat Performance
 Fabrication Équipe
 Dynamisme

1796 1870 2001 2023



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www.fsh-welding.ca

SUMMARY



Find all our range at www.fsh-welding.ca

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Find ALL OUR RANGE ON WWW.FSH-WELDING.CA



CAST IRON & NICKEL

Soudotec 189 BF

Unique steel coated nickel barium free core electrode* for easy welding of cast iron to steel, as well as unknown and European cast irons and those with dirty and/or oily surfaces.

Tensile strength : 70 000 psi (483 MPa)
Hardness : 180 BH

APPLICATIONS

Assembly and repair of all types of cast irons, thick sections and dissimilar cast iron/steel assemblies, machinery bases, presses, gear boxes, compressors, cast iron molds, gear teeth, etc.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

* Exists also in metal cored wire Soudotec MC 8189G

CAST IRON

The product + :

- Maximum resistance to cracking
- Low heat input; the electrode will not overheat
- Cold welding in all positions, without preheat
- Dense and porosity-free deposits
- Machinable deposits
- Easy slag removal
- Excellent conductivity



Soudotec 168

Specially coated electrode with a low-carbon steel core designed for cost-effective welding of dirty, contaminated and burnt cast irons. Excellent for depositing buttering coats before welding with machinable cast-iron electrodes.

Tensile strength : 65 000 psi (450 MPa)
Hardness : 350 - 400 BH

APPLICATIONS

Foundry oven parts, sewer pipes, exhaust manifolds, smelting irons, crankcases, oil and grease saturated cast parts, etc.

Ø mm - (inch)

3.2 - (1/8)

4.0 - (5/32)

CAST IRON

The product + :

- Excellent weldability on burnt cast iron
- Good anchorage on dirty and oily cast irons
- Excellent weldability in all positions
- Good Mechanical resistance.



Soudotec 179

CAST IRON

Specially-coated electrode* with very high nickel content and non-conductive flux coating recommended for cold welding of all types of cast irons, even when dirty and/or oily, where watertightness and/or 100% machinability are required.

Charge de rupture : 55 000 psi (380 MPa)

Hardness : 150 BH

APPLICATIONS

Steel-cast iron assemblies, engine blocks, cylinder heads, machining errors, pump casing, gear boxes, etc.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

The product + :

- 100% machinability
- Ideal for thin cast iron repairs
- Very strong and stable arc.
- All-position electrode.



* Exists also in MIG wire Soudotec M8169SP and TIG rods Soudotec T169

Soudotec 1690

NICKEL ALLOY

Extremely versatile high alloy core Inconel® type electrode* for welding nickel alloys, stainless steels and steels difficult to weld together or as dissimilar assemblies.

Tensile strength : 100 000 psi (689 MPa)

Yield strength : 70 000 psi (483 MPa)

Elongation : 40 - 43 %

APPLICATIONS

Assembly of dissimilar metals, refractory steels, foundry oven parts, valve seats, chemical industries, atomic and petrochemical industries, cryogenic steels, boilers, heat exchangers, shafts, etc.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

The product + :

- Superior resistance to severe stress
- Excellent corrosion, oxidation and acid resistance
- Excellent mechanical properties at high or very low temperatures
- Very high elongation
- Maximum resistance to hot cracking
- Excellent all-position weldability



*Exists also in MIG wire Soudotec M1690, TIG rods Soudotec T1690, in flux cored wire Soudotec FC 1690G and high performing electrodes (140 %) Soudotec 1690 SP

STEEL & ALLOY STEEL

206

High-recovery (160%) electrode* containing manganese for welding and building up low alloy and high alloy steels, manganese steels (11-14% Mn) and difficult-to-weld steels.

Tensile strength :	95 000 psi (655 MPa)
Yield strength :	75 000 psi (517 MPa)
Elongation :	38 %
Hardness (as-welded) :	250 BH
Work-hardened:	525 BH

APPLICATIONS

Dissimilar assemblies. Recommended for high-strength steels, manganese steels, T1, CHT 360, Scandia, SPS 245 steels; propellers, pumps, valves, crusher rolls, railroad switches, rails, construction equipment, etc. Ideal as a cushion before hardfacing.

Ø mm - (inch)
3.2 - (1/8)
4.0 - (5/32)
5.0 - (3/16)

* Exists also in flux cored wire Soudotec FC 8206G

ALLOY
STEEL

The product + :

- Excellent weldability and high deposit rate
- Work hardening deposit
- Excellent corrosion, oxidation and impact resistance
- Stable arc and very low spatter
- High temperature resistance



220

High strength low-alloy electrode* with a basic coating or deposits with very low diffusible hydrogen content. Recommended low alloy steels with high yield strength, low to medium carbon steels and steels generally sensitive to cracking.

Tensile strength :	115 000 psi (791 MPa)
Yield strength :	100 000 psi (690 MPa)
Elongation :	21 - 24 %

APPLICATIONS

Recommended for welding heavy equipment parts, monorails, mining equipment, steels such as T1, Corten, Scandia, CHT, SPS 245, Impacto and Hardox, as well as low alloy steels containing nickel, chromium and molybdenum.

Ø mm - (inch)
2.5 - (3/32)
3.2 - (1/8)
4.0 - (5/32)
5.0 - (3/16)

* Exists also in flux cored wire Soudotec FC 8220G

ALLOY
STEEL

The product + :

- High crack resistant deposit
- Excellent radiographic quality
- Excellent weldability in position
- Excellent machinability
- Stable arc and low spatter
- Flame cut deposit



Soudotec 222

Electrode* specifically designed for welding mild steels and specifically galvanized steels.

Tensile strength : 80 000 psi (550 MPa)
Yield strength : 64 000 psi (440 MPa)
Elongation : 24 - 28 %

APPLICATIONS

Recommended for steel furniture, thin sheet metal, farm machinery and body work.

Ø mm - (inch)
1.6 - (1/16)
2.0 - (5/64)
2.5 - (3/32)
3.2 - (1/8)
4.0 - (5/32)
5.0 - (3/16)

* Exists also in MIG wire Soudotec M500

STEEL

The product + :

- All-position welding including vertical down
- Excellent on AC power supply, low amperage
- Ideal for thin sheets
- Flexible moisture-resistant coating
- Easy slag removal



Soudotec 230

Exceptional high strength electrode* for welding high carbon and high alloy steels. Highly recommended for welding all types of unknown steels between themselves or as dissimilar assemblies. Excellent as a cushion before hardfacing on high alloy steels.

Tensile strength : 120 000 psi (827 MPa)
Yield strength : 100 000 psi (690 MPa)
Elongation : 28 - 32 %

APPLICATIONS

Repair of spring blades, drill bits, molds, dies, chains, mechanical shovel parts, crane booms, axles, shafts, tool steels, cast steels, armour steels, etc.

Ø mm - (inch)
1.6 - (1/16)
2.0 - (5/64)
2.5 - (3/32)
3.2 - (1/8)
4.0 - (5/32)
5.0 - (3/16)

* Available in high recovery version Soudotec 275, TIG rods Soudotec T265 and flux-cored wire Soudotec FC 8265G.

ALLOY STEEL

The product + :

- Excellent mechanical properties
- Very good weldability in position
- Machinable, crack free deposit
- Corrosion, heat and oxidation resistance
- Impact and wear resistant deposit



Soudotec 267

Incomparable electrode, with exceptional resistance, designed for applications with extreme stress. Superior for welding of difficult-to-weld steel, especially high alloy steel, tool steel, manganese steel, spring steel and tempered steel.

Tensile strength : 140 900 psi (971 MPa)
Yield strength : 104 500 psi (720 MPa)
Elongation : 22 - 27 %

APPLICATIONS

Turbines, shafts, mining equipment, petroleum industries, wear plates, extreme stress application situations.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

ALLOY
STEEL

The product + :

- Exceptional mechanical resistance
- All position weldability
- Fusion very soft and easy
- Very good corrosion, heat and acid resistance
- Easy striking and re-striking
- Easy slag removal



Soudotec 277

High strength electrode* recommended for welding alloy and carbon steels, unknown stainless steels, tempered steels, manganese steel and difficult-to-weld steels requiring maximum elongation.

Tensile strength : 100 000 psi (689 MPa)
Yield strength : 68 000 psi (468 MPa)
Elongation : 38 - 45 %

APPLICATIONS

Truck frames, railroad switches, chain links, gear teeth, etc. Excellent as a cushion before hardfacing on tool steel.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

5.0 - (3/16)

ALLOY
STEEL

The product + :

- Crack-resistant deposit
- Excellent heat (950°C/1742°F), corrosion and vibration resistance
- Machinable deposit
- Spatter free and easy slag removal
- High elongation



* Also available in flux-cored wire Soudotec FC 8277G and TIG rods Soudotec T277

SPECIAL

Unique double-coated «controlled hydrogen» electrode with low alloy core specifically suited for welding structural steels and heavy equipment parts.

Tensile strength : 85 000 psi (586 MPa)
Yield strength : 65 300 psi (450 MPa)
Elongation : 26 - 40 %

APPLICATIONS

Truck frames, heavy equipment, farm machinery, excavation equipment; ideal for forestry equipment and any other application outdoors and in wet environments.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

5.0 - (3/16)

STEEL

The product + :

- Excellent moisture resistance, resulting in crack-free deposits
- Very stable arc and low spatter
- Easy slag removal
- Exceptional all position weldability
- Superior mechanical properties, even at low temperatures



STUD-XTRACT

Specially engineered flux coated electrode that protects the threads during the welding process. Designed to remove broken studs, bolts, taps, drill bits, screw extractors, etc.

Tensile strength : 125 000 psi (860 MPa)
Elongation : 30 - 35 %

APPLICATIONS

All broken studs, bolts, taps, drill bits, screw extractors, etc.

Ø mm - (inch)

2.0 - (5/64)

2.5 - (3/32)

3.2 - (1/8)



**ALLOY
STEEL**

The product + :

- EZ-STRIKETIP graphite striking tip
- Can also be used in horizontal position
- Easy striking and re-striking
- Can be used with all grades of bolts
- High mechanical properties (125 000 psi)
- Low amperage and easy to use
- Saves time and money





REBUILDING & HARDFACING

Soudotec 330

High-recovery (160%) electrode* with high chromium carbide for hardfacing mild steel, low alloy steel, stainless steel and manganese steel parts subjected to severe abrasion and moderate impacts.

Hardness (as-welded): 58 - 63 HRC

APPLICATIONS

Bucket lips/teeth, conveyors, scrapers, crusher material, rollers, hammers, augers, press screws, excavation equipment, etc.

	DEPOSIT RATING SCALE									
ABRASION	1	2	3	4	5	6	7	8	9	10
IMPACT	1	2	3	4	5	6	7	8	9	10
HEAT	1	2	3	4	5	6	7	8	9	10
CORROSION	1	2	3	4	5	6	7	8	9	10

Ø mm - (inch)
2.5 - (3/32)
3.2 - (1/8)
4.0 - (5/32)
5.0 - (3/16)
6.3 - (1/4")

* Also available in flux-cored wire Soudotec FC 8330

HARDFACING

The product + :

- Corrosion and high temperature resistance
- Smooth and dense deposit
- Smooth and stable arc, spatter free
- Easy slag removal
- Very high deposit rate
- Minimum dilution rate for superior hardness, even at elevated temperatures
- Grindable deposits only



Soudotec 333 SP

Very high-recovery (200%) slag-free electrode* with complex chromium, niobium, tungsten, molybdenum and vanadium carbides for hardfacing mild steel, low alloy steel, stainless steel and manganese steel parts subjected to extreme abrasion, heat and moderate impacts.

Hardness (as-welded): 65 - 67 HRC

APPLICATIONS

Mixer blades, refractory press screws, plow blades, scrapers, bucket teeth, gate valves, ore crushers, wear plates, etc.

DEPOSIT RATING SCALE	
ABRASION	1 2 3 4 5 6 7 8 9 10
IMPACT	1 2 3 4 5 6 7 8 9 10
HEAT	1 2 3 4 5 6 7 8 9 10
CORROSION	1 2 3 4 5 6 7 8 9 10

Ø mm - (inch)	
3.2 - (1/8)	
4.0 - (5/32)	
5.0 - (3/16)	

* Also available in flux-cored wire Soudotec FC 8333

HARDFACING

The product + :

- Heat and corrosion resistance, up to 550°C (1022°F)
- Slag-free deposit
- Smooth and regular fusion
- High wear-resistant complex carbide alloys
- High deposit rate



Soudotec 340

Electrode* specifically designed for building up manganese steels (11 - 14% Mn), low carbon steels and low alloy steels subjected to severe impacts and moderate abrasion.

Hardness (as-welded): 250 BH

Work-hardened : 550 BH

APPLICATIONS

Bucket lips/teeth, crusher hammers/rollers, rails, railway switches, mining and excavation equipment, etc.

DEPOSIT RATING SCALE	
ABRASION	1 2 3 4 5 6 7 8 9 10
IMPACT	1 2 3 4 5 6 7 8 9 10
HEAT	1 2 3 4 5 6 7 8 9 10
CORROSION	1 2 3 4 5 6 7 8 9 10

Ø mm - (inch)	
3.2 - (1/8)	
4.0 - (5/32)	
5.0 - (3/16)	
6.3 - (1/4")	

* Also available in flux-cored wire Soudotec FC 8342

REBUILDING

The product + :

- Ideal as a cushion before hardfacing with Soudotec 330
- Machinable and work hardening deposits
- All-position electrode with stable arc
- Multi-pass deposit
- Porosity-free deposits
- Easy slag removal



Soudotec 342

REBUILDING

High recovery electrode* (140%) for joining and build-up of carbon steels, low alloy and 11 - 14% manganese steels (Hadfield steels). Ideal as a cushion before hardfacing. Excellent resistance to severe impacts with moderate abrasion and corrosion.

Hardness (as-welded) : 250 BH
 Work-hardened : 550 BH

APPLICATIONS

Idlers, bottom and tread rolls, railroad crossings, switches and frogs, crusher rolls and cones, bucket teeth.

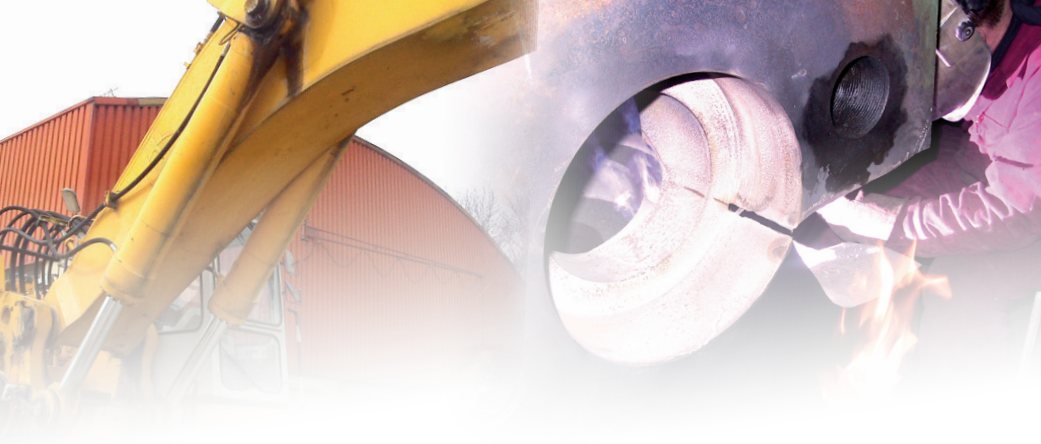
The product + :

- Multi-pass deposit
- High chromium content
- Work hardening and machinable Cr-Ni-Mn deposit
- Excellent mechanical properties

DEPOSIT RATING SCALE										
ABRASION										
IMPACT										
HEAT										
CORROSION										
	1	2	3	4	5	6	7	8	9	10

Ø mm - (inch)	
3.2 - (1/8)	* Also available in flux-cored wire Soudotec FC 8340
4.0 - (5/32)	
5.0 - (3/16)	





Soudotec 344

All-position hardfacing electrode* containing fine carbides of tungsten, chromium and vanadium, for hardfacing carbon steel, low alloy steel, cast steel and manganese steel parts subjected to abrasion, moderate impacts and metal-to-metal friction up to 550°C (1022°F).

Hardness (as-welded) : 42 - 45 HRC

APPLICATIONS

Scrap cutting shears, trimming and blanking dies, shear blades, forging dies, cold and hot working dies, hammer dies, etc.

DEPOSIT RATING SCALE

	1	2	3	4	5	6	7	8	9	10
ABRASION										
IMPACT										
HEAT										
METAL / METAL										

Ø mm - (inch)

3.2 - (1/8)

4.0 - (5/32)

* Also available in flux-cored wire Soudotec FC 8344G

HARDFACING

The product + :

- Excellent all-positions weldability, even on AC power supply
- Crack-free deposit
- Smooth arc and spatter-free
- Dense, machinable and porosity-free deposits
- Easy slag removal





Soudotec 345

Superior high alloy electrode* in the high speed steel category for hardfacing, building up and manufacturing tool steels. Excellent heat and metal-to-metal frictional wear resistance.

Hardness (as-welded) : 62 HRC
 After heat treatment: 64 - 65 HRC

APPLICATIONS

Excellent for building up, cutting and machining tools, cold shear blades, threaders, milling tools, drills, drill bits, sharp edges, debarking tools, punching dies, stamping dies and any parts subjected to metal-to-metal frictional wear. Recommended for use on M1, M2, D2 steels, etc.

DEPOSIT RATING SCALE

	1	2	3	4	5	6	7	8	9	10
METAL / METAL										
IMPACT										
HEAT										
ABRASION										

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

TOOL SURFACING

The product + :

- Good hardness up to 560°C (1040°F)
- Excellent all-position weldability
- Good resistance to impacts and abrasion
- Dense and porosity-free deposits
- Deposits can be heat treated



* Also available in metal-cored wire Soudotec MC 8345G TIG rods Soudotec T345

Soudotec 346

High alloy **tubular** electrode containing chromium carbide for hardfacing steel, stainless steel and cast iron parts subjected to severe abrasion, corrosion and moderate impacts.

Hardness (as-welded) : 58 - 62 HRC

APPLICATIONS

Crusher jaws/hammers, bucket teeth, scraper blades, conveyor chains, augers, buckets, etc.

DEPOSIT RATING SCALE	
ABRASION	1 2 3 4 5 6 7 8 9
IMPACT	1 2 3 4 5 6 7 8 9
HEAT	1 2 3 4 5 6 7 8 9
CORROSION	1 2 3 4 5 6 7 8 9

Ø mm - (inch)

6.3 - (1/4)

8.0 - (3/8)

12.7 - (1/2)

HARDFACING

The product + :

- Superior deposit rate at very low amperages and in all positions
- Low dilution rate
- Low heat input, reducing deformation and cross-checking
- Moisture-resistant coating
- Smooth and shiny slag-free deposit with high chromium carbide content



Soudotec 390

All-position economical electrode* for hardfacing carbon steels, low alloy steels, cast steels and manganese steels subjected to abrasion, moderate impacts and metal-to-metal friction.

Hardness (as-welded) : 55 - 60 HRC

APPLICATIONS

Crusher jaws, plow blades, excavation equipment, pulleys, guides and transport rails, chisels, scrapers, bucket teeth, etc.

DEPOSIT RATING SCALE	
ABRASION	1 2 3 4 5 6 7 8 9
IMPACT	1 2 3 4 5 6 7 8 9
HEAT	1 2 3 4 5 6 7 8 9
METAL-METAL	1 2 3 4 5 6 7 8 9

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

5.0 - (3/16)

*Available in flux-cored wire Soudotec 8332W and solid MIG wire Soudotec M600

HARDFACING

The product + :

- Excellent all-position weldability, even on AC power supply
- Crack-free deposit
- Smooth arc and low spatter
- Dense and porosity-free deposits
- Easy slag removal





Soudotec 399

HARDFACING

Tubular electrode* with Ni-Cr-B-Si matrix and a high percentage of tungsten carbides for hardfacing mild steel, low alloy steel and medium carbon content steel parts subjected to extreme abrasion with no violent impacts. Excellent resistance to acids and other corrosive agents.

Hardness (matrix) : 54 - 56 HRC
 Tungsten carbides : 2360 HV

APPLICATIONS

Drilling tools hardfacing and varied parts used in chemical industries, food industries, pulp and paper, aluminum industries, mines, foundries, brickworks, etc.

The product + :

- 65 % tungsten carbide content
- Low heat input due to very low amperage
- Dense, smooth, porosity-free and slag-free deposits
- Good resistance to heat
- Grindable deposit only (diamond grinder)

DEPOSIT RATING SCALE	
ABRASION	1 2 3 4 5 6 7 8 9 10
IMPACT	1 2 3 4 5 6 7 8 9 10
HEAT	1 2 3 4 5 6 7 8 9 10
CORROSION	1 2 3 4 5 6 7 8 9 10

Ø mm - (inch)

4.0 - (5/32)

5.0 - (3/16)



* Also available in metal-cored wire Soudotec MC 8399G and tubular rods Soudotec 396

STAINLESS STEEL

Selectarc 308L, 309L, 316L

STAINLESS
STEEL

A full line of all position rutile coating stainless steel electrodes certified by the Canadian Welding Bureau (CWB) for welding a wide range of stainless steel grades 301, 302, 304, 304L, 308L, 309, 309L, 321, 347, 316, 316L, 317, 317L, 318, etc.)

APPLICATIONS

Selectarc 308L = Welding of stainless steel grades 301, 302, 304L, 308, 308L, 321 et 347

Selectarc 309L = Welding of stainless steel grades 309, 309L, 304, 304L, 308 et 308L

Selectarc 316L = Welding of stainless steel grades 316, 316L, 317, 317L et 318

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

5.0 - (3/16)

The product + :

- Available in L-16 and L-17 versions
- Certified by CWB CSA W48-18
- Conforms to specifications: AWS A5.4 and ASME SFA 5.4
- Stable arc with low spatter
- Excellent on AC/DC+ power supply



Selectarc TIG / MIG / Flux-Cored 308L, 309L, 316L

STAINLESS
STEEL

A full line of stainless steel products in TIG / MIG and flux cored wire certified by the Canadian Welding Bureau (CWB) for welding a wide range of stainless steel grades 301, 302, 304, 304L, 308L, 309, 309L, 321, 347, 316, 316L, 317, 317L, 318, etc.)

APPLICATIONS

Selectarc 308L = Welding of stainless steel grades 301, 302, 304L, 308, 308L, 321 et 347

Selectarc 309L = Welding of stainless steel grades 309, 309L, 304, 304L, 308 et 308L

Selectarc 316L = Welding of stainless steel grades 316, 316L, 317, 317L et 318

GMAW (MIG)

Ø mm - (inch)

0.8 - (.030)

0.9 - (.035)

1.2 - (.045)

GTAW (TIG)

Ø mm - (inch)

1.2 - (.045)

1.6 - (1/16)

2.5 - (3/32)

3.2 - (1/8)

The product + :

- Certified by CWB CSA W48-18
- TIG / MIG conform to specifications: AWS A5.9 and ASME SFA 5.9
- Flux-Cored wire conforms to specifications: AWS A5.22 and ASME SFA 5.22
- Stable arc with low spatter



COPPER ALLOYS

Soudotec 536

Special formula aluminum-bronze alloy electrode* containing manganese and nickel for building up and welding copper alloys and a wide range of ferrous metals (steels, cast irons, stainless steels) to copper alloys.

Tensile strength : 100 000 psi (689 MPa)
Yield strength : 55 000 psi (380 MPa)
Elongation : 26 - 28 %
Hardness : 185 BH

APPLICATIONS

Ideal for dissimilar assemblies, aluminum-bronze with high manganese content. Boat propellers, turbines, pumps, couplings, gear teeth, punches, dies, rolls, etc.

Ø mm - (inch)

3.2 - (1/8)

Others Ø
Consult us

* Also available in TIG rods Soudotec T536 and solid MIG Soudotec M8536

COPPER
ALLOY

The product + :

- Excellent for parts subjected to compressive stress and wear
- Excellent for welding a wide variety of copper alloys
- Excellent weldability in all position
- Very good corrosion resistance
- Very low friction coefficient
- Stable arc and low spatter



Soudotec 57 FC

High strength flux-coated rod* with low silver content for brazing ferrous metals and copper alloys together or as dissimilar assemblies

Tensile strength : 100 000 psi (689 MPa)
Elongation : 25%
Hardness : 200 BH

APPLICATIONS

Dissimilar assemblies. Recommended for the repair of tempered steel parts, tools, molds (tool steel), extending drill bits, bearings, fittings, vices, bushings, etc. Do not use on aluminum and/or magnesium alloys.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

* Also available in bare rods Soudotec 57B

COPPER
ALLOY

The product + :

- Excellent fluidity
- May replace silver alloys in certain applications
- Good adherence to cast irons, copper alloys, stainless and alloy steels
- Deposits suitable to plating



Selectarc MIG / TIG CuSi3

Silicon bronze alloy solid GMAW (MIG) wire and GTAW (TIG) rods for welding copper, copper alloys and galvanized steels. Also recommended for overlaying surfaces subjected to corrosion or wear.

Tensile strength :	50 000 psi (350 MPa)
Yield strength :	23 000 psi (160 MPa)
Elongation :	45 %
Hardness :	70 - 80 BH

APPLICATIONS

Galvanized steels, cast copper parts, hydraulic and electrical installations, etc.

GMAW (MIG)
Ø mm - (inch)
0.6 - (.024)
0.8 - (.030)
0.9 - (.035)
1.2 - (.045)

GTAW (TIG)
Ø mm - (inch)
1.6 - (1/16)
2.5 - (3/32)
3.2 - (1/8)



COPPER ALLOY

The product + :

- Excellent for welding galvanized steels
- Excellent corrosion resistance
- Conform to standard AWS A5.7 and ASME SFA 5.7 : ERcSi-A
- Very good mechanical properties
- High copper content deposit

Selectarc MIG / TIG CuA9

Aluminum bronze solid wire GMAW (MIG) or GTAW (TIG) for welding copper-aluminum alloys, heterogeneous assemblies like copper to steel, cast iron to copper and welding of galvanized steels. .

Tensile strength :	> 80 000 psi (552 MPa)
Yield strength :	> 35 000 psi (242 MPa)
Elongation :	> 28 %

APPLICATIONS

Casting repair, general maintenance, galvanized sheet metal fabrications, and overlays on surfaces needing a bronze wearing surface.

GMAW MIG
Ø mm - (inch)
0.9 - (.035)
1.2 - (.045)

GTAW TIG
Ø mm - (inch)
1.6 - (1/16)
2.5 - (3/32)
3.2 - (1/8)



COPPER ALLOY

The product + :

- Conform to standard AWS A5.7 and ASME SFA 5.7 : ERcAl-A2
- Excellent weldability
- Excellent machinability
- The most versatile filler metal in the aluminum-bronze alloys

NICKEL ALLOYS

Selectarc B90

NICKEL
ALLOY

Inconel type electrode*. Semi-synthetic basic coated electrode with 140% recovery and an Inconel 600 type nickel base deposit. Used for repairing and joining of Nickel alloys, 5 and 9 % Nickel steels cryogenic stainless steels (down to -196°C), Incoloy 800 and other high temperature steels. High performance for joining dissimilar materials as stainless steels / low alloyed steels, stainless steels / Nickel alloys. Deposit insensitive to cracks, very good resistance to acids, salt and alkaline solutions, molten salt (ex. cyanide), flux of brazing, oxidizing and carburization atmosphere (avoid sulphurous).

CLASSIFICATION:

AWS A5.11 : ENiCrFe-3 UNS : W 86182 EN/ISO14172 : E-Ni 6182 (NiCr15Fe6Mn)

APPLICATIONS

Oven parts, burners, heat treatment equipment, cement works, moulds, tanks, transport and storage of liquid gas. Chemical industries, petrochemical industries, glassworks, civil engineering, repairing and maintenance workshops.

Note: Inconel and Incoloy' are the trade names of Inco Companies

BASE MATERIALS: 5%Ni, 9%Ni, 600, 601, 800, 800H, DSMn

MECHANICAL PROPERTIES

Tensile strength : > 87 000 psi (> 600 MPa)

Yield strength : > 55 000 psi (> 380 MPa)

Elongation: > 30 %

Impact (Charpy V) : 80 J à +20°C, > 60 J à -196°C

Heat resistance up to 1200°F

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)

5.0 - (3/16)



TYPICAL WELD METAL COMPOSITION (%)

C < 0.05, Si 0.5, Mn 5.5, Cr 16.0, Nb 2.0, Fe <10, Mo 0.2, Ni Rem

*Also available in wire Selectarc MIG B90 and rods Selectarc TIG B90 (AWS A5.14 : ERNiCr-3)

Selectarc B91

NICKEL
ALLOY

High recovery and high corrosion resistant Ni-Cr-Mo electrode*. Rutile-basic coated electrode with a high recovery (170%) deposit type alloy 625. Very good weldability, low spatter, easy slag removal and nice bead aspect.

CLASSIFICATION: AWS A5.11 : ENiCrMo-3 UNS : W86112 EN/ISO 14172: E-Ni6625 (NiCr22Mo9Nb)

APPLICATIONS

Welding of Nickel-Chromium-Molybdenum alloys to themselves and to lower alloyed steels as well as for welding of special austenitic stainless steels. Often used for butt welding and surfacing on low alloyed and high strength steels as well as for dissimilar joints, buffer layers and for difficult to weld steels. Crack resistant buffer layers on machine parts in earth movement and steel industries subject to impact and pressure.

BASE MATERIALS: 9% Ni, 625, 825, 904L, 254SMo

MECHANICAL PROPERTIES

Tensile strength : > 110 000 psi (> 760 MPa)
Yield strength : > 65 000 psi (> 450 MPa)
Elongation: > 30 %
Hardness: ~ 240 BH

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)



TYPICAL WELD METAL COMPOSITION (%)

C < 0.04, Si 0.6, Mn 0.8, Cr 21.0, Nb 3.3, Fe 4.0, Mo 8.5, Ni Rem

* Also available in rods Selectarc TIG B91 and wire Selectarc MIG B91 (AWS A5.14: ERNiCrMo-3)

Selectarc Ni 276

NICKEL
ALLOY

Nickel base electrode* Ni-Cr-Mo (C-276) type. Basic coated electrode with an alloyed core wire for welding of Nickel-Base alloys (alloy C-276) and other highly corrosion resistant Ni-Cr-Mo alloys as well as special stainless steel types. Stable arc, regular drop transfer, easy to watch weld pool, nice aspect of the weld beads. Very resistant in sulphurous acid environment, highly concentrated with chlorides and also in the presence of oxidizing solutions (FeCl, CuCl).

CLASSIFICATION: AWS A5.11 : ENiCrMo-4 UNS : W80276 EN/ISO 14172: E-Ni6276 (NiCr15Mo-15Fe6W4) - DIN 1736: EL-NiMo15Cr15W

APPLICATIONS

Chemical industries, piping systems, components of flue gas desulfurizing plants.

BASE MATERIALS: C-276, C-4, 625, 825, 254SMo

MECHANICAL PROPERTIES

Tensile strength : > 105 000 psi (> 720 MPa)
Yield strength : > 65 000 psi (> 450 MPa)
Elongation: > 30 %
Impact (Charpy V): > 70 J à +20°C

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

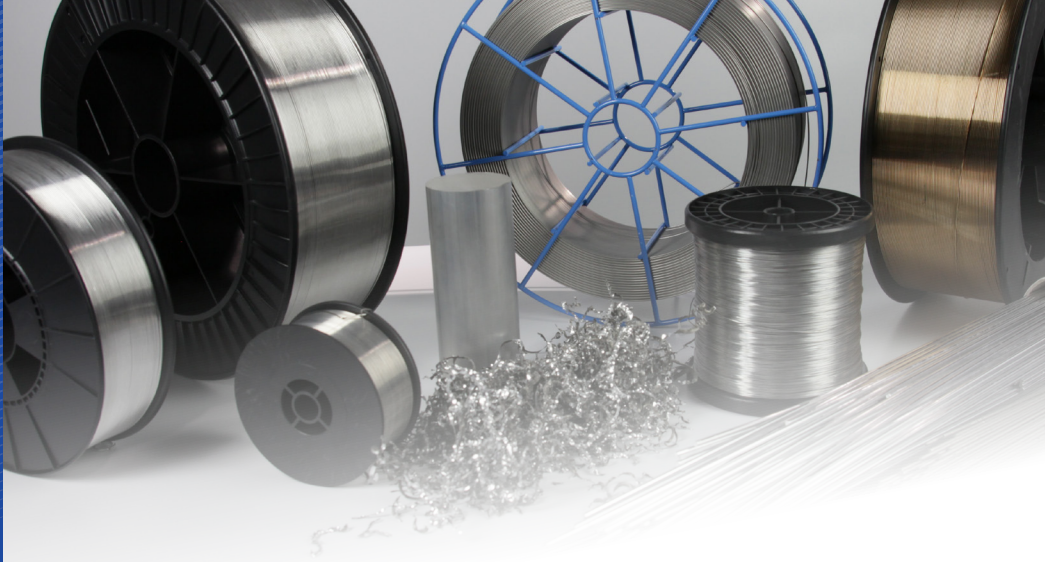
4.0 - (5/32)



TYPICAL WELD METAL COMPOSITION (%)

C < 0.02, Si 0.2, Mn 0.6, Cr 16.5, W 4.0, Fe 5.0, Mo 16.0, Ni base

* Also available in rods Selectarc TIG Ni276 and wire Selectarc MIG Ni276 (AWS A5.14: ERNiCrMo-4)



LIGHT METALS

TBW ZINAL 4

Zinc-aluminum extruded tubular flux-cored rod* containing a non-corrosive flux for low temperature soldering of aluminum and its various alloys, aluminum with copper and aluminum with stainless steel.

Bonding temperature: 440 - 460°C (824 - 860°F)
 Type of flame : Slightly carburizing

APPLICATIONS

Dissimilar assemblies. Heat exchangers, refrigeration and brazing of air conditioning systems, aluminum condensers, radiators, aluminum pipe fittings, etc. Not made for aluminum-magnesium alloy.

Ø mm - (inch)
1.2 - (.045)
1.6 - (1/16)
3.2 - (1/8)

* Also available in wire and preformed rings

**ZINC
ALUMINUM**

The product + :

- No other flux required
- Low bonding temperature
- Easy and quick application
- Less risk of deforming the base metal
- No post-braze cleaning required
- High fluidity and good wettability



Soudotec EasyMigAlu

Solid GMAW (MIG) wire made up of a high strength and highly liquified aluminum alloy for welding difficult-to-weld thin sheet, forged and cast aluminum alloys.

Tensile strength : 34 000 psi (235 MPa)

APPLICATIONS

Truck bodies, refrigeration, body work, aluminum furniture and boats, frames, tanks, pulleys, etc.

Ø mm - (inch)

0.9 - (.035)

1.2 - (.045)



ALUMINUM

The product + :

- Specially designed for dirty or difficult-to-weld aluminum alloys
- Very high fluidity
- Low melting point alloy
- Excellent weld pool control
- High mechanical resistance
- Excellent electrical conductivity
- Good colour match on aluminum
- Excellent hot cracking resistance

Soudotec 70

Specially designed electrode for welding and rebuilding aluminum and its various alloys.

Tensile strength : 34 000 psi (235 MPa)

Elongation : 15 - 25 %

Hardness: 40 - 60 BH

APPLICATIONS

Recommended for cast aluminum parts, truck bodies, transmissions, tanks, pipes, repairing machining errors, building up missing sections on castings and mouldings, extrusions, plates, etc.

Ø mm - (inch)

2.5 - (3/32)

3.2 - (1/8)

4.0 - (5/32)



ALUMINUM

The product + :

- Porosity-free and corrosion resistant deposit
- Good colour match with aluminum
- Stable arc in all positions
- Active coating especially suited for welding of contaminated aluminum
- Excellent cracking resistance
- May be used with torch
- Works only in polarity DC+

SILVER BRAZING

High Silver Content Flux-Coated Rods

Soudotec 6020 FC, 6030 FC, 6045 FC

Universal coated cadmium-free rod* from medium to very high silver content for brazing ferrous and non-ferrous metals; steels, stainless steels, copper alloys and nickel alloys.

BRAZING PARAMETERS

Bonding temperature 6020 FC : 570 - 620°C (1060 - 1150°F)
Silver content (Ag) : 56 % - AWS A5.8 : BA9-7

Bonding temperature 6030 FC: 720 - 750°C (1330 - 1385°F)
Silver content (Ag) : 30 %

Bonding temperature 6045 FC : 650 - 680°C (1200 - 1260°F)
Silver content (Ag) : 45 % - AWS A5.8 : BA9-36

Type of flame : Slightly carburizing

APPLICATIONS

Ideal for joining and repairing stainless steel equipment used in food and dairy industries. Excellent for high vacuum assemblies, laboratory apparatus, tubes, instruments, high pressure fittings, hospital equipment, refrigeration, etc.

Ø mm - (inch)

1.6 - (1/16)

2.5 - (3/32)

**SILVER
ALLOY**

The product + :

- From medium to very high capillarity
- High tensile strength
- Exceptional corrosion resistance
- Excellent electrical conductivity
- Good colour match with stainless steel
- Low bonding temperature



* Also available in bare rods, wire and shim



High Silver Content Tubular Alloys

Selectarc TBW 5034

SILVER ALLOY

Seamless, tubular flux-cored cadmium-free brazing product* with a medium silver content for brazing ferrous and non-ferrous metals; steel, stainless steel, nickel and copper alloys.

* Silver content (Ag) : 34%

BRAZING PARAMETERS

Bonding temperature TBW 5034 : 630 - 730°C (1166 - 1346°F)

Type of flame: Slightly carburizing

APPLICATIONS

Ideal for production assemblies. Excellent for brazing tubes and fittings, in electrical industries and for household appliances, etc.

Ø mm - (inch)

1.6 - (1/16)

2.0 - (5/64)

The product + :

- No extra flux required.
- No fragile coating
- Quick and easy application
- Longer shelf life of the product
- High fluidity and good wettability
- Easy and less cleaning after brazing
- Ratio metal/ flux: 88/12



* Available in rods, wire and preformed rings

Selectarc TBW 5045

Seamless, tubular flux-cored cadmium-free brazing product* with a high silver content for brazing ferrous and non-ferrous metals; steel, stainless steel, nickel and copper alloys.

* Silver content (Ag) : 45%
AWS A5.8: BAg-36

BRAZING PARAMETERS

Bonding temperature : 640 - 680°C (1184 - 1256°F)
Type of flame: Slightly carburizing

APPLICATIONS

Multiple usage in production and maintenance. Ideal for production assemblies. Excellent for brazing tubes and fittings, in electrical industries and for household appliances, refrigeration, etc.

Ø mm - (inch)

1.6 - (1/16)

2.0 - (5/64)

* Available in rods, wire and pre-formed rings

SILVER
ALLOY

The product + :

- No extra flux required
- No fragile coating
- Quick and easy application
- Longer shelf life of the product
- High fluidity and good wettability
- Less and easy cleaning after brazing
- Ratio metal/ flux: 88/12



Selectarc TBW 5056

Seamless, tubular flux-cored cadmium-free brazing product* with a very high silver content for brazing ferrous and non-ferrous metals; steel, stainless steel, nickel and copper alloys.

* Silver content (Ag) : 56%
AWS A5.8: BAg-7

BRAZING PARAMETERS

Bonding temperature : 620 - 655°C (1148 - 1211°F)
Type of flame: Slightly carburizing

APPLICATIONS

Ideal for joining and repairing stainless steel equipment used in food and dairy industries. Excellent for high vacuum assemblies, laboratory apparatus, tubes, instruments, high pressure fittings, hospital equipment, refrigeration, etc.

Ø mm - (inch)

1.6 - (1/16)

2.0 - (5/64)

* Available in rods, wire and preformed rings

SILVER
ALLOY

Les + du produit :

- No extra flux required
- No fragile coating
- Quick and easy application
- Longer shelf life of the product
- High fluidity and good wettability
- Easy and less cleaning after brazing
- Ratio metal/ flux: 88/12



Bare Rods

Copper-Phosphorous-Silver

6800

Bare cadmium-free self-fluxing rod with a high capillary action made up of a copper and phosphorous alloy for brazing copper and copper alloys (brass and bronze).

AWS A5.8 : BCuP-2

BRAZING PARAMETERS

Bonding temperature : From 730°C (1346°F)

Type of flame: Slightly carburizing

Tensile strength: 40 000 psi (275 MPa)

APPLICATIONS

Refrigeration, plumbing, air conditioning, electricity, copper, brass or bronze connectors, etc.

Ø mm - (inch)

1.6 - (1/16)

2.5 - (3/32)

3.2 - (1/8)



**SILVER
ALLOY**

The product + :

- Laser printed identification of AWS code and heat number on each rod
- Ideal for medium and small fit joints (< 1mm)
- Excellent capillary action
- Excellent electrical conductivity
- Self-fluxing alloy for pure copper applications only
- Good ductility
- Good corrosion resistance
- High tensile strength

6804

Bare cadmium-free self-fluxing rod with a high capillary action made up of a copper, silver (2%) and phosphorous alloy for brazing copper and copper alloys (brass and bronze).

AWS A5.8 : BCuP-6

BRAZING PARAMETERS

Bonding temperature : From 740°C (1364°F)

Type of flame: Slightly carburizing

Tensile strength : 40 000 psi (275 MPa)

APPLICATIONS

Refrigeration, plumbing, air conditioning, electricity, copper, brass or bronze connectors, etc.

Ø mm - (inch)

1.6 - (1/16)

2.5 - (3/32)

3.2 - (1/8)



**SILVER
ALLOY**

The product + :

- Laser printed identification of AWS code and heat number on each rod
- Ideal for standard and small fit joints (0.05-0.5 mm)
- Excellent capillary action
- Excellent electrical conductivity
- Self-fluxing alloy for pure copper applications only
- Good ductility
- Good corrosion resistance
- High tensile strength

Soudotec 6805

Bare cadmium-free self-fluxing rod with a high capillary action made up of a copper, silver (5%) and phosphorous alloy for brazing copper and copper alloys (brass and bronze).

AWSA5.8 : BCuP-3

BRAZING PARAMETERS

Bonding temperature : From 710°C (1310°F)

Type of flame: Slightly carburizing

Tensile strength : 40 000 psi (275 MPa)

APPLICATIONS

Refrigeration, plumbing, air conditioning, electricity, copper, brass or bronze connectors, etc.

Ø mm - (inch)

1.6 - (1/16)

2.5 - (3/32)

3.2 - (1/8)



**SILVER
ALLOY**

The product + :

- Laser printed identification of AWS code and heat number on each rod
- Ideal for small fit joints
- Excellent capillary action
- Excellent electrical conductivity
- Self-fluxing alloy for pure copper applications only
- Good ductility
- Good corrosion resistance
- High tensile strength

Soudotec 6805 AWS A5.8 BCuP3 15% Ag lot 21322-03

Soudotec 6806

Bare cadmium-free self-fluxing rod with a high capillary action made up of a copper, silver (15%) and phosphorous alloy for brazing copper and copper alloys (brass and bronze).

AWS A5.8 : BCuP-5

BRAZING PARAMETERS

Bonding temperature : From 700°C (1292°F)

Type of flame: Slightly carburizing

Tensile strength : 40 000 psi (275 MPa)

APPLICATIONS

Refrigeration, plumbing, air conditioning, electricity, copper, brass or bronze connectors, etc.

Ø mm - (inch)

1.6 - (1/16)

2.5 - (3/32)

3.2 - (1/8)



**SILVER
ALLOY**

The product + :

- Laser printed identification of AWS code and heat number on each rod
- Ideal for small fit joints
- Excellent capillary action
- Excellent electrical conductivity
- Self-fluxing alloy for pure copper applications only
- Good ductility
- Good corrosion resistance
- High tensile strength

* Available in Shim : Soudotec SHM15

SOLDERING

Tin-Silver Alloy

Soudotec 6157

High strength solid wire made up of a tin silver alloy for soldering ferrous and non ferrous metals; steels, stainless steels, copper alloys and nickel alloys at low temperatures.

BRAZING PARAMETERS

Bonding temperature : 195°C (385°F)
 Type of flame : Slightly carburizing
 Tensile strength : 15 500 psi (106 MPa)

APPLICATIONS

Ideal for brazing thin sections; printed circuits, boilers, tanks, instrumentation; suitable for the food industry, hospitals, breweries, dairy plants, sugar refineries, etc.

Ø mm - (inch)

1.6 - (1/16)

3.2 - (1/8)



SILVER
ALLOY

The product + :

- Does not contain any contaminant (cadmium, lead, antimony, etc.)
- High fluidity
- Deposits are shiny and suitable to plating
- Good conductivity
- Good colour match on stainless steel
- Good resistance to corrosion and vibrations
- Reduced risk of deformation

SURFACE TREATMENT PRODUCTS

Soudotec PICK LF

The Soudotec pickling paste PICK LF allows you, producing 70 to 80% less nitrous gaz, to reestablish the corrosion resistance quality of stainless steel. In less than 1 hour, the paste strips the steel and completely removes the contaminated layer as well as the weakened chromium layer, leaving a clean metallic surface.

Weight (kg) / pot

2

12

20 (liquid)



PICKLING
PASTE

The product + :

- 2 Kg of the product allows you to treat 160 to 300 meters of weld beads.
- The liquid version in 20 kg jar can be pulverise.
- Produce 70 à 80 % less nitrous gaz than regular version.

Soudotec NEUTRA

The Soudotec neutralizing paste Neutra is the product that neutralizes and eliminates the effect of residual acids produced by the pickling paste. Neutralization of acids is essential from an environmental point of view.

Weight (kg) / pot

2



NEUTRALIZING

The product + :

- 1 Kg of the product allows you to treat 80 to 150 meters of weld beads.

FSH WELDING EcoPassiv

EcoPassiv is an extremely effective decontamination and passivating agent for cleaning free iron particles on all stainless steel surfaces. This product was developed to meet the passivating norms ASTM A 967-05. Formulated water base and a performing organic acid mix, surfactants and corrosion inhibitors, EcoPassiv has a very weak toxicity and replaces effectively the nitric acid base passivation agent.

Packaging

750 ml, 3.78 L, 18.9 L, 205 L



PASSIVATING

Les + du produit :

- Dissolves free iron ions
- Highly effective.
- 0% of COV (volatile organic composites)
- Effective on all types of stainless steel
- Water base and organic acid
- Weak toxicity and biodegradable

FSH WELDING CleanRust

CleanRust is an excellent water-based biodegradable acid cleaner. Made with organic acids (ex: citric), it is mainly used to clean inorganic contaminants such as rust, oxidation, scale and calcium salts. CleanRust was designed to be used on ferrous metals (steel, cast iron and stainless steel) to remove rust and scale, on non ferrous metals (copper, aluminum, zinc, tin, etc.) to clean oxidation. It can also be used on painted surfaces, concrete, masonry, all plastics, glass and wood.

Packaging

18.9 L



RUST
REMOVER

The product + :

- Thoroughly cleans rust & oxidation
- Increases paint adherence on all metal substrates;
- Water based and biodegradable 0% VOC (Volatile Organic Compound)
- Great to dissolve calcium

FSH WELDING BlueClean

BlueClean is a very powerful water based degreaser formulated with a mix of surfactants and alkaline agents. BlueClean is a concentrate that can be used pure on large jobs or diluted with water. BlueClean is used to clean oil and grease of mineral, vegetable, synthetic and animal origins, grimy roads, cutting oil, fingerprints, low fusion waxes, mold, yeast, bacteria, ink, stains of all kinds and carbon.

Packaging

750 ml, 3.78 L, 18.9 L, 205 L



DEGREASER

The product + :

- Deeply cleans hard to remove contaminants.
- Highly effective
- Water base and biodegradable
- 0% of VOC (volatile organic composites)
- Excellent on ferrous metals, plastics and concrete

FSH WELDING THERMAGEL

Thermagel is a unique odorless polymer gel specially formulated to create a heat barrier or shield to protect parts from brazing or soldering flames and welding.

Format (Liter)

1



HEAT
SHIELD
GEL

The product + :

- Easy to apply, harmless to skin, non-toxic, non corrosive and biodegradable

CUTTING, CHAMFERING AND PIERCING

212 SP

Electrode specially designed for easy gouging, cutting and piercing of any ferrous and non-ferrous metals.

APPLICATIONS

Ideal for removing defective or old weld beads, preparing workpieces, opening grooves prior to welding, gouging cracks, piercing holes, eliminating irregularities on all metals, including cast irons, stainless steels, copper, brass, aluminum, etc.

Ø mm - (inch)

3.2 - (1/8)

4.0 - (5/32)

5.0 - (3/16)



CUTTING AND CHAMFERING

The product + :

- Less noise and smoke than compressed air processes
- No adherence between the molten metal and the base metal
- Excellent on AC power supply due to the presence of oxides in the coating
- Easy striking and restriking (OCV = 60 Volts)
- Superior efficiency, speed and use in position
- Non-conductive coating

BROCO® PRIME CUT

ULTRATHERMIC
CUTTING

Prime Cut is an ultrathermic cutting system operating at temperatures exceeding 10 000°F (5538°C). Because of this very high temperature, the surface preheating, often long and exhausting, is not required. Additionally, surface grinding and gouge cleaning are not required because Prime Cut does not leave any carbon deposit.

Because of the unique burning action of Prime Cut's proprietary, ultrathermic rods literally liquefy any material in their path, using material itself as fuel. They will quickly cut, pierce and gouge almost any known material including cast iron, stainless steel, alloy or mild steel, concrete, granite, nickel, titanium and aluminum.



Prime Cut ultrathermic cutting system is safer than other types of cutting equipment because they do not require high amperage or potentially dangerous acetylene (or any other secondary fuel). Operator comfort and safety are also improved, because Prime Cut produces less noise, smoke and noxious gases than other systems. The 6, 12 or 24 volt DC ignition system, single oxygen fuel source with one regulator and completely self-contained portable kit assures that a Prime Cut system is easy to operate....even for the first time user.

Watch our Broco Prime Cut Video



BROCO[®] PRIME CUT

ULTRATHERMIC
CUTTING

Characteristics

- **Powerful performance**
- **Easy to operate, safe and multi-purpose system**
- **Easy ignition with a 6, 12 or 24 volts battery**
- No preheating or grinding required
- Rods can be bend for out-of-position cutting
- Flash arrestor in the torch for maximum protection
- No acetylene or other gases required (only oxygen)
- Adjustable oxygen pressure for small or large works
- 4 diameters (3/16", 1/4", 3/8" and 1/2") and 4 lengths (18", 36", 48" and 60") of rods available

INDUSTRIAL APPLICATIONS

When saving time is the primary consideration, Prime Cut is the professional's first choice for applications involving specialty gouging, piercing or cutting.

- **Pin piercing and removal**
- Gouge old welds or cracks
- Petrochemical
- Asphalt plants
- Building maintenance
- City departments
- Demolition
- Heavy equipment
- Railways
- Road systems
- Construction
- Quarries
- Welding shops
- Plant maintenance
- Navy construction
- Emergency service
- Foundries
- Scrap yards
- Mining
- Cement
- Agriculture



Underwater Ultrathermic Cutting System: BR-22

Underwater ultrathermic cutting system provides the fastest, most efficient and cost effective means of completing underwater tasks involving cutting, piercing, or gouging of a broad ferrous and nonferrous metal range. The BR-22 Cutting Torch is ergonomically designed for diver comfort and reducing forearm fatigue. The non-conductive flexible coupler joining the oxygen control valve to the torch head is a key safety feature. The BR-22 can also be used as a welding electrode holder. The Underwater Ultrathermic Cutting System uses only oxygen and maximum of 150 amps. Other equipment may require as much as 500 amps to cut. Our Ultrathermic Cutting Rod readily ignites from a spark generated by a 12 or 24 volt auto or marine battery and will continue to burn with electrical current removed until the flow of oxygen is stopped or the rod is consumed.

Underwater Ultrathermic Cutting Rods

The Ultrathermic Cutting Rod operate using oxygen only and produces a temperature in excess of 10 000°F (5 538°C), hot enough to quickly cut or melt through almost anything including cast iron, stainless steel, brass, other ferrous and non-ferrous metals and concrete. Ultrathermic Cutting Rods can be bent 90 degrees or more to access hard to reach places without restricting oxygen flow or causing insulation to split or flake off. Underwater Ultrathermic Cutting Rods are available in 1/4" (6,3 mm) and 3/8" (9,5 mm) diameters.



Underwater BR-20 Welding Stinger

The **BR-20 Welding Stinger** is lightweight, durable and designed to hold the electrode at the optimum angle to the work piece delivering quality welds while reducing operator fatigue. The movable jaw design accepts a wide range of electrode diameters. All brass parts last longer under extreme conditions.

Underwater welding coated electrodes: Easytouch

The **Easytouch** electrodes are the economic mild steel electrodes, all positions, conceived to meet all the necessary specifications. It is easy to strike the arc, to run (a controllable puddle with rippled bead appearance) and to clean. The ideal choice for the anodes or for underwater non-structural repairs.

Underwater welding coated electrodes: Softouch

The **Softouch** electrodes are the **top of the range** electrodes in mild steel or in stainless steel, all positions, conceived to exceed all the necessary specifications in the field of underwater welding (high level of radiographic and mechanical test results). It is easy to strike the arc, to run and to clean.

For more information consult the **FSH Welding Canada** technical department





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