

# Index

1 1/4Cr 1/2Mo . . . . . B-26  
1.5% Lanthanum . . . . . B-23  
2% Ceriated  
2% Thoriated  
3M Products . . . . . E-12, E-16, E-20,  
E-21, E-27, E28, E-29, E-30  
4-IN-1 Clamps . . . . . D-8  
A 230 AC/DC . . . . . C-35  
A 250 AC/DC  
Acetylene . . . . . A-10  
Air Cooled MIG Guns . . . . . C-20  
AIR LIQUIDE Equipments . . . . . C-4, C-6,  
C-8, C-10, C-35, C-37  
**ALFLUX** . . . . . A-18  
**ALIGAL 1** . . . . . A-20  
**ALIGAL 2**  
**ALIGAL 3**  
**ALIGAL 5**  
**ALIGAL 13**  
**ALIGAL 15**  
**ALIGAL 28**  
**ALIGAL BEVERAGE**  
**ALIGAL DRAFT ALE**  
**ALIGAL DRAFT LAGER**  
**ALIGAL DRAFT STOUT**  
**ALIGAL WINE**  
**ALMIG** . . . . . A-18  
Alphagaz . . . . . A-22, A-23  
**ALTIG** . . . . . A-18  
**ALTOP** . . . . . A-2, A-8, A-9, A-23  
Aluminum / Electrodes . . . . . B-6  
Aluminum / Rod . . . . . B-28  
Aluminum / Wire  
Angle Clamp . . . . . D-9  
Aprons . . . . . E-3  
**ARCAL 14** . . . . . A-19  
**ARCAL 21**  
**ARCAL 39**  
**ARCAL 121**  
**ARCAL 129**  
**ARCAL 211**  
**ARCAL / Shielding Gases** . . . . . A-16  
Argon . . . . . A-12  
Fixed Shade  
Welding Helmets . . . . . E-15  
Automated Plasma Welding . . . . . C-42  
Beanies . . . . . E-22  
Bibs . . . . . E-3  
Blankets . . . . . E-23

**BLUESHIELD 620-308L** . . . . . B-29  
**BLUESHIELD 620P-308L**  
**BLUESHIELD 622-316L**  
**BLUESHIELD 622P-316L**  
**BLUESHIELD 624-309L**  
**BLUESHIELD 624P-309L**  
**BLUESHIELD 630-308L** . . . . . B-30  
**BLUESHIELD 630-309L**  
**BLUESHIELD 630-316L**  
**BLUESHIELD 640-308L** . . . . . B-31  
**BLUESHIELD 640-308L HiSil**  
**BLUESHIELD 640-309L**  
**BLUESHIELD 640-309L HiSil**  
**BLUESHIELD 640-316L**  
**BLUESHIELD 640-316L HiSil**  
**BLUESHIELD 650-308L** . . . . . B-32  
**BLUESHIELD 650P-308L**  
**BLUESHIELD 652-316L**  
**BLUESHIELD 652P-316L**  
**BLUESHIELD 654-309L**  
**BLUESHIELD 654P-309L**  
**BLUESHIELD MNR** . . . . . B-5  
**BLUESHIELD / Shielding Gases** . . . . . A-17  
**BLUESHIELD**  
Submerged-Arc Wire . . . . . B-25  
**BLUESHIELD Tungsten** . . . . . B-23  
Bobcat 250 . . . . . C-38  
BRAZE WELDING . . . . . B-20  
BRAZING . . . . . B-19, B-20, B-21, B-22  
BRAZING ROD . . . . . B-21  
BRAZING WIRE 450  
BRAZING WIRE 452  
BRAZING WIRE 560  
BRAZING WIRE, EASY-FLO 45  
Brushes . . . . . D-17  
Bulk Pak . . . . . A-3  
Bulk Supply  
Cable Connectors . . . . . D-3  
Cable Lugs . . . . . D-4  
Cables . . . . . D-2  
Cages / Industrial Cylinders . . . . . A-28  
Cages / Propane Cylinders  
Cannisters . . . . . D-6  
Cape Sleeves . . . . . E-3  
Caps / Welding . . . . . E-22  
Carbon Dioxide . . . . . A-12  
Carts / Cylinder . . . . . A-24, A-25  
Carts / MIG Welder . . . . . C-48  
Cast Iron / Electrodes . . . . . B-6  
Caterpillar Engine . . . . . C-40

C-Clamps . . . . . D-10  
Certified Analysis . . . . . A-22, A-23  
CGA Cylinder Connections . . . . . A-21  
Chipping Hammers . . . . . D-17  
Clamps . . . . . D-7, D-8, D-9, D-10  
Compressed Air . . . . . A-13  
Connections . . . . . A-21  
Connectors . . . . . D-3  
Contour Marker . . . . . D-12  
Copper Ground Clamps . . . . . D-7  
CREWS Products . . . . . E-11, E-24  
**CRYSTAL 4043** . . . . . B-28  
**CRYSTAL 4047**  
**CRYSTAL 5356**  
CST 280 . . . . . C-36  
Curved Jaws . . . . . D-10  
Cutting and Gouging / Electrodes . . . . . B-5  
CV-400 . . . . . C-14  
Cylinder Handling . . . . . A-4  
Cylinder Size Charts . . . . . A-6, A-7, A-8  
DC-400 . . . . . C-15  
Deltaweld 452 . . . . . C-14  
Dimension 452 . . . . . C-15  
Dynasty 200 . . . . . C-26  
Dynasty 350 . . . . . C-27  
E10018-D2 . . . . . B-4  
E10018-M  
E11018-M  
E12018-M  
E2209LT0-1 E2209LT0-4 . . . . . B-32  
E2209LT1-1 E2209LT1-4  
E308L-17 . . . . . B-29  
E308L-E309L-E316L-ER347 . . . . . B-25, B-27  
E308LT0-1 E308LT0-4 . . . . . B-32  
E308LT1-1 E308LT1-4  
E309L-17 . . . . . B-29  
E309LT0-1 E309LT0-4 . . . . . B-32  
E309LT1-1 E309LT1-4  
E316L-17 . . . . . B-29  
E316L Stainless . . . . . B-25, B-27, B-29  
E316LT0-1 E316LT0-4 . . . . . B-32  
E316LT1-1 E316LT1-4  
E4918-1-H4 . . . . . B-3  
E4928

E6010	B-2
E6011	
E6013	
E7014	
E7018	B-3
E7018-1	
E7018-1-H4R	
E7018-A1	B-4
E7024	B-2
E70C-3M-H8	B-11
E70C-6-H4/ E492C-6M-H4	
E70C-6M-H4/ E70C-6-H4	
E70C-6M-H4/ E70C-6-H4	
E70C-6M-H4/ E70C-6-H4	
E70C-6M-H4/ E70C-6-H4	
E70T-1-H16	B-15
E70T-1-H8	
E70T-1M-H8	
E70T-4-H16	B-14
E70T-9-H16	B-15
E70T-9-H8	
E70T-9M-H8	
E71T-11-H16	B-14
E71T-12MJ-H4	B-16
E71T-14-H16	B-14
E71T-1-H8	B-15, B-16
E71T-1M-H8	
E71T-1MJ-H4	B-16
E71T-9-H8	B-15, B-16
E71T-9M-H8	
E71T-9MJ-H4	B-16
E71T-GS-H16	B-14
E8018-B2	B-4
E8018-C1	
E8018-C2	
E8018-C3	
E81T1-A1-H16	B-17
E81T1-B2-H8	
E81T1-Ni2-H8	
E81T1-Ni2M-H8	
E81T1-W2-H8	
E81T1-W2M-H8	
E9018-B3	B-4
E9018-M	
E91T1-B3-H8	B-17
EA2	B-26
Ear Clamps	D-8
EB2	B-26
EB3	
EG	
EH12K	
Electrodes Holders	D-5

Electrodes Ovens	D-6
Electrodes / Mild-Steel	B-2, B-5
Electrodes, Low Alloy	B-4, B-5
EM12K	B-25
ER308L	B-26, B-30, B-31, B-33
ER308LSi	B-31
ER309L	B-26, B-30, B-31, B-33
ER309LSi	B-31
ER316L	B-26, B-30, B-31, B-33
ER316LSi	B-31
ER347	B-26, B-33
ER4047	B-28
ER5356	
ER70S-2	B-20
ER70S-3	B-9, B-10, B-20
ER70S-6	
EVERDUR 656	B-20
EWCe-2	B-23
EWLa-1.5	
EWP	
EWTh-2	
EWZr-1	
Extraction Arms	E-25, E-26
Eye Wear / Safety	E-11, E-24
F7A0-EM12K	B-25
F7A2-EM12K	B-27
F7A4-EM12K	B-25
F7A6-EM12K	B-25, B-27
F7P6-EM12K	
Faceshields	E-14
FCAW / Filler Metals	B-14, B-15, B-16, B-17, B-18, B-32
Fillet Weld Gauges	D-18
Filter Carts	E-26
Filter Plates	E-18
Fittings	D-16
FL BRONZE	B-20
<b>FLAMAL</b>	A-11
Flux	B-21, B-22
FLUX COATED BRAZING ROD 560	B-21
Flux Cored, Wire	B-14, B-15, B-16, B-17, B-18
Food Industry Gases / <b>ALICAL</b>	A-20
Fume Extraction Systems	E-25, E-26
Gas Supply Modes	A-2, A-3

Gas Tungsten Arc Welding	B-23
Gasoline Engine	C-37, C-38, C-39
Glasses / Safety	E-11
Gloves	E-4, E-5, E-6, E-7, E-8
GMAW / Filler Metals	B-28, B-31
GMAW / MIG Welding Equipments	C-3, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, C-14, C-15, C-16, C-17, C-18, C-19, C-20, C-21
Goggles	E-13
Goldstar 452	C-31
Ground Clamps	D-7
GTAW / Filler Metals	B-23, B-30
GTAW / TIG Welding Equipments	C-22, C-23, C-24, C-25, C-26, C-27
Hammers	D-17
Handling Cylinders	A-4
HANDY BRAZING FLUX	B-22
HANDY BRAZING FLUX, TYPE A-1	
HANDY BRAZING FLUX, TYPE B-1	
Handy Flux	B-21, B-22
Hard Hats	E-17
Hardfacing, Electrodes	B-6, B-7
Headgears	E-14
Hearing Protection	E-12, E-30
Helium (Balloon)	A-14
Helium (Industrial)	A-13
Helmets	E-15, E-16, E-27, E-28, E-29
HERCULES IRON	B-20
High Alloy, Electrodes	B-5
High Heat Protection and Accessories	E-8
HI-TENSILE	B-20
Holders	D-5
Honda Engine	C-37
Hoses / Welding	D-13, D-14
Hydrogen	A-14
Hypertherm Equipments	C-44, C-45, C-46
Infrared Non-Contact Thermometers	D-19
Inspection Mirrors	D-20
Integro Twin Arc Robotic Systems	C-41
Invertec V-155 S	C-34
Invertec V205-T AC/DC	C-26
Invertec V310-T AC/DC	C-27
Inverter V-275 S	C-36

Jackets	E-2
Kohler Engine	C-38, C-39
Kubota Engine	C-40
LA 100	B-25, B-33
LA 100 C-MG	B-13
LA 10018-D2	B-4
LA 10018-M	
LA 110 C-MG	B-13
LA 11018-M	B-4
LA 12018-M	
LA 12K	B-25
LA 18 PLUS LMP	B-3
LA 23	B-25
LA 46	
LA 59	
LA 6010	B-2
LA 6013	
LA 7014	
LA 7018	B-3
LA 7018-A1	B-4
LA 7024	B-2
LA 7028	B-3
LA 80 C-Ni1	B-13
LA 80 C-Ni2	
LA 8018-B2	B-4
LA 8018-C1	
LA 8018-C2	
LA 8018-C3	
LA 80C-W	B-13
LA 81 T1-A1	B-18
LA 81 T1-B2	
LA 81 T1-Ni2	
LA 81 T1-W2	
LA 90 C-M	B-13
LA 9018-B3	B-4
LA 9018-M	
LA 90C-B3	B-13
LA 91-T12M	B-16
LA C-3M	B-11
LA C-6	B-11, B-12
LA C-6CR	B-11
LA C-6CT	
LA C-6LF	B-11, B-12
LA C-6LS	B-11
LA EXELARC 18	B-3
LA S-3	B-9, B-10
LA S-6	
LA T-11	B-14
LA T-14	

LA T-9 LF	B-15
LA T-9 PLUS	
LA T-91	
LA T-91 C60 Ni1	B-17
LA T-91 LF	B-16
LA T-91 PLUS	B-15
LA ULTRA 11	B-2
LA UNISHIELD	B-14
Laboratory	A-22, A-23
<b>LASAL</b> 1	A-19
<b>LASAL</b> 2	
<b>LASAL</b> 4	
<b>LASAL</b> 34	
<b>LASAL</b> 39	
<b>LASAL</b> P51	
<b>LASAL</b> 53	
<b>LASAL</b> 61	
<b>LASAL</b> 83	
<b>LASAL</b> 105	
<b>LASAL</b> 155	
<b>LASAL</b> 201	
<b>LASAL</b> 2001	
Laser Industry Gases / <b>LASAL</b>	A-19
Lenses	E-19
LEXAL 2209	B-32
LEXAL 2209P	
Lighter	D-16
LINCOLN Equipments	C-5, C-7, C-9, C-11, C-12, C-14, C-15, C-16, C-17, C-24, C-25, C-26, C-27 C-34, C-36, C-38, C-39, C-40
Locking U-Clamps	D-10
Low Alloy / Electrodes	B-5
Lugs	D-4
Magnet Square	D-9
Magnetic Carts / Cylinder	A-26
Magnetic Levels	D-18
Magnets	E-24
Maintenance and Repair Electrodes	B-5, B-6, B-7
Manifold	A-2
Markers	D-12, D-20, D-21
Maxstar 150 S	C-34
MCAW	B-10, B-11, B-12, B-13
Mechanized Cutting Systems	C-47
Metal Marker	D-20, D-21
Metal-Cored Welding	B-10, B-11, B-12, B-13
Micro Bulk	A-3

MIG / Filler Metals	B-28
MIG Pliers	D-8
MIG Torches	C-18, C-19
MIG Welding and Flame Cutting / Gloves	E-5, E-6
MIG Welding Parameters	C-3
MIG/GMAW Welding Process	
Mild Steel / Electrodes	B-2, B-5
MILLER Equipments	C-5, C-7, C-9, C-11, C-13, C-14, C-15, C-16, C-17, C-24, C-26, C-27, C-34, C-36, C-37, C-38, C-39, C-40
MILLER Products	E-16
Millermatic 140	C-5
Millermatic 180 Auto-Set	C-7
Millermatic 212	C-9
Millermatic 252	C-11
Millermatic 350P	C-13
<b>MINITOP</b>	A-2, A-9, A-10
Mirrors	D-20
MNR, 4 x 4	B-5
MNR, BUILDER 38	B-6
MNR, BUILDER MN	
MNR, CAST 55	
MNR, CAST 99	
MNR, CHINOOK	B-5
MNR, ERASER	
MNR, HARD 58	B-7
MNR, HARD 60	
MNR, KROME 62	
MNR, KROME 68	
MNR, LITE	B-6
MNR, REBEL	B-5
MNR, SILVER 45	B-6
MNR, STRIKER	B-5
MNR, TRI-CAST	B-6
MNR, UNIVERSAL	B-5
MNR, XTREME	
Nederman Products	E-25, E-26
Nitrogen	A-15
NUCLEARC LA 7018	B-3
Nutech Integro Arc Systems	C-41
OE S1 CrMo2	B-26
OE S2Mo	
OE S308L	B-26, B-33
OE S309L	
OE S316L	
OE S347	

# Index

- OE S3NiMo-1 . . . . . B-26  
OE SD2  
OE SD3  
OERLIKON Wire
- OP 121TT . . . . . B-27  
OP 139  
OP 176
- OP 33 . . . . . B-27, B-33  
OP 76
- Ovens . . . . . D-6
- Oxygen Gas . . . . . A-10
- Packaging Information . . . . . B-34
- Paint Markers . . . . . D-20, D-21
- Pants . . . . . E-2
- Parweld XP8 Mig Gun . . . . . C-20, C-21
- Pipe Jack Stands . . . . . E-24
- Pipe Pliers . . . . . D-9
- Pipe Stands . . . . . D-11
- Plasma Cutting  
Equipments . . . . . C-37, C-38, C-39, C-40
- Pliers . . . . . D-7, D-8, D-9, D-10
- Portable Cylinders . . . . . A-2, A-9
- Portable Welding Screens . . . . . E-23
- Power Cable Extensions . . . . . E-24
- Power MIG 140C . . . . . C-5
- Power MIG 180C . . . . . C-7
- Power MIG 215XT . . . . . C-9
- Power MIG 255XT . . . . . C-11
- Power MIG 350MP . . . . . C-12
- Power Sources . . . . . C-25, C-36, C-37,  
C-38, C-39, C-40
- Power Wave 455M . . . . . C-17
- Powermax 1000 . . . . . C-45
- Powermax 1250 . . . . . C-46
- Powermax 1650
- Powermax 190C . . . . . C-44
- Powermax 30
- Powermax 45 . . . . . C-45
- PowerWeld Products . . . . . E-24
- Precision TIG 225 . . . . . C-24
- Precision TIG 275 . . . . . C-25
- Precision TIG Welding . . . . . C-23
- Pro 300 CC/CV . . . . . C-40
- Propane . . . . . A-11
- Pure Gases . . . . . A-12, A-13, A-14, A-15
- Purity Grades . . . . . A-22, A-23
- Push-Pull Gun . . . . . C-13
- Python-Push-Pull Gun . . . . . C-12
- Ranger 250 . . . . . C-38
- Ranger 305G . . . . . C-39
- Rap-Arounds . . . . . E-24
- Reels / Welding Hose . . . . . D-15
- Respiratory Protection . . . . . E-20, E-21,  
E-27, E-28, E-29, E-30
- Robotic Systems . . . . . C-41
- Saddle Machines . . . . . D-11
- Safe Practices for Welding . . . . . C-2
- Safe Tube . . . . . E-24
- SAW / Submerged-Arc  
Welding . . . . . B-25, B-26, B-27
- Scandina Cap . . . . . A-22, A-23
- Screens . . . . . E-23
- Semi-Automatic Torches . . . . . C-18
- Shade Selection . . . . . E-10
- Sheet Metal Clamps . . . . . D-10
- Shielding Gases / **ARCAL** . . . . . A-16, A-17  
Shielding Gases / **BLUESHIELD**
- Shielding Metal Arc Welding . . . . . B-2, B-3,  
B-4, B-5, B-6, B-7
- Shurlite Spark-Lighter . . . . . D-16
- SIL-FOS . . . . . B-21  
SIL-FOS 15  
SIL-FOS 5  
SIL-FOS 6M
- Silver Brazing / Electrodes . . . . . B-6
- Silver Brazing / Rods . . . . . B-21  
SILVER SOLDER, EASY-FLO 45
- Sizing of Garmets . . . . . E-4
- Sleeves . . . . . E-3
- SMARTOP** . . . . . A-2, A-8
- SMAW / Filler Metals . . . . . B-2, B-3, B-4,  
B-5, B-6, B-7, B-8
- Soapstone Holders . . . . . D-16
- Soldering . . . . . B-22
- Spark-Lighter . . . . . D-16
- Specialty Gas . . . . . A-22, A-23
- Specialty Welding Electrodes for  
Maintenance and Repair . . . . . B-5, B-6, B-7
- Stabilizing Ovens . . . . . D-6
- Stainless Consumables . . . . . B-29, B-30, B-31
- Stainless, Duplex and Nickel Alloys . . . . . B-27
- Stands . . . . . D-11, E-24
- Steel / Electrodes . . . . . B-5
- Steel Ground Clamps . . . . . D-7
- Stick Electrodes Welding  
Equipments (SMAW) . . . . . C-32, C-33, C-34,  
C-35, C-36, C-37
- STRAIGHT WELD LA S-3 . . . . . B-10  
STRAIGHT WELD LA S-6
- Submerged-Arc  
Stainless Steel / Fluxes . . . . . B-33  
Submerged-Arc Stainless Steel / Wire
- Submerged-Arc Wire . . . . . B-25, B-26
- SUPER BRONZE . . . . . B-20  
SUPERWELD
- Switch-over . . . . . A-2
- Syncrowave 200 . . . . . C-24
- Syncrowave 250 DX . . . . . C-25
- Tape Measurers . . . . . D-18
- Temperature Indicator Sticks . . . . . D-19
- Thermometers . . . . . D-19, E-24
- TIG / Aluminum Rod . . . . . B-28
- TIG Welding / Gloves . . . . . E-6
- Tip Cleaner . . . . . D-16
- Torches . . . . . C-18, C-19, C-20, C-21, C-28
- Trailblazer 302 . . . . . C-39
- Transporting cylinders . . . . . A-5
- Tregaskiss Products . . . . . C-18, C-19,  
C-20, C-21
- Tungsten . . . . . B-23
- V205-T AC/DC . . . . . C-26
- Vantage 300 . . . . . C-40
- Wall Brackets / Cylinder . . . . . A-27
- Welding Cables . . . . . D-2
- Welding Equipments . . . . . Section C
- Welding Gun . . . . . C-20, C-21, C-22
- Welding Hose Reels . . . . . D-15
- Welding Hoses . . . . . D-13, D-14
- Welding Machines . . . . . Section C
- Wheels / Replacement . . . . . A-27
- Wire / Carbon Steel  
Flux Cored, Gas Shielded . . . . . B-15, B-16
- Wire / Carbon Steel  
Flux Cored, Self Shielded . . . . . B-14
- Wolfpac 175 . . . . . C-37
- Work Gloves . . . . . E-7
- Wrenches . . . . . D-16
- XP8 MIG Gun . . . . . C-19, C-20, C-21
- XPR . . . . . A-2, A-12, A-15, A-21
- XR-A Aluma Pro Push-Pull Gun . . . . . C-13
- ZIRCONIUM . . . . . B-23