

Section 6

Weld Metal, Tools & Accessories

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Connecting Power to Your World™



FLINT IGNITOR 38-0309-00

The 38-0309-00 Flint Ignitor is used to ignite the starting powder. Each mold that is sold with a frame has a Flint Ignitor included.

Replacement flints are available upon request.

Part #38-0309-01.



FLINT IGNITOR EXTENSION 38-0904-00

The 38-0904-00 Flint Ignitor Extension allows the installer to stand 36" from the mold. Flint Ignitor is included.



ELECTRONIC FLINT TRIGGER 38-8253-00

thermOweld's new Electronic Flint Trigger is designed to ignite the starting powder by generating time delayed sparks of 5, 10 or 15 seconds, igniting the starting powder on top on the mold. The Trigger mount to the side of the any size mold with a magnet.



EZ Lite Remote® Electric Ignition System

Mission Critical jobs require the versatility of thermOweld's EZ Lite Remote® System so you can finish without delays. Our remote system is the only system that gives you 2 ignition options so you can finish your job on time.

- ▶ Use your Flint Ignitor or the EZ Lite Remote® and never be stuck out on the job!
- ▶ Have 100% confidence that you will get your connections done when you want!
- ▶ Reliable ignitor - 100% guaranteed to ignite
- ▶ Use with existing thermOweld® EZ Lite® Mold and Weld Metal
- ▶ Uses 4 Alkaline "D" size batteries (we recommend a high quality brand battery such as Duracell® or Energizer®).

EZ Lite Remote® Electric Ignition Catalog #'s		Lead Time
Catalog #	Description	
38-EZLT-RU	EZ Lite Remote® Unit, ready to use with batteries installed at the factory	SDS
38-EZLT-15	EZ Lite Remote® Unit with 15 ft lead, ready to use with batteries installed at the factory	3
38-EZLT-IG	(10) 38-EZLT-IG EZ Lite Remote® Ignitors for use with existing thermOweld® EZ Lite® Molds and weld metal on your shelf, in your truck or at the job site.	SDS
38-EZLT-SK	Starter Kit complete with; (1) 38-EZLT-RU EZ Lite Remote® Unit, ready to use with batteries installed at the factory (20) 38-EZLT-IG EZ Lite Remote® Ignitors for use with existing thermOweld® EZ Lite® Molds and weld metal on your shelf, in your truck or at the job site	SDS
38-EZLT-SS	EZ-Lite Remote adapter for Single Shot Molds	SDS
38-EZLT-CA	6 ft. Replacement lead	3
38-EZLT-CX	15 ft. Replacement lead	3
38-EZLT-CY	20 ft. Replacement lead	3
38-EZLT-CW	Cold Weather Kit	2

Pre-packaged Weld Metal with Ignitors		
Standard	Cast Iron	Packed per box
TW15EZ	—	20
TW25EZ	TW25CIEZ	20
TW32EZ	TW32CIEZ	10
TW45EZ	TW45CIEZ	20
TW65EZ	TW65CIEZ	20
TW90EZ	TW90CIEZ	10
TW115EZ	TW115CIEZ	10
TW150EZ	—	10
TW200EZ	—	10
TW250EZ	—	10
TW500EZ	—	10

thermOweld® Weld Metal is sold in box quantities only




12 CM
(Weld Metal)



QR Code to YouTube
EZ Lite Remote® video

EZ Lite Remote® Cold Weather Kit Instructions

When using thermOweld's EZ Lite Remote® in temperatures below 32° F (freezing) we recommend using our Cold Weather Kit 38-EZLT-CW. The Kit includes 4 adapters and 12 AA Batteries (we recommend a high quality brand battery such as Duracell® or Energizer®).



WELD METAL

thermOweld® weld metal is the most reliable and consistently-performing weld metal available worldwide. Our continuous-improvement manufacturing process is supplemented with multiple quality validation steps for every lot we produce. Upon final acceptance, our weld metal is specially packaged in moisture-resistant plastic cartridges with special closure caps. Then the cartridges and required metal discs are packaged in moisture-resistant boxes with unique manufacturing lot codes. These lot codes are a thermOweld® innovation, providing complete traceability from raw material origination, through our multiple processing stages to shipment. Finally, thermOweld® applies special shrink-wrap plastic to every weld metal box, insuring reliable storage, positive field ignition and superior welds every time.

Every individual weld metal cartridge is marked with the size and weight in grams for easy identification, even when separated from the host box. thermOweld® weld metal is shipped worldwide to more than 50 countries via ground, air and ocean freight. All sizes of weld metal are available immediately with thermOweld's Same Day Service (SDS) shipment program.

Our engineers have formulated and created various weld metal types for application-specific use, including our standard formulations:

- 1) copper-to-copper, copper-to-steel and copper-to-copper-clad steel
- 2) copper-to-ductile (cast) iron



Standard Cartridge Size	Low Emission Cartridge* Size	Cast Iron Cartridge Size	Packed Per Box
#15	LE#15	—	20
#25	LE#25	#25CI	20
#32	LE#32	#32CI	10
#45	LE#45	#45CI	20
#65	LE#65	#65CI	20
#90	LE#90	#90CI	10
#115	LE#115	#115CI	10
#150	LE#150	—	10
#200	LE#200	—	10
#250	LE#250	—	10
—	LE#300	—	4*
—	LE#400	—	4*
#500	LE#500	—	10

thermOweld® Weld Metal is sold in box quantities only

*Low Emission Weld Metal cartons contain four (4) cartridges; four (4) ignitors; gasket(s), and one (1) filter. **

Weld Metal Discs

Weld Metal Discs are used to hold the weld metal in place until the reaction occurs. One disc per weld is required. Discs are included with the weld metal.

Part #37-0320-01 ¾" Dia. Disc (For use w/ #15 thru #65 Weld Metal Cartridges) 20 pack

Part #37-0320-02 1" Dia. Disc (For use w/ #90 thru #115 Weld Metal Cartridges) 10 pack

Part #37-0320-03 1 ½" Dia. Disc (For use w/ #150 thru #500 Weld Metal Cartridges) 10 pack

Part #37-6127-00 Disc Kit (Kit consists of a tube with 25 each of the above discs)



TOOL KIT

- 38-0302-00 ~ Tool Kit with Tools
(includes the following items)
- 38-0304-00 ~ 8" File
- 38-0307-00 ~ Crimping Tool
- 38-3922-00 ~ Mold Cleaning Brush
- 38-0308-00 ~ Screwdriver
- 38-0306-00 ~ Card Cloth Brush
- 38-0305-00 ~ Wire Cleaning Brush
- 38-0302-02 ~ Tool Kit with Tools listed above plus
- 38-0101-00 ~ Rasp
- 38-4129-00 ~ 1 lb. Packing Material
- 38-0303-00 ~ Tool Box Only



Items included in tool kit 38-0302-00



38-0101-00 RASP

This tempered steel, curved Rasp is recommended for removing rust and mill scale from steel and cast iron surfaces. The blade is replaceable. Specify part # 38-0101-01. Not recommended for use on galvanized surfaces.



PACKING MATERIAL

Packing Material is used to prevent the molten weld metal from leaking out of the mold. When cable opening becomes worn from heavy use, the packing material may be used to prolong mold use. It is also used around 7 strand cable to prevent leaking. Packing material comes in a 1 lb or a 5 lb package.

- Part #38-4129-00 for 1 lb package
- Part #38-4129-05 for 5 lb package

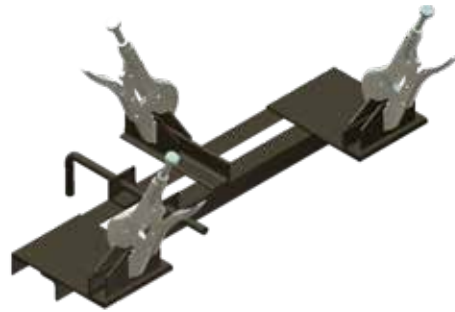
Note: This packing material to be used on outside of mold only. If packing gets into weld cavity, gassy welds will result.



ACCESSORIES

38-0330-00 CABLE CLAMP

The thermOweld® Cable Clamp is recommended for holding a wide range of cables properly in place in molds when welding cables that are under tension. This prevents the cables from pulling out of the mold when the weld is made.



GROUND ROD DRIVING SLEEVES

Ground Rod Driving Sleeves are placed over the top of a ground rod while driving it into the ground. This prevents the top from mushrooming or flaring out. Ground rod driving sleeves come in sizes to fit all standard unthreaded ground rods.

Catalog #	Ground Rod Size
38-3662-01	1/2" Copper Clad or Steel Ground Rod
38-3662-02	5/8" Copper Clad Ground Rod
38-3662-05	5/8" Steel Ground Rod
38-3662-03	3/4" Copper Clad Ground Rod
38-3662-06	3/4" Steel Ground Rod
38-3662-04	1" Copper Clad Ground Rod
38-3662-07	1" Steel Ground Rod



CABLE CLEANING AND CARD CLOTH BRUSH

The Cable Cleaning Brush is recommended for cleaning heavily oxidized cables. The V-shape Brushes permit their use over a wide range of cable sizes. Brush assembly consists of a handle with two stiff wire bristle brushes that are rotatable, for longer life and are replaceable.

The Card Cloth Brush is used for cleaning large conductors and bus bar. It has short stiff bristles. These brushes are for cleaning cable only, not molds.

The Mold Cleaning Brush is used to clean the graphite mold without damaging the mold.



38-0135-00



38-0306-00



38-3922-00

- Cable Cleaning Brush.....38-0135-00
- Replacement Brushes38-0135-01
- Card Cloth Brush.....38-0306-00
- Mold Cleaning Brush.....38-3922-00



MOLD CLEANERS

Mold Cleaners are used to clean the slag from molds that are not split through the crucible.

40-0319-01.....for cartridge sizes #15 thru #65

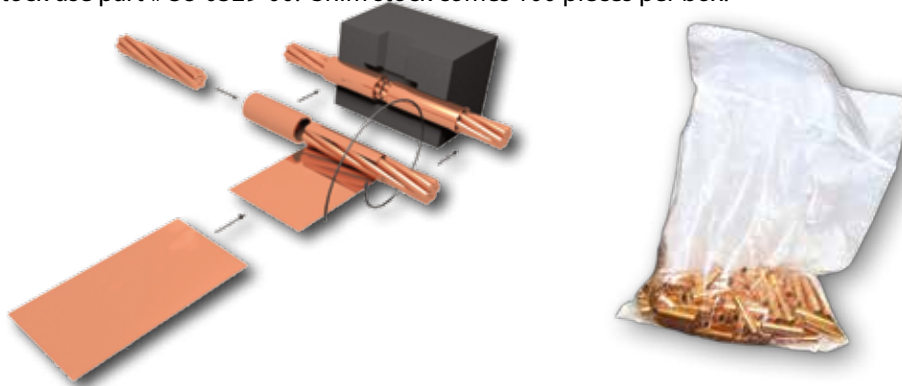
40-0319-03.....for cartridge sizes #90 thru #500

ADAPTER SLEEVES

SHIM STOCK AND ADAPTER SLEEVES

thermOweld® molds designed for larger cable sizes can be used on smaller diameter cables if copper adapter sleeves or shim stock are utilized. The copper shim stock, .0108" x 1-1/2" x 3", is normally wrapped around cable until the diameter is about equal to the cable opening. A tight fit is not necessary as the shim stock will unwrap slightly and prevent leakage of weld metal.

To order shim stock use part # 38-0329-00. Shim stock comes 100 pieces per box.



For Use On Cable Size		Catalog #	Use In Mold Size	Sleeve Dimensions		
Stranded	Solid			O.D.	I.D.	Length
#12, #14	#10, #12, #14	38-0200-00	#6 STR & Sol	.156	.111	1.00
#9, #10	#8, #9, #10	38-0208-00	#4 Sol	.203	.140	1.00
2.5, 6 mm ²	2.5 mm	38-4590-00	16 mm ²	.203	.140	1.00
10 mm ²	4 mm	38-4588-00	25 mm ²	.250	.200	1.00
#7, #8, #10	#6, #8	38-0201-00	#4	.227	.177	1.00
#6	#5	38-0202-00	#2	.292	.198	1.00
#4, #5	#3, #4	38-0207-00	#2	.287	.246	1.00
16 mm ²		38-4589-00	32 mm ²	.303	.209	1.00
#4	#2	38-0204-00	#1	.328	.265	1.00
#2	#1	38-0203-00	1/0	.370	.307	1.00
#1	1/0	38-0209-00	2/0	.420	.359	1.00
1/0, #1	2/0	38-0205-00	3/0 & 4/0 Sol	.452	.389	1.00
2/0, 1/0	3/0	38-0240-00	4/0	.524	.437	1.50

WEAR PLATES

WEAR PLATES

The average life of a mold is 50 plus welds depending on the care and treatment it receives. The maximum wear on a mold takes place at the mold openings due to forcing the mold shut over "out-of-round" conductors, hitting and then chipping openings with ends of conductors, etc. To increase the mold life, "Wear Plates" can be factory installed around the mold openings. They can be supplied for all molds for cable sizes; 1/0 AWG through 500 MCM and Copper-Clad Steel cable 7/#10 through 19/#6. To order, simply add the suffix "-W" to the mold catalog number such as M-241-W.



Weld Type	No. Wear Plates Req'd	Weld Type	No. Wear Plates Req'd	Weld Type	No. Wear Plates Req'd	Weld Type	No. Wear Plates Req'd
AC-1	1	CS-1	1	CC-1	2	CR-1	1
AC-2	2	CS-2	2	CC-2	3	CR-2	2
ACR-1	1	CS-3	1	CC-6 [†]	3	CR-3	2
ACR-2	2	CS-4	1	CC-7 [†]	4	CRE-3	2
CB-1	1	CS-6	2	CC-11	4	CRE-4	2
CB-5	2	CB-33	1				

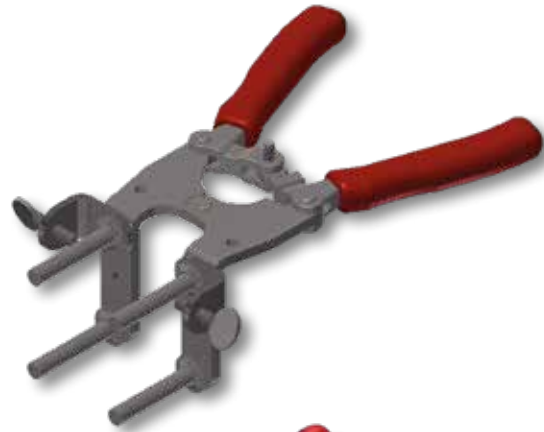
[†]Wear plates only available on 1/0 Str or 7/#10 and larger cable.

HANDLE CLAMPS

B-106 & B-107 HANDLE CLAMPS

For most connections involving lugs, cable or rectangular bus, thermOweld® Handle Clamps are used. thermOweld® Handle Clamps make possible the use of many different sizes and types of molds with only two different clamps. The two handle clamps are catalog numbers B-106 and B-107. These will fit of all standard thermOweld® molds.

1. Use B-106 clamps for all molds having a price key 4, 7, 17, 22 or 24. These molds are a nominal 3 1/8" wide molds.
2. Use B-107 clamps for all molds having a price key 5, 6, 8, 13 or 23. These molds are a nominal 4" wide molds.
3. All molds having a price key 3, 10, 12, 14, 15, 16 or 33 have an attached frame; separate handles are not required.



PK-3 MAGNETIC CLAMP

The PK-3 integral magnetic clamp is adaptable to all thermOweld® price key 3 molds. A strong, 48 lb. magnet holds the mold in place and prevents leakage. Works on both cast iron and steel and can be used to weld to both pipe as well as flat surfaces. Designed for remote welding, using our thermOweld® EZ Lite Remote® ignition system. See page 232 for more information.

Part # 40-7202-00
SHOWN WITH HANDLE



PK-14 HANDLE ATTACHMENT

The PK-14 Handle Attachment is used to hold a PK-14 molds in position. It is easily attached to the B-106 Handle Clamps. The PK-14 Handle Attachment can be used with weld types CRE-1 and CRE-4.

Part # 40-0106-75

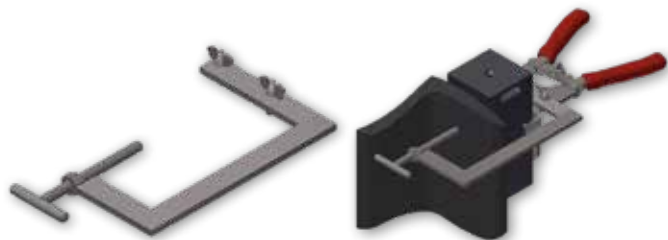


40-0106-75 Shown attached to B-106 Handle Clamp

MOLD SUPPORT CLAMP

The Mold Support Clamp is used to hold a mold in position on a vertical steel column or angle. It is easily attached to the Handle Clamps. The Mold Support Clamp can be used with weld types CS-3, CS-18, CS-23 and CS-27.

Part # 40-3657-00

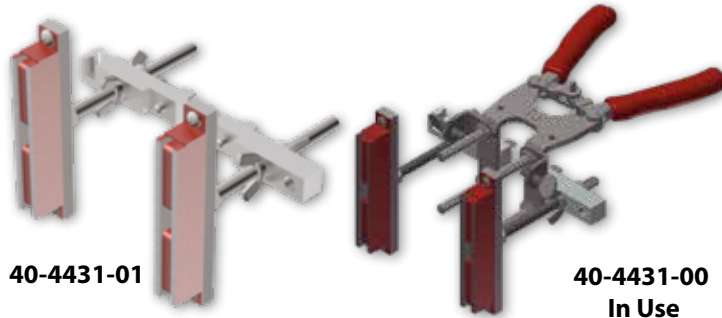


40-3657-00 Shown in use with the B-106 Handle Clamp.

HANDLE CLAMPS

VERTICAL MAGNETIC CLAMPS

thermOweld® Magnetic Clamp is used to hold a mold in position on a vertical steel surface. The magnetic clamp can be purchased complete with B-106 Handle Clamps or if you already have a set of handles, you can order just the magnetic mounting assembly. The mounting assembly can easily be mounted on the prongs of your existing B-106 handle clamps. A minimum of 10" is required.



40-4431-01

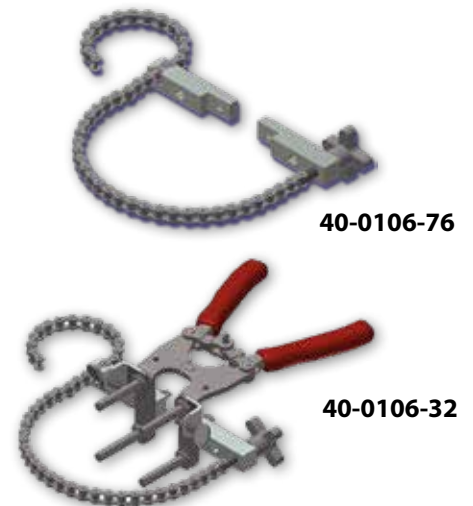
40-4431-00
In Use

Vertical Magnetic Handle Clamps (Complete with B-106 Handle Clamp)		
Catalog #	Fits Molds w/ Price Key	For Use With Weld Types
40-4431-00	4 & 17	CS-3, 4, 7 & 23
Vertical Magnetic Clamp Only (Handle Clamp Not Included)		
Catalog #	Fits Handle Clamp	For Use With Weld Types
40-4431-01	B-106/B-107	CS-3, 4, 7 & 23

HORIZONTAL & VERTICAL CHAIN CLAMPS

thermOweld® Chain Clamps are used to hold a mold in position on horizontal or vertical pipe up to 4" in diameter. For larger pipe a 20" chain extension is available to allow the chain clamps to be used on pipe up to 10" in diameter. The chain clamp can be purchased complete with B-106 or B-107 Handle Clamps or if you already have a set of clamps, you can order just the chain clamp and mounting assembly. The mounting assembly can easily attach to your existing thermOweld® Handle Clamps. 20" Chain Extension part #40-0106-27.

Chain Clamps (Complete with Handle Clamps)				
Catalog #	Fits Molds w/ Price Key	For Use With Weld Types	Pipe Position	
40-0106-32	4, 17, 22 & 24	CS-3, 4, 7, 23 & CRE-6	Vertical	
40-0107-32	5, 6 & 23	CS-3, 4, 7 & 23	Vertical	
40-0106-37	4, 17, 22 & 24	CS-1, 2, 5, 8 & 9	Horizontal	
40-0107-37	5, 6 & 23	CS-1, 2, 5, 8 & 9	Horizontal	
40-0106-41	4, 17	CS-6, 18 & CRE-3	Vertical	
Chain Clamp Only (Handle Clamps Not Included)				
Catalog #	Fits Handle Clamp	For Use With Weld Types	Pipe Position	
40-0106-76	B-106 & B-107	CS-3, 4, 7, 23 & CRE-6	Vertical	
40-0106-78	B-106 & B-107	CS-1, 2, 5, 8 & 9	Horizontal	
40-0106-77	B-106 & B-107	CS-6, 18 & CRE-3	Vertical	



40-0106-76

40-0106-32



40-0106-78

40-0106-37 In Use

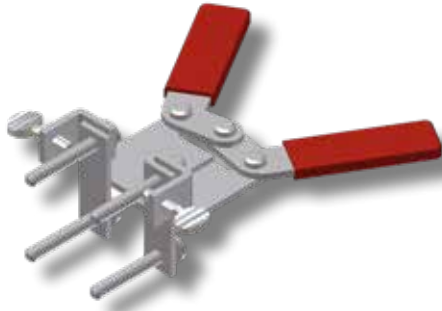
40-0106-77

40-0106-41 In Use

MINI HANDLE CLAMPS

MINI HANDLE CLAMPS

thermOweld® Mini Handle Clamps are used PK-18, 19 and 20 Molds.



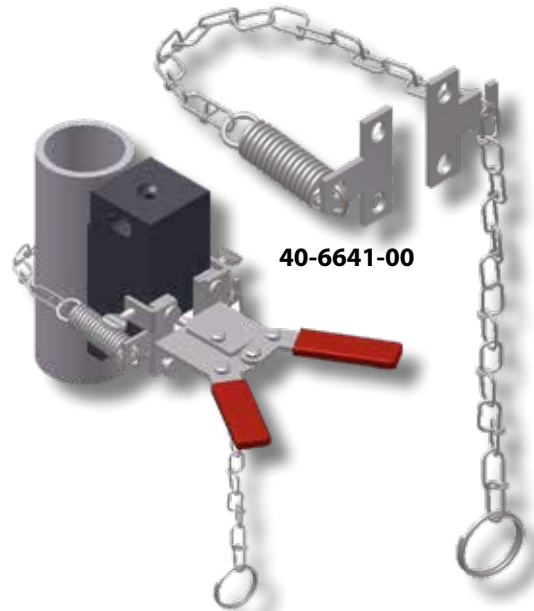
40-4565-00

Mini Handle Clamps	
Catalog #	Fits Molds w/ Price Key
40-4565-00	18, 19, 20

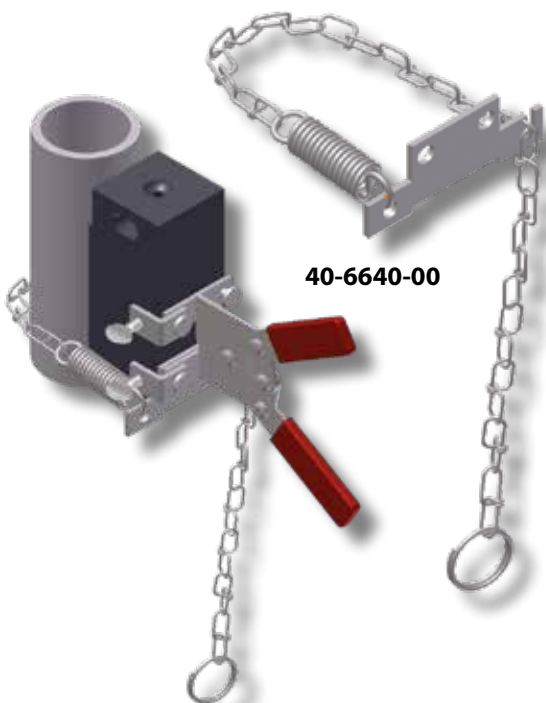
HORIZONTAL & VERTICAL CHAIN CLAMPS

thermOweld® Chain Clamps for use with the Mini Handle Clamps are used to hold a mold in position on horizontal or vertical pipe up to 4" in diameter. The mounting assembly easily attaches to your existing thermOweld® Mini Handle Clamps.

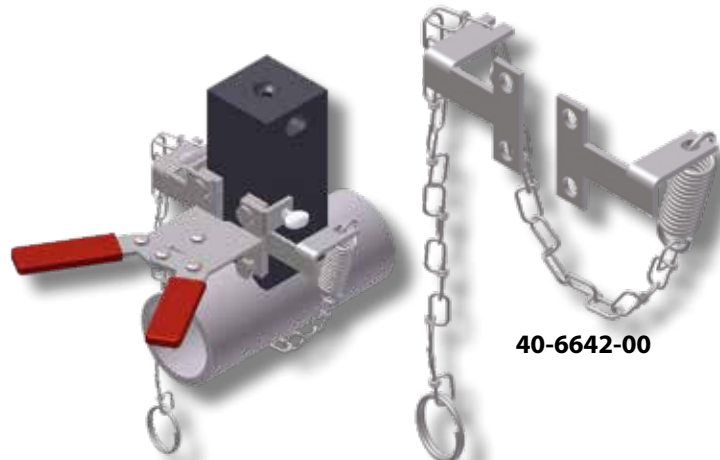
Chain Clamps Only (Handle Clamps Not Included)			
Catalog #	Fits Molds w/ Price Key	For Use With Weld Types	Pipe Position
40-6641-00	18, 19 & 20	CS-3, 4, 7, 23, 36, 37 & CRE-6	Vertical
40-6640-00	18, 19 & 20	CS-6, 18, 27 & CRE-3	Vertical
40-6642-00	18, 19 & 20	CS-1, 2, 5, 8, 9 & CRE-4	Horizontal



40-6641-00



40-6640-00



40-6642-00