

Ocal installation products

The right tools for the job

ABB Ocal PVC-coated conduit is designed to prevent corrosion from striking weak points in conduit systems. But any PVC-coated conduit system is only as good as the installation job. The wrong tools can result in incorrectly installed pipes and fittings or damage to PVC coating, creating those weak points where corrosion starts.

After careful research and evaluation, ABB now offers you the very best installation tools available for PVC-coated conduit. These tools are ready for use on PVC-coated conduit right out of the box. What that means to you, the installer, is lower costs – in equipment, in installation time and in time you'd normally have to spend adapting standard tools for use on PVC-coated conduit.

Hassle-Free Installation

Count on ABB to provide a hassle-free way for installers to get the right tools for the job in their hands – just another benefit of using Ocal products.

For more information on Ocal Installation Guidelines, see pages 72-78.





Hand bender for PVC-coated conduit

Make saddles, offsets and conventional bends



Hand bender for PVC-coated conduit

Cat. No.	Conduit Size (in.)
35220	1/2
35225	3/4
2424A8	1

Ridgid stationary power threading machine 1224 Series

Stationary power threading machines such as the Ridgid model number 1224 have the capacity to thread rigid conduit from 1/2" to 4".



—
01 Special jaw insert
for PVC coated conduit
Ridgid model number
97365 and 26187

—
02 Standard jaw insert

—
03 In hot weather, use
scored shell clamps
to prevent slipping

- The standard jaw inserts for these units are intended to secure uncoated rigid conduit. The teeth of the standard jaw inserts will penetrate the PVC coating, but not bite into the steel. As a result, the standard jaw inserts will grind the PVC coating off the conduit. To prevent this, shell style clamps or jaw inserts for coated conduit may be used.

- **Shell clamps – Range: 1/2" to 3 1/2"**

To properly clamp the conduit, the shell style clamps described earlier can be used on conduit sizes from 1/2" to 3 1/2". However, for 4" conduit, there is not enough room in the chuck to accommodate both the 4 in. conduit and shell clamps.

- **Jaw inserts for coated conduit – Range: 1/2" to 4"**

The jaw inserts for coated conduit have teeth that will penetrate the PVC coating and bite into the conduit itself. Ridgid Catalogue No. 26187 is the jaw insert for coated conduit used in the Ridgid 1224 threading machine.

The jaw inserts for coated conduit will leave slits in the PVC jacket. You will need to touch up slits with Ocal exterior PVC patching compound (see pages 63 – 64). Since an extra step is required with the special jaw inserts, most installers usually use them only for 4 in. conduit with the Ridgid 1224 threading machine.

There is no need to pencil cut or score the PVC because these threading machines use a roller cutter and remove 1/4 in. of the PVC coating. Cuttings simply fall onto the screen on the lower portion of the machine.

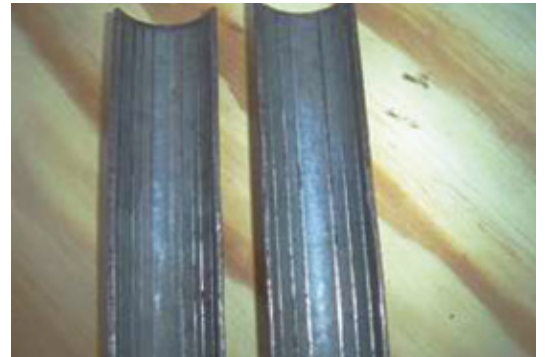
Machines that use centrifugal force (slap chucks) to tighten the jaws around the conduit can be used, but only with shell clamps attached. These types of threaders will damage the PVC coating without use of shell clamps



01



02



03

Ridgid 700 portable threader and die heads

For PVC coated conduit



These units will thread 2 1/2" through 6" PVC coated conduit. However, geared threaders are typically only used for 5" and 6" conduit. The cutting dies are adjustable and will not require pencil cutting the conduit.

The geared threader requires a clamp screw to secure the conduit. The clamp screw will penetrate the PVC coating. Make sure the clamp screw is tight as it will slip around the conduit and tear the coating. After the threading process is complete, touch up the penetrated area with Ocal exterior patching compound. Ream the conduit and dress the threads as described earlier.

Ridgid 700 portable threader

Cat. No.	Description
Ridgid 700 portable threader and die heads for PVC coated conduit	
51857	high speed 1/2 in. 12R die head
51862	high speed 3/4 in. 12R die head
51867	high speed 1 in. 12R die head
51872	high speed 1 1/4 in. 12R die head
51877	high speed 1 1/2 in. 12R die head
51882	high speed 2 in. 12R die head

Ridgid Tools 460-6

Tri-stand chain vise



Product features

- Sturdy, stable frame collapses for easy mobility and storage
- Ceiling brace for overhead support enables you to secure frame even during difficult work
- Features recesses for bending tubes 3/8", 1/2" and 3/4" O.D.

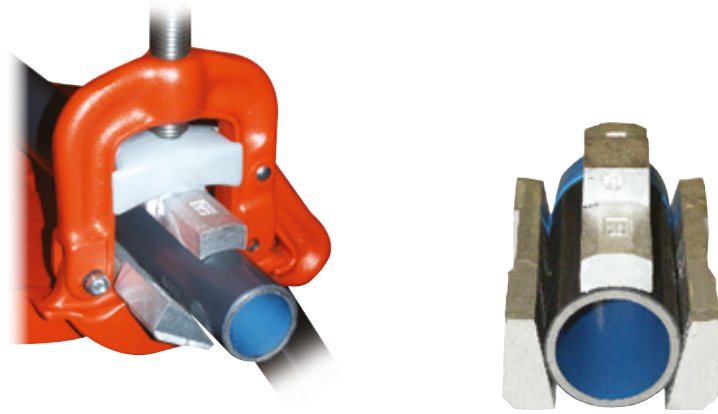
Ridgid Tools 460-6

Cat. No.	Description	Pipe Capacity	
		in.	Metric Size Designator*
Ridgid Tools 460-6	Tri-Stand with 6" Chain Vise (use with Ocal Half-Shell Clamps)	1/2 – 6	16 – 155

* Metric size designator (ANSI C80.1-1994).

Ocal jaws for PVC-coated conduit

Designed to hold PVC-coated conduit safely and securely in a yoke-style vise



Product features

- Replaces the standard jaw inserts in a yoke vise
- Provides greater clamping force and prevents pipe from spinning during threading
- Machined aluminum construction
- Three-piece set

Ocal jaws for PVC-coated conduit

Cat. No.	Description	Weight (lbs)	Weight (kg)
JAWS23	Used with RIDGID No. 23 Yoke Vise	2.80	1.27

Ratchet pipe reamer

Rapid and clean deburring



Product features

- Smooth-running ratchet
- Tempered-steel cutting bit
- For steel tubes 1/4" to 2" O.D.

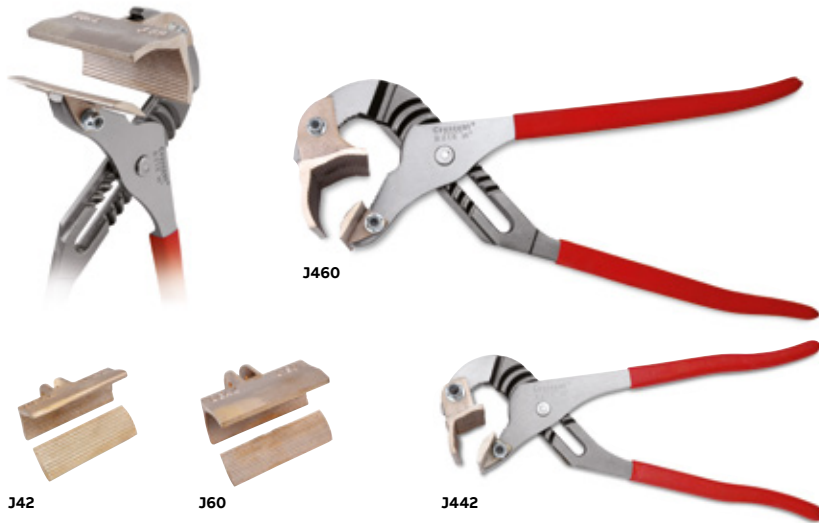
Ratchet pipe reamer

Cat. No.	Description	Pipe O.D. (in.)
70289	Ratchet Pipe Reamer	1/4-2

Ocal J-wrenches

Removable aluminum jaws for PVC-coated conduit

Use with our pliers, or purchase just the jaws and adapt your own!



Ratchet pipe reamer

Cat. No.	Description	Pipe Capacity (in.)
J442	12" J-Wrench with Jaws	1/2 - 1 1/4
J460	16" J-Wrench with Jaws	1 1/2 - 2 1/2
J42	12" Jaw Set only	1/2 - 1 1/4
J60	16" Jaw Set only	1 1/2 - 2 1/2

Strap wrenches

Specially coated strap won't absorb oil



Strap wrenches

Cat. No.	Handle Length		Strap Length		Strap Width		Pipe Capacity		Pipe Capacity (O.D.)		Weight	
	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(in.)	(mm)	(lbs)	(kg)
31355	11.75	298.45	17.00	431.80	1.75	44.45	2.00	50.80	3.50	88.90	1.75	.79
31370	18.00	457.20	29.25	742.95	1.75	44.45	5.00	127.00	5.50	139.70	2.75	1.25

KOPR-SHIELD® joint compound

Protects, lubricates and enhances the conductivity of all electrical connections



Product features

- Meets NEC® requirements for protection against corrosion: “Where corrosion protection is necessary and the conduit is threaded in the field, all threads shall be coated with an approved electrically conductive, corrosion-resistant compound.”
- Extremely adhesive compound flows smoothly into uneven contours and voids, ensuring easy application and complete, positive protection and lubrication
- Won’t settle out, thin, thicken, harden or dry out under the most severe environmental conditions
- Excellent temperature characteristics — can be brushed on at -50° F to 250° F (-45° C to 121° C) and remains intact for short periods even at 1,800° F (982° C)
- Ensures low resistance and seals out air and moisture
- Unique, homogenized blend of pure, polished colloidal copper, rust and corrosion inhibitors

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KOPR-SHIELD® joint compound



Cat. No.	Container	Size
201-31879-1	4 oz. Container with Brush	4 oz. (.12 liter)
CP8-TB	8 oz. Container with Brush	8 oz. (.24 liter)
CP16	16 oz. Container with Brush	16 oz. (.47 liter)
CP128	1 Gallon Can	1 gallon (3.79 liter)

Note: Not recommended for food & beverage processing applications.

Ocal touch-up compounds

Fast-drying, air-cure patch for Ocal conduit and fittings



Ocal touch-up compounds

Cat. No.	Container	Size	Color
Exterior PVC Patch			
SPRAY-G	Spray Can	12½ oz. (0.37 liter)	Dark Gray
SPRAY-W	Spray Can	12½ oz. (0.37 liter)	White
SPRAY-B	Spray Can	12½ oz. (0.37 liter)	Light Blue
PATCHP-G	Brush Cap Can	1 pint (0.47 liter)	Dark Gray
PATCHP-W	Brush Cap Can	1 pint (0.47 liter)	White
PATCHP-B	Brush Cap Can	1 pint (0.47 liter)	Light Blue
PATCHG-G	Bottle	1 gallon (3.79 liter)	Dark Gray
PATCHG-W	Bottle	1 gallon (3.79 liter)	White
PATCHG-B	Bottle	1 gallon (3.79 liter)	Light Blue
Interior Urethane Patch			
URETHANEPATCH	Brush Cap Can	1 pint (0.47 liter)	Blue

Note: Not recommended for food & beverage processing applications.

Ocal heat-cure patch

A better patching solution for hot weather applications



Even in the best of installations, the PVC jacket on PVC-coated conduit or fittings can be cut, nicked or abraded. To maintain corrosion protection, Ocal has added a new, thicker PVC patch to its offering of touch-up compounds.

Ideal for use in hot weather, Ocal heat-cure patch offers a thicker consistency at high ambient temperatures than standard air-cure patches, ensuring better coverage and a more effective patch.

Ocal Heat-cure patch makes patching fast and easy.

1. Make sure the area to be patched is clean and dry.
2. Squeeze the amount of patch material needed onto the area to be repaired.
3. If necessary, spread and level the patch material with a putty knife.
4. Apply heat with a heat gun or torch, such as the ABB Portable heat-shrink torch.
5. Being careful not to overheat (500° F/260°C max.), apply heat for two minutes total, or at least one minute after surface of patch has turned glossy. (The patch material is a glossy liquid that turns flat with initial heat application and then turns glossy again as heating continues.)
6. Allow the patched area to air cool, or use a water quench.

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Ocal heat-cure patch

Cat. No.	Color	Size
PATCHT-G	Dark Gray	6 oz. (.18 liter)
PATCHT-W	White	6 oz. (.18 liter)
PATCHT-B	Light Blue	6 oz. (.18 liter)

ABB portable heat-shrink torch

Separate controls enable precise adjustment of flame and temperature



Product features

- 2,500° F (1,371° C) output capacity satisfies virtually any heating, brazing or soldering requirement
- Dual fuel- and air-flow controls enable separate adjustment of temperature and flame precision
- Brass and steel construction provides durability
- Operates on standard butane lighter fluid (not included)
- Operating Time (per full fuel tank): Up to 220 minutes
- Fuel Tank Capacity: 2.03 fl. oz. / 60.03ml

Ocal touch-up compounds

Cat. No.	Description	Dimensions (without base)						Weight (when filled)	
		Length		Width		Height		oz	g
		(in.)	(mm)	(in.)	(mm)	(in.)	(mm)		
WT-PTORCH	Portable Heat-Shrink Torch	3.90	99.06	1.40	35.56	5.40	137.16	9.88	280.09