

Conduit Space Recovery - A No Dig Solution

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MaxCell



2017 BICSI Winter Conference & Exhibition

January 22-26 • Tampa, FL

Conduit Space Recovery Seminar



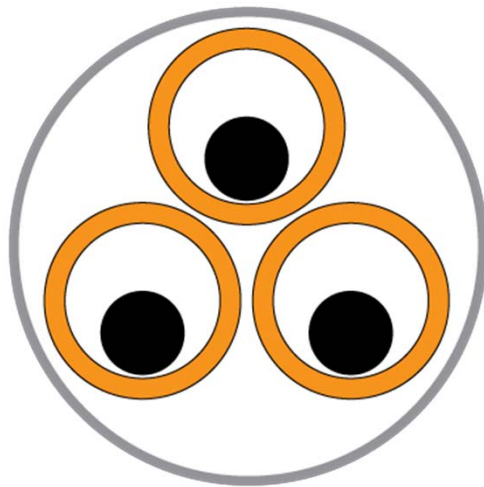
Safely remove rigid inner duct from operating fiber optic cables and recover up to 90% of occupied duct without digging!



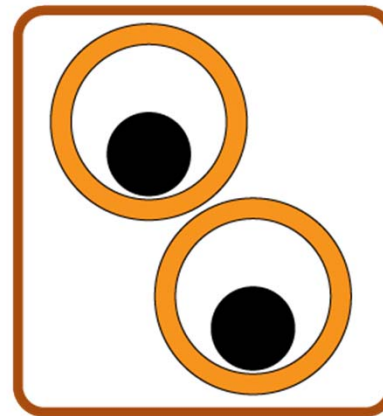
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Since the early 80's, rigid inner duct has been used in conduit infrastructure



4" Conduit



3 1/2" Clay Conduit

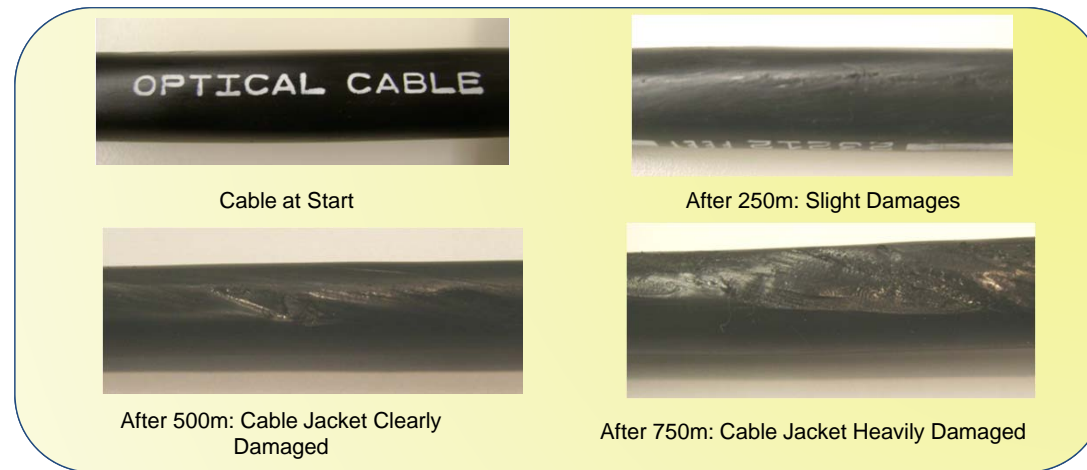


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Rigid inner duct allowed cables to be placed when needed without having to pull cables over cables, which can damage both cables.



Rigid inner duct also allowed cables to be placed for longer distances with cable blowing.

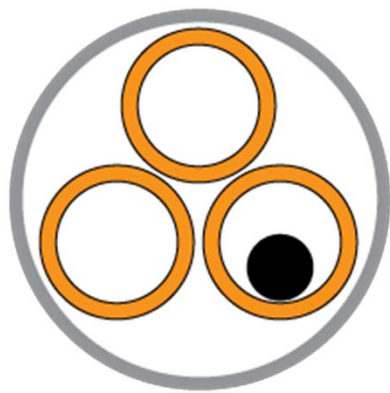


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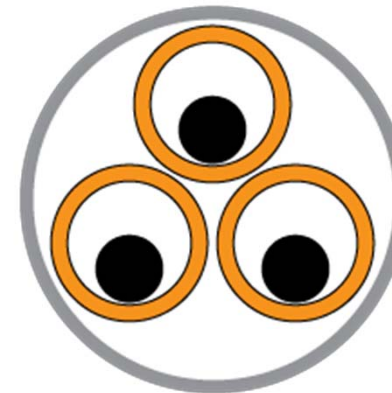
Installed rigid inner ducts over time will eventually be filled to capacity with operating cables.



First cable placed



Second cable placed



Final cable placed



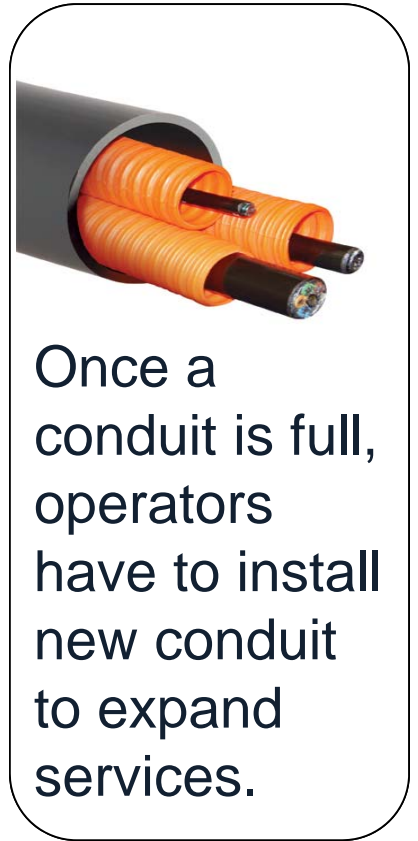
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Trenching

- New conduits in major cities can cost \$300-\$700/ft. Trenching can be as slow as 6" per hour.
- Recovering conduit is a small fraction of the cost and 100 to 1000 times faster – up to 10ft/min removing ducts and placing textile inner ducts.



Once a conduit is full, operators have to install new conduit to expand services.

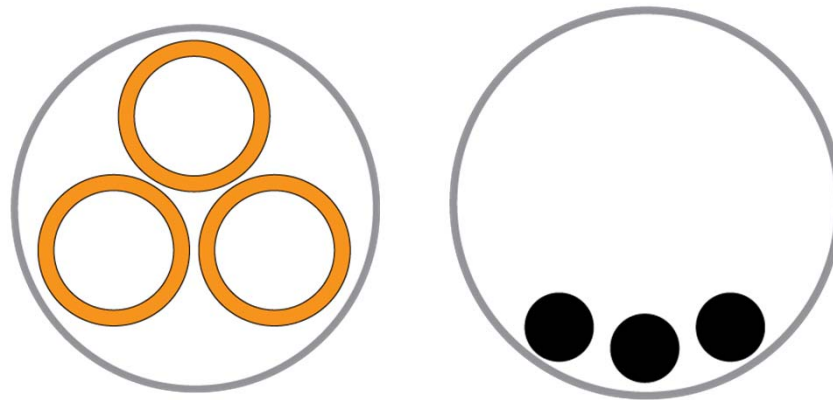


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Utilizing rigid inner ducts is an ineffective use of the conduit space – a major reason textile inner ducts were developed.



Inner ducts take up to 80 – 90% of usable conduit space. Three .75" diameter cables use only 10% of the space in a 4" conduit.



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Benefits for Your Network

- Recover up to 90% of conduit space
- Add up to 9 new cables
- No disruption of service
- Cables can be placed immediately
- Safer than trenching or boring around current infrastructure
- Service customer needs faster
- Larger diameter cable can be placed in textile inner duct



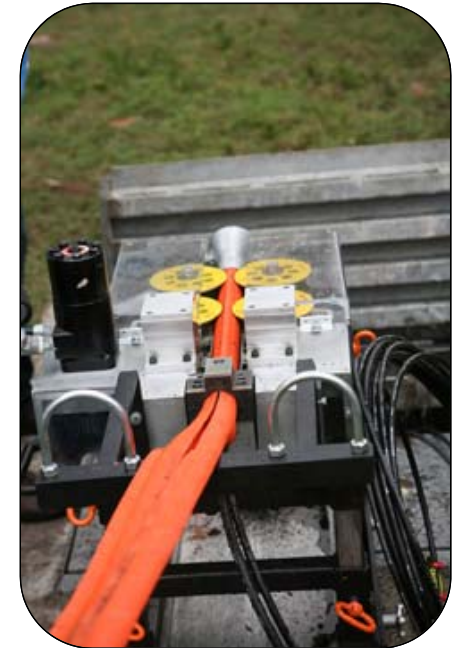
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Benefits for Your Budget

- Save significant costs – SIGNIFICANT
- NO engineering costs
- NO new trenches
- NO new conduit
- NO trenching permits required
- NO EPA oversight
- NO Right-of-Way red tape
- NO property restoration costs from trenching or boring



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Benefits for Your Construction Project

- Fast Process - A NO DIG Solution
- Remove inner duct in a fraction of time of trenching or boring
- Compact machine for tight vault spaces
- Less than 50 lbs. of tension on cables
- Install textile inner duct during same service
- Easy Disposal/Recycling of rigid inner duct
- Homeowners and businesses are not inconvenienced
- Safer for pedestrian traffic

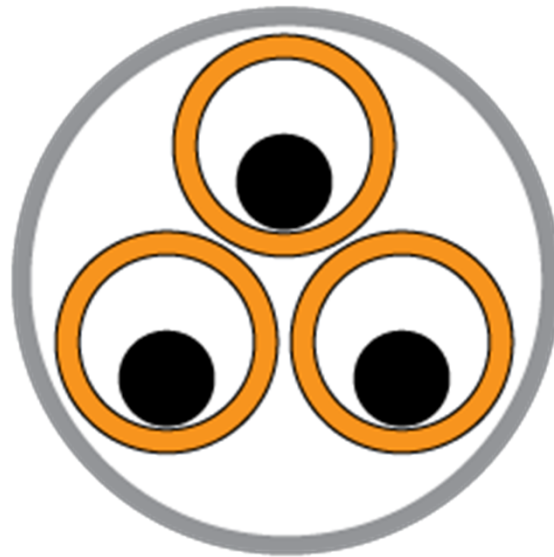


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After cables are in place, the rigid inner ducts serve no useful purpose.

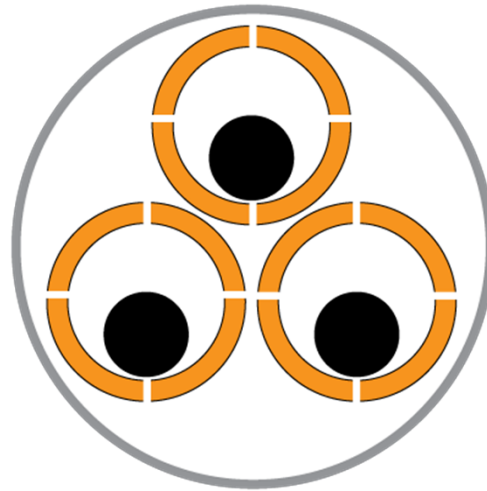


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If inner ducts could be removed safely while cables are still operating,



we could effectively recover up to 90% of 4" conduit space.



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Inner duct can be safely removed, recovering up to 90% of conduit space.



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Reclaim Your Network



Remove



Recover



Renew



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Patents Pending

Existing conduit completely occupied with conduit with operating cable.



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First Inner Duct Removed



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Second Inner Duct Removed



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All inner ducts removed. Recovered 90% of conduit space.



No
Disruption of
Service



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Three textile inner duct packs
installed in recovered space.



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Conduit with nine cables and textile inner duct.



Only 45% space used

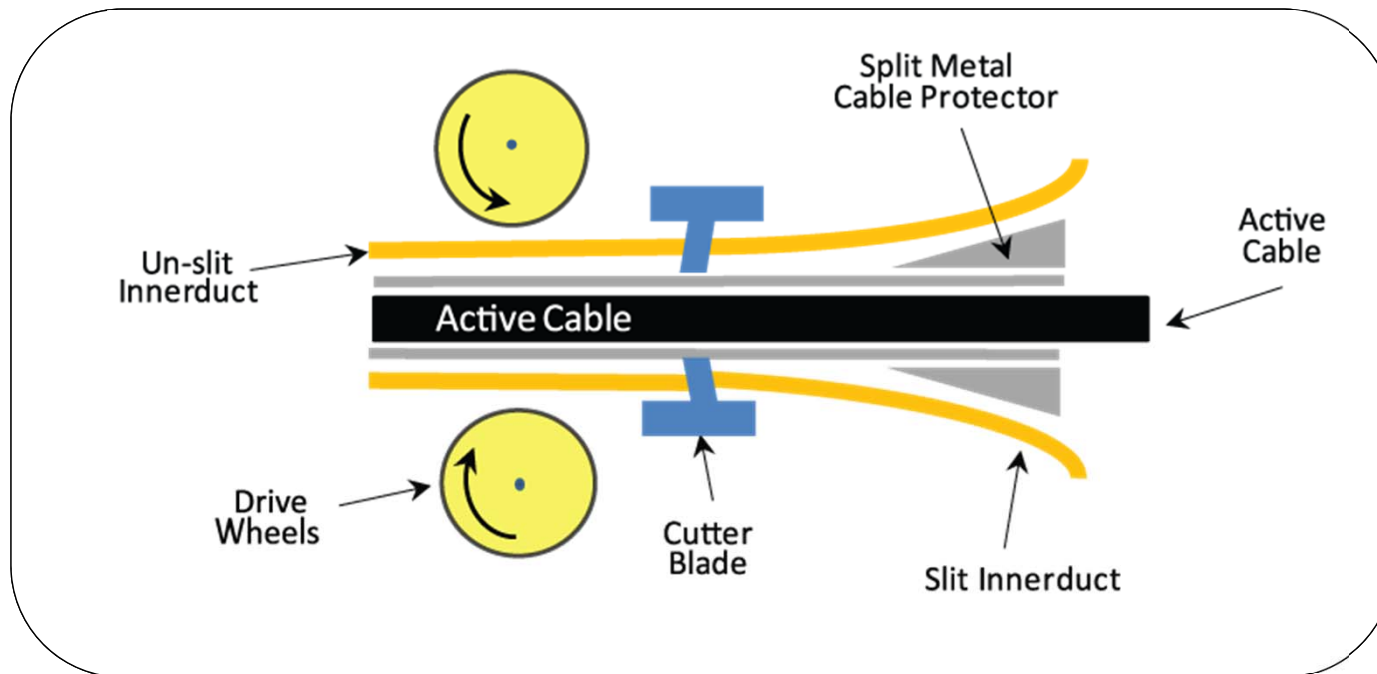


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Schematic of Splitter



The cable is protected by Split Metal Protector Sleeve



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Don't Dig!



Trenching and Digging is expensive, time consuming and disruptive.



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Don't Dig – Reclaim!



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Easy disposal and recycling of rigid inner duct.

As part of the process, extracted inner duct is chipped and bagged.

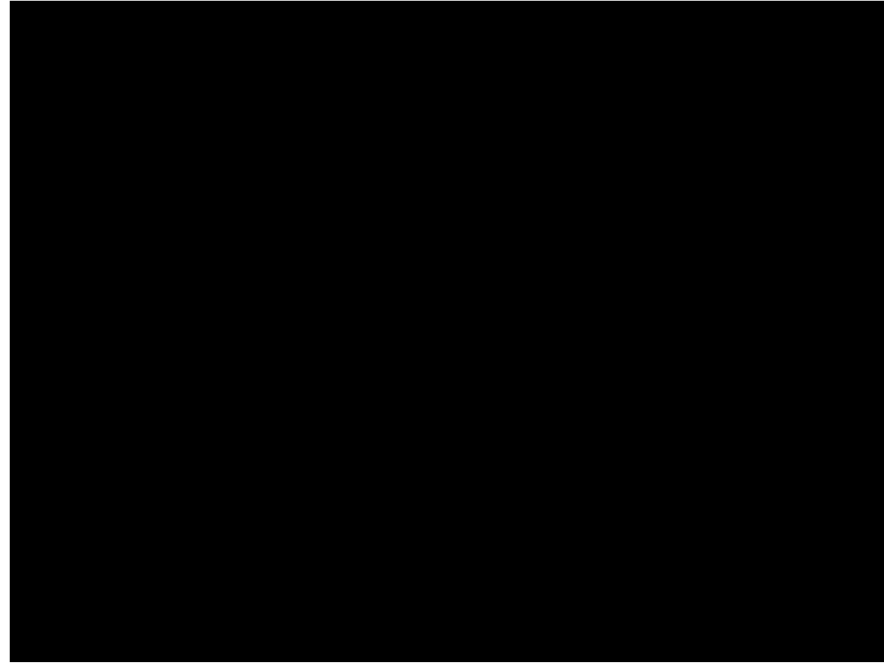


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Recovering Space, Renewing Networks



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Learn More at Booth 521



Both the method of removing inner duct over operating cables and recovering space and the specialized equipment used are patented and protected.

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A Conduit Maximization Solution brought to you by MaxCell®



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