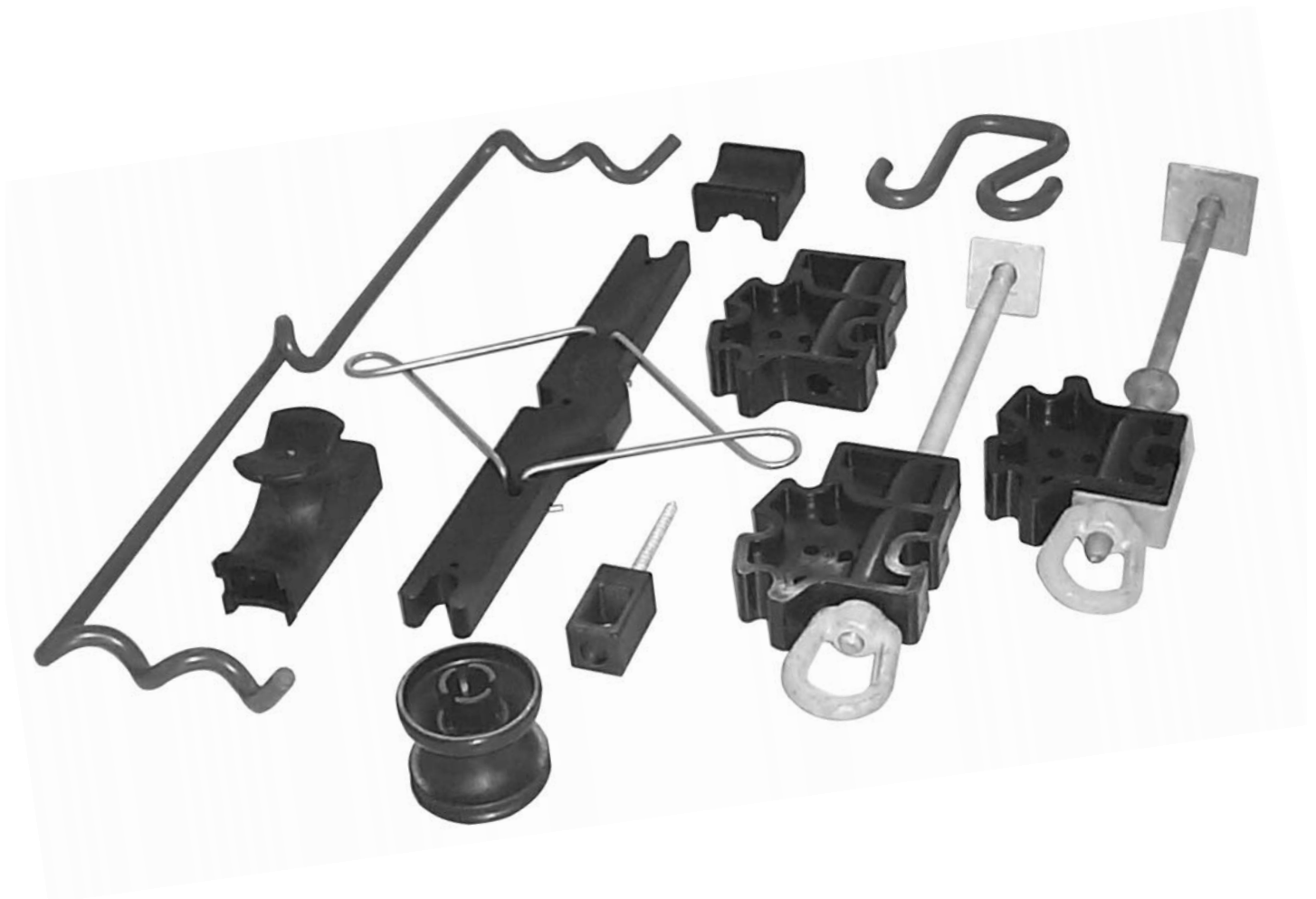




EnerSCAN

Engineering Incorporated

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CATALOG

Pole Line Hardware & Bucket Truck Tools

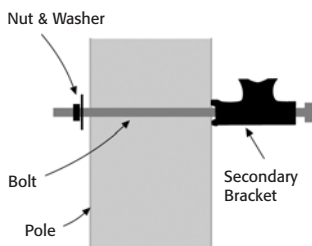


Secondary Bracket/Neutral Bracket

Application: To replace standard 53-2 insulator and clevis as well as neutral brackets.

Features: Several years of development were required to bring this unique, patented design to the electric utility, communications and cable TV marketplace. The unique design innovatively replaces all combinations of clevis and spool insulators as well as all spool bolt and spool insulator combinations. Installation time is reduced and the SECONDARY BRACKET is virtually unbreakable in comparison to its former counterparts. Meets or exceeds all applicable CSA and ANSI standards for 53-2 insulators and associated hardware.

Typical Installation:



Catalog Number
25101

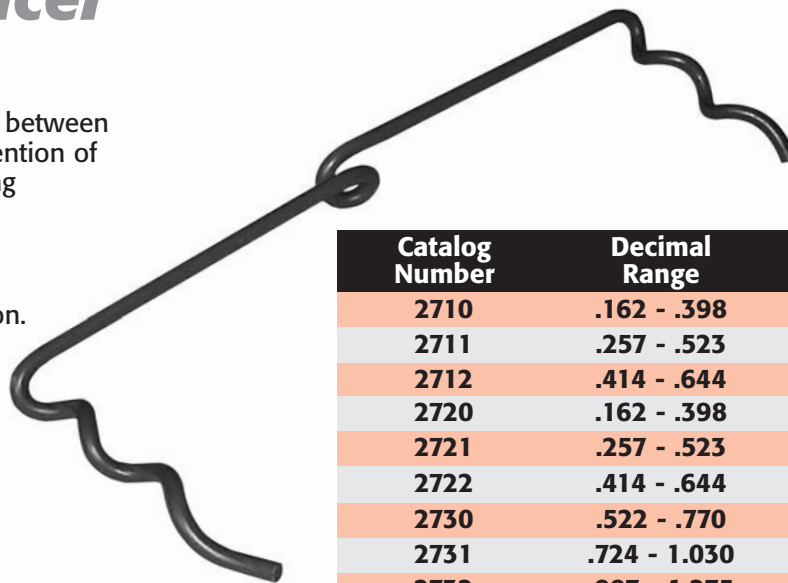
Secondary Spacer

Application: For maintaining spacing between conductors on long spans or for prevention of flashovers caused by wind, ice or aging insulation.

Fabrication: Made from strong, rigid, UV stabilized, non-conducting PVC.

Features: Simple and quick installation. Centre loop is snapped over middle conductor and the top and bottom are wound around the other two. No tools required.

Custom sizes available.
Material thickness 3/8" or 1/2"
(please specify).



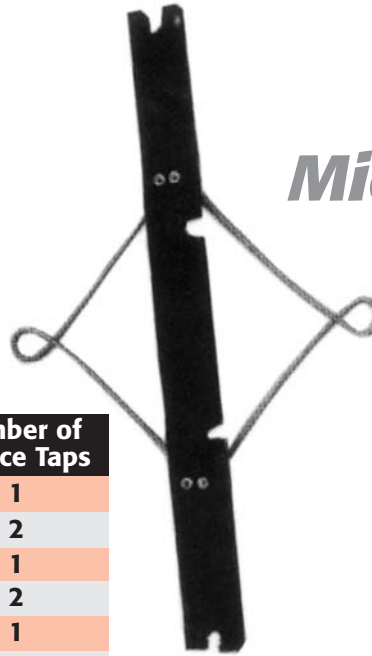
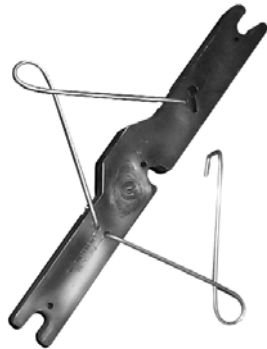
Catalog Number	Decimal Range	Conductor Spacing
2710	.162 - .398	6"
2711	.257 - .523	6"
2712	.414 - .644	6"
2720	.162 - .398	8"
2721	.257 - .523	8"
2722	.414 - .644	8"
2730	.522 - .770	10"
2731	.724 - 1.030	10"
2732	.997 - 1.275	10"
2740	.162 - .398	12"
2741	.257 - .523	12"
2742	.414 - .644	12"



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Line Hardware & Bucket Truck Tools

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Open Wire Secondary Midspan Bracket

Application: For use in open wire secondary systems as a spreader or for mid span taps.

Fabrication: Bar fabricated from high density, non-conducting UV stabilized polyethylene. Bail wires #304 stainless steel.

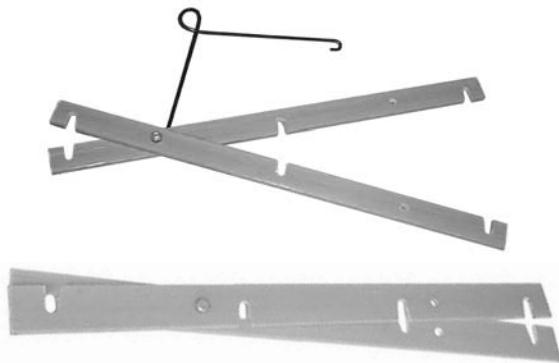
Features: Simple and quick installation. One bail wire swings away from bar to enable placement. Tie wire threaded through the bar is then wound around the conductors. No tools required. Accommodates any wire size. Exceeds CSA standard.

Note: Custom sizes available.



INCLUDES RECYCLED PLASTICS

Catalog Number	Number of Conductors	Conductor Spacing	Number of Service Taps
2510	3	8	1
2511	3	8	2
2520	3	10	1
2521	3	10	2
2530	4	8	1
2531	4	8	2
2560	3	12	1
2561	3	12	2



Arch T. Flower Design Secondary Spreaders

EnerSCAN is pleased to announce it has assumed responsibility for production and distribution of Arch T. Flower Co. pole line hardware products. Arch T. Flower Co. has been manufacturing products since 1752 and EnerSCAN is proud to continue the tradition.

Application: For use in open wire secondary systems as a spreader or for mid span taps.

Fabrication: Bridle fabricated from high density, non conducting UV stabilized fiberglass. Bridles #304 stainless steel. All nuts and bolts hot dip galvanized.

Features: Scissor design allows fast simple installation. Remove bolt, open spreader(as shown at left) close over all conductors in single motion, insert bolt and fit bridle.

Note: Custom sizes available.

Assembly Number	Number of Conductors	Conductor Spacing	Slot Diameter
332-32	4	8"	13/32"
332-36	3	12"	13/32"
332-45-1	3	8"	21/32"
332-65	3	18"	13/32"
332-104	3	12"	23/32"
332-105	3	12"	21/32"
332-GS	3	8"	21/32"
332-N25	14.5" spacing bridle only		
332-N25	6.5" spacing bridle only		

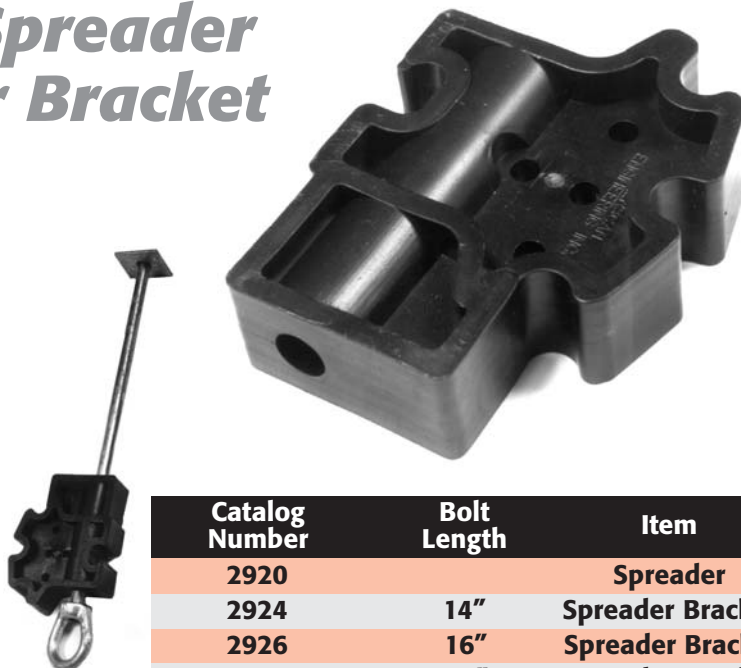


Standoff Multiplex Spreader & Standoff Spreader Bracket

Application: This product is a logical modification of EnerSCAN's Multiplex Spreader. The Standoff Spreader Bracket extension allows the installer to use an inexpensive machine bolt or double arming bolt instead of a double shoulder spool bolt. Double shoulder spool bolts are expensive and sometimes difficult to find or have long delivery times. The patented (or patent pending) shape also eliminates the need for the angle bracket used to hold the neutral wire in place. This same hook in the block makes it a useful tool for untwisting triplex or 4-plex.

Note: Please consult EnerSCAN's knowledgeable staff to ensure selection of proper bolt length.

 INCLUDES RECYCLED PLASTICS



Catalog Number	Bolt Length	Item
2920		Spreader
2924	14"	Spreader Bracket
2926	16"	Spreader Bracket
2928	18"	Spreader Bracket
2930	20"	Spreader Bracket

Multiplex Spreader & Multiplex Spreader Bracket

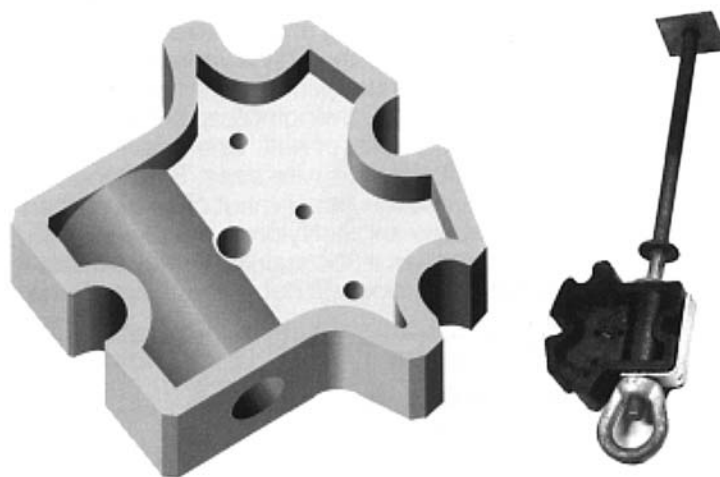
Application: For use as a spacer for triplex and quadruplex. As a spreader bracket it can be used for service take-offs.

Fabrication: Made from strong, rigid, UV stabilized, non conducting high density polyethylene. As a bracket the spreader is mounted on a standard 5/8" stand off bolt. The bolt includes a square washer and eye nut, and a collar to separate the spacer from pole.

Features: Simple and quick installation. Contains recycled plastic: is environmentally conscious.

See also EnerSCAN's Standoff Multiplex Spreader.

 INCLUDES RECYCLED PLASTICS



Catalog Number	Bolt Length	Item
2900		Spreader
2910	10"	Spreader Bracket
2912	12"	Spreader Bracket
2914	14"	Spreader Bracket





Heavy Duty Secondary Spacer



Application: For maintaining spacing between conductors on long spans or for prevention of flashovers caused by wind, ice or aging conductor insulation.

Fabrication: Made from strong, rigid, UV stabilized, high density polyethylene. Lightweight.

Features: Quick, simple installation without tools. Bracket is fit into position and held in place with tie wires. Accommodates any wire size. Some recycled plastic; environmentally sensitive.

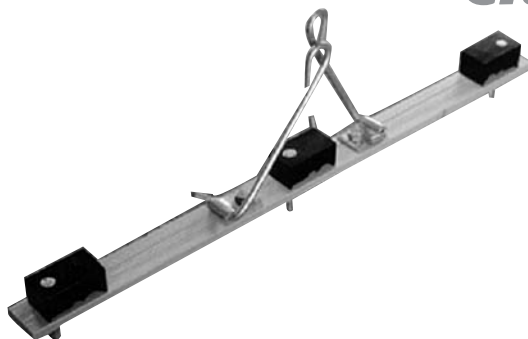
Note: Custom sizes available on request.



INCLUDES RECYCLED PLASTICS

Catalog Number	Number of Conductors	Conductor Spacing
2400	3	8"
2410	3	10"
2420	3	12"
2430	4	8"
2440	4	10"
2450	4	12"

Clamping Midspan Bracket



Application: For use in open wire secondary systems as a mid span spreader, or for mid span taps, where positive clamping to the secondary is required.

Fabrication: Bar fabricated from high density, non-conducting UV stabilized polyethylene or fiberglass. Bail wires #304 stainless steel. Exceeds CSA standard. All nuts, bolts, and washers hot dip galvanized.

Features: Positive clamping of the conductors to the bar. Simple installation requires only a wrench or socket. Two bail wires swing open to allow installation. Clamps tighten onto conductors quickly. Accommodates all wire sizes.

Any size/configuration available on request.

Catalog Number	Number of Conductors	Conductor Spacing	Number of Service Taps
2610	3	8"	1
2611	3	8"	2
2620	3	10"	1
2622	3	10"	2
2630	4	8"	1
2631	4	8"	2
2650	3	12"	1
2651	3	12"	2



Service Wireholder

Application: This product replaces any service spool insulator and clevis combination or porcelain service anchor.

Specification: This patented (or patent pending) product is fabricated from fiberglass reinforced nylon with a high quality hot dip galvanized lag screw or embedded in the injection moulded holder.

Features: The SERVICE WIREHOLDER can be nailed into any pole or other wood or can be started with a hammer and drawn in with a screwdriver through the hole or with the handy installation tool. The SERVICE WIREHOLDER is less expensive than any porcelain and steel spool insulator and clevis alternative, and is virtually unbreakable in comparison. Available with a variety of lag screw and machine bolt lengths.

Note: *This product was designed and is manufactured by EnerSCAN for AB CHANCE Company (part of the Hubbell Group). Hubbell distributes this product throughout North America and overseas.*



Catalog Number	
96003	Lag Screw (various sizes)
96004	Machine Bolt (various sizes)
96005	Service Mast Assembly (small)
96006	Service Mast Assembly (large)

Ground Wire Moulding

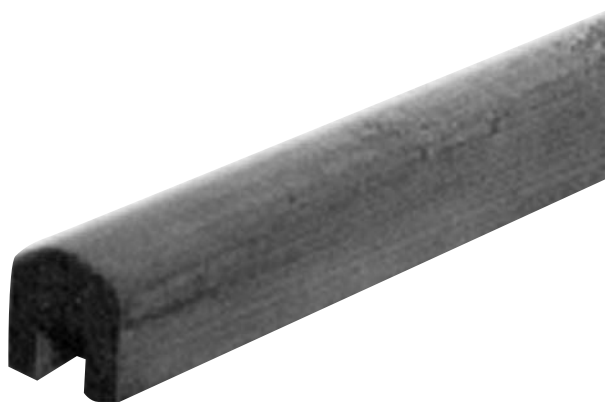
Application: For protection of ground wire.

Specifications: Material: Wood or durable UV stabilized high density polyethylene. Dimensions 0.5" wide by 8' long, but available in various sizes.

Meets CSA Standard for softening at high temperatures, brittleness at low temperatures, and UV ray resistance.

Features: Fast simple installation with the same staples used with any other form of ground wire moulding. This material is very light and therefore easily handled. It is flexible, thereby ensuring it's ease of storage on line trucks. Standard length 8 feet, but available in varying lengths.

Also available in spruce, pine or pressure-treated wood.



Catalog Number
7000



Polymer Spool Insulators (53-1 and 53-2 Design)



Patents Pending

Application: These polymer spool insulators are suitable replacements for any porcelain 53-1 and 53-2 insulators.

Features: Made from polymers specially blended for the high compressive strength required for this application. UV stable, non-conductive and almost unbreakable, these insulators are a far superior choice to any porcelain equivalent. Installation identical to that for any porcelain equivalent.

Tested successfully for both mechanical and electrical performance and capabilities. Standards call for >25,000 volts dry flashover and 15,000 volts wet flashover, both of which were achieved during testing at the AB Chance / Hubbell testing lab. Mechanical standards require the insulator to withstand 3000 lb tension when installed in a clevis. At over 5000 lbs the clevis failed but the insulator remained completely intact and no damage was visible. Longer term testing provided similar results.

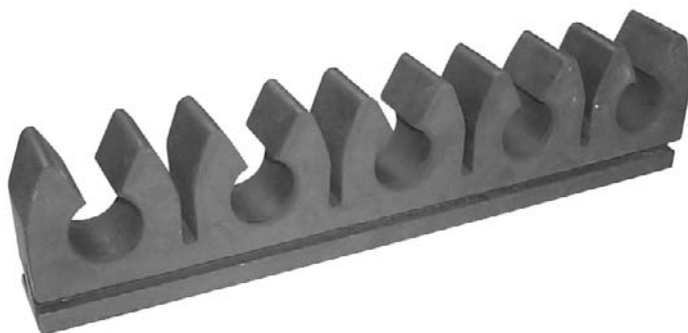
Note: 53-2 insulator available at the time of printing of this catalog. 53-1 insulator to follow within a few months.

**Catalog
 Number**

99001 53-2 design

99002 53-1 design

Hotstick Holder



Application: This product was developed by EnerSCAN for an Atlantic utility whose line truck hot stick holders were slightly different from most. The major suppliers' products didn't fit very well so EnerSCAN developed a comparable holder at a fraction of the price. The rubber component fits into a steel rail that is mounted to the truck.

Fabrication and Features: Made from long lasting natural and synthetic rubber compounds that won't mark the hotsticks, this product has proven to be as easy to use as the expensive models.

Note: Available in a variety of diameters and sizes for different hotsticks. 2, 3, 4 or 5 holders per block.

**Catalog
 Number**

20011



Insulator Bail

Application: Used with a 53-1 insulator (either porcelain, purchased from other suppliers, or the plastic version as described on page 6 in this catalog) this bail serves as an anchor for services or other purposes.

Features: This simple item is typical of metal stamping and bending Enerscan is capable of producing. Made from formed 1/4 inch diameter mild steel and then hot dip galvanized. Pin diameter 3/8 inch and is fitted with a stainless or brass retaining pin.

Note: Available with or without the insulator.



Shown with 53-1 insulator installed

Catalog Number

3004 4"

3008 8"

Cable Rack Insulator

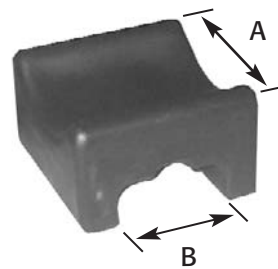
Application: Insulator for a variety of cable racks.

Features: This polymer cable rack insulator is the first of several soon to be available from Enerscan. This common size is identical in shape to insulators offered by several industry leaders. This polymer equivalent is unbreakable in comparison to porcelain and it weighs a fraction as much. A groove is provided in the bottom to allow the use of a cable tie or other fastener to secure the cable without interfering with the positioning of the insulator on the rack.

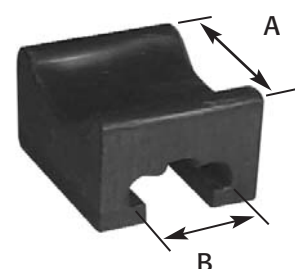
Specifications: Dielectric strength is comparable to that of insulators when they are new and without any chips or cracks. This polymer will never chip or crack.

Product number 3002 has identical dimensions as AB CHANCE part No. C203-1120 and Cooper part No. KE17U1. Product number 3003 has the same dimensions as Cooper part No. DE11U1 and includes an undercut to allow the insulator to slide on a rack

Note: Other sizes and shapes available.



3002



3003

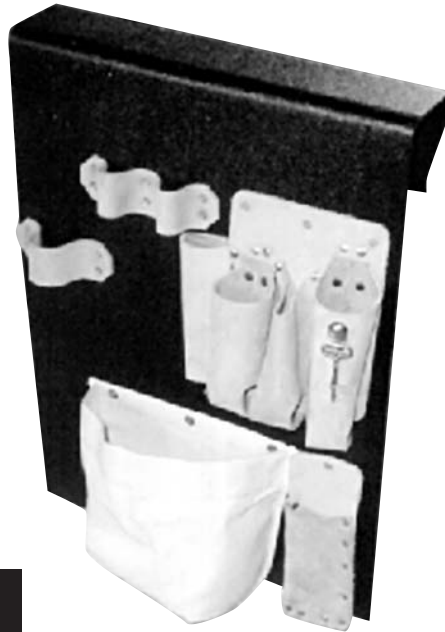
Catalog Number	"A" Cable Saddle Width	"B" Cable Rack Groove Width
3002	3"	1 9/16"
3003	3"	1 9/16"



Bucket Tool Pouch



Adjustable



Catalog
Number

5110

5111 (adjustable)

Application: For installation inside any line bucket. Variety of pouches and tool holders ensure ready access and save time. Versatile. Custom designs available at no extra cost.

Specifications: Body material: Black ABS plastic, shaped to accommodate a variety of bucket lip sizes and shapes. Pouches: Top Grain cowhide, sewn and riveted. Very durable.

Features: Strong and durable. Fast, simple installation.

Bucket Truck Tool Rack



Catalog
Number

95010

Application: For installation inside any line bucket. Variety of pouches and tool holders ensure ready access and saves time.

Features: This series of superior quality tool racks was designed exclusively for Hydro Quebec over a two year trial period. The result is a tool rack that linemen deemed to be one that meets ALL of their needs. Adjustable clamp on this 18" wide rack ensures a good fit on any bucket. Built with impact resistant ABS and durable polyethylene, these racks are what every lineman wants!



Bucket Hook

Application: For attaching over the lip of buckets to provide a secure hook for hanging tools and other gear.

Specifications: Body Material: Gray PVC plastic.

Features: Strong and durable. Fast, simple installation. Shaped to enable installation on a variety of bucket shapes and sizes. This product has consistently out-performed all competitive equivalents in terms of durability and strength, at a fraction of the cost.

Available in a variety of sizes and shapes.



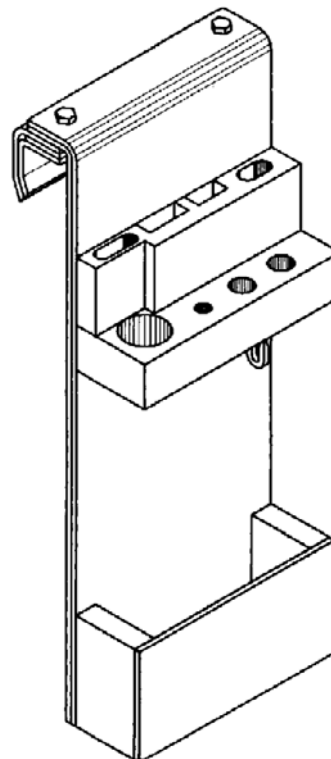
**Catalog
Number**

5010

Service Tool Rack

Application: For installation inside any line bucket. Variety of pouches and tool holders ensure ready access and saves time.

Features: This smaller version of the original Hydro Quebec Tool Rack is only 18 inches wide. This series of superior quality tool racks was designed exclusively for Hydro Quebec over a two year trial and error period. The result is a tool rack that linemen deemed to be the one that meets ALL of their needs. Adjustable clamp ensures a good fit on any bucket. Built with impact resistant ABS and durable polyethylene, these racks are what every lineman wants!



**Catalog
Number**

95011



Catalog
Number

7101

Chainsaw Scabbard

Application: For mounting chainsaws or other tools to line or other buckets.

Specifications: Durable, UV stabilized fiberglass.

Features: This is an example of the custom work commonly performed by EnerSCAN. In this case, the scabbard was designed and fabricated to meet a need not being filled by the Original Equipment Manufacturer whose product is good, but did not quite meet the needs of the utility. It was not worthwhile for the OEM to develop a solution, but the project was typical for EnerSCAN. Available with fixed or adjustable top.



Catalog
Number

01062

Drill Scabbard

Application: For mounting gas drills, to line or other tools to other buckets.

Specifications: Durable black ABS and HDPE plastic. Adjustable top ensures good fit on any bucket.

Features: Strong construction. Helps ensure tool longevity by providing secure location for tool storage.



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ENERSCAN'S PRODUCTS ARE PROTECTED BY PATENTS AND/OR INDUSTRIAL DESIGN REGISTRATIONS.

Product List	Pg.	Catalog N°
Secondary Bracket/Neutral bracket	1	25101
Secondary Spacer	1	2710 - 2742
Open Wire Secondary Midspan Bracket	2	2510 - 2541
Arch T Flower Products	2	Various
Standoff Multiplex Spreader & Standoff Spreader Bracket	3	2920 - 2930
Multiplex Spreader & Multiplex Spreader Bracket	3	2900 - 2914
Heavy Duty Secondary Spacer	4	2410 - 2450
Clamping Midspan Bracket	4	2610 - 2651
Service Wireholder	5	96003 - 96006
Ground Wire Moulding	5	7000
Polymer Spool Insulators (Patents Pending)	6	99001 - 99002
Hotstick Holder	6	20011
Insulator Bail	7	3004 - 3008
Cable Rack Insulator	7	3002 - 3003
Bucket Tool Pouch	8	5110
Bucket Tool Rack	8	95010
Bucket Hook	9	5010
Service Tool Rack	9	95011
Chainsaw Scabbard	10	7101
Drill Scabbard	10	01062

Not all products are shown in this catalog. For a complete and up to date listing and information please visit our web site www.energscanengineering.com.

Energscan also undertakes product development on a custom and contract basis.