Trusted Worldwide by Mining, Cement, Aggregate, Power Gen, Oil and Gas, Ports, and Major Processing Operations Since 2006. Canada and USA Program – Spicer Solution Providers (2sp) Inc.















## **Leonardo Arrieta**V-P Development and Training

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Things have changed. We listen and deliver proven custom solutions that you can trust.

- A MUCH BETTER WAY TO REPAIR BELT DAMAGE: RubbaFIX® (page 2) Permanently repair belt covers, edges and rips. The only one-component solution, with important advantages and benefits not available with any two-part polyurethane kits: NO mixing or waste, NO expiry date, NO toxic fumes, remains a constant 70 durometer that will not harden or crack, thermal bond results in exceptional adhesion, NO cleanup required, and ready in only 30 minutes. Ask how you can try before you buy.
- RELIABILITY NOW AT A REASONABLE COST: Legend Screw Splice (pages 3-4) Belt splice and repair. We radically improved & patented new technology, w/up to 8 rows of screws and up to >1430 PIW. Five models: (1) three w/split top & bottom segments incl. two w/vulcanized rubber positioning strip and one w/spacers; and (2) two models with segments vulcanized at center for a faster install and superior resistance to impact. Legend Screw Splice is proven to endure long after, while many other fasteners continue to fail. Guaranteed to outperform and outlast any fastener in use. Ask for details.
- PUMPS LIKE NO OTHER: <u>Supavac</u>® (pages 5-6) The Original patented mobile, pneumatic displacement, solids transfer pumps. Unlike submersible and centrifugal pumps, only Supavac can access anywhere, vacuum recover abrasive/corrosive/oily sludge w/hard solids thru long suction hose like a vac truck, with auto/adjustable pressure discharge to 1000s of feet. And with no rotating parts or electricity, reliability and a recent 20-year and still pumping report is the experience. Rent with purchase option.
- 2<sup>nd</sup> GENERATION: SSP-770 Ceramic Belt Cleaners® (page 7) Consistently remove more carry back, stop belt cover damage from some sharp tungsten carbide blade scrapers and resist corrosive and extreme high-temperature operation. Proven to last >4-times polyurethane. Reports of elimination of ~95% of carryback w/dual installation in year two of operation. Ask about Performance Guarantee.
- Installation supervision, startup and training provided directly by factory representatives.
- Authorized distributors provide turnkey installation service on available products. Ask to join *The Team*.
- Services disponibles en français sur demande.
   Servicios disponibles en español bajo pedido.

Corporate office, manufacturing and service centre, and international distribution:

Contact: Spicer Solution Providers (2sp) Inc. or Authorized Distributor

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International Telephone: +1.514.335.4275



# Save the Belt – Upgrade to the Only One-Part Rubber Repair Are you interested but unsure? Ask how you can try before you buy.

Master International
Distributor. Select
opportunities are available.

Safe to view videos: <a href="https://vimeo.com/282732075">https://RubbaFIX.com.au</a>















Mini and Melta Pro models from small to large belt repair. 115/1/60 or 230/1/50.

No mixing ever required and no more waste.

Repair damaged belt covers, edges & holes. Constant 70 duro rubber remains flexible, providing outstanding adhesion and long life.

Secure elevator buckets.

Flexco® plate and hinged fasteners can now be covered, cut maintenance.













Permanently repair long rips, belt edge, holes, cover, gouge damage – ask how.

Cover Super Screw® & other fasteners and stop scrapers from catching and damaging the edge of uneven covers.

With a smooth like-new cover,  $\uparrow$  belt scrapers clean more effectively

#### RubbaFIX®, uniquely w/only 1 component, advantages NOT available w/any 2-component polyurethane kits:

- No longer a need to mix and never any wastage. Unlimited shelf life, even when opened.
- Simply add rubber pucks to the applicator gun, heat and apply to the preheated areas of belt to be repaired.
- If belting damaged all the way through, add reinforced fabric sheets between RubbaFIX® top & bottom layers.
- RubbaFIX® rubber remains a constant flexible 70 durometer long after application, will not harden or crack and can be reworked by reheating at any time should a repaired area become damaged again.
- Outstanding thermal adhesion to rubber belting, Nitrile & pvc solid-woven belting, metals, fiberglass & more.
- FRAS certified. Fire-resistant and anti-static for underground mines and critical location requirements.
- NO toxic fumes, unlike polyurethane refer to the MSDS.
- Ready to buff and return to service in only 30 minutes add icy water to cool down to minimize time.
- NO need to ever clean the applicator gun just leave unused rubber and you are ready for the next task.
- Repairs to all type of conveyor belts, chute and hopper linings, ball mill rubber liner bars, tank linings, rubber-lined pumps, impellers, valves, and diaphragms, filler putty between rubber sheeting & pulley lagging, rubber conveyor rollers, non-structural off highway tire repairs, rubber expansion joint repair – ask for info.
- Unlike cold patches and bulky belt clips, the repaired areas remain even with the top cover, ensuring that sharp scrapers do not get caught on an uneven cover or belt edge – and will clean the belt more effectively.
- Approved for operation of SSP-770 Ceramic Belt Cleaners<sup>®</sup>.
- Fill the open void area above Super Screw® and other mechanical belt fasteners and the top belt cover level. And this provides an extra protective layer to resist moisture, corrosion, abrasion, and especially impact.

  Damage is avoidable: Ensure that sharp tungsten carbide scrapers blades do not get caught on the edge of uneven steps and damage the belt and fastener, especially high-speed and high-capacity belt conveyors.
- We can equip your Team with RubbaFIX® rubber and Melta Pro® and Melta Mini® applicator machines and provide training so your Team is prepared to respond immediately to permanently fix & minimize downtime.

Legend Screw Splice® for Max Reliability

We didn't invent the screw fastener; however, we did radically improve w/patented models. Proven solutions to reliably splice and repair at a more reasonable cost.

Stock or fast directly from manufacturer. Reduce installation time, maintenance costs & extend service life.





Upgrade to the patented Legend-BH-350-XHD – ④ see below for BH-254 details. Advanced technology screw splice w/2 rows of 3/16" plus 2 rows of 5/16" screws on each side, no spacers, titanium cloth reinforced, w/highest >1430 PIW rating, top and bottom segments are exclusively factory vulcanized together at center = results in superior impact resistance and long service life. Premium RMA-1 rubber = maximum abrasion/cut resistance. Custom made readily available to meet your belt specifications. Supplied in custom kits or various size rolls – refer to chart. The legendary alternative to vulcanization, especially when time, location, and weather are limiting factors. LEGEND is proven to continue long after, while most other fasteners continue to fail.

LEGEND Split-Segment Design: These reliable conveyor screw fasteners splice belts & insert repair sections into long rips/damaged belts, available up to >1430 PIW.





**LEGEND BH-120 Split Conveyor Belt Screw Splice – with standard spacers.** Two lines of 3/16" screws on each side + middle line secures joint. All nuts are securely vulcanized into the bottom segment. Top and bottom segments are split, designed for belt joints of light-medium weight conveyor belts. Tension to 575 PIW.





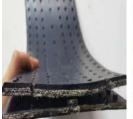
**LEGEND BH-180 Split Screw Splice + Insert for Damage and Long Rip Repair. NO spacers.** Three rows of 3/16" screws on each side + middle line. All nuts are securely vulcanized into bottom segment. With 3-ply top and 3-ply bottom HD fabric reinforced segments, a strong, secure joint is ensured. Belt tension to 860 PIW.





LEGEND BH-254 Joined Screw Splice w/Top & Bottom Segments Vulcanized.

4 Same patented advanced technology as BH-350-XHD as detailed above. Three lines of 3/16" screws each side. All nuts are securely vulcanized into the bottom segment. With top and bottom segments, each with heavy-duty fabric reinforcement layers, a strong, secure joint is ensured. Belt tension to 1145 PIW





**NO spacers.** One line of 3/16" + two lines of 1/4" screws on each side. Nuts securely vulcanized into the bottom segment. With top and bottom segments, each with heavy-duty fabric reinforcement layers, a strong, secure joint is ensured. Centre row of screws secures into rubber positioning strip for splice. eliminates need for spacers and provides superior impact resistance. Belt tension to >1430 PIW rating.

### Legend Screw Splice® and Insert Repair - General Specifications ① ② ③

Proven Solutions to Reliably Splice & Repair, Anywhere, Anytime, Any Weather, at a More Reasonable Cost.

| LEGEND® MODELS                                                                                             | BH-120                                     | BH-180                                     | BH-254                                      | BH-260-HD                                   | BH-350-XHD                                    |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------|---------------------------------------------|---------------------------------------------|-----------------------------------------------|
| LEGEND® SPECIFICATION DETAILS ↓                                                                            | Splice                                     | Splice + HD Repair<br>Damage/Long Rips     | Splice                                      | Splice + XHD Repair<br>Damage/Long Rips     | Splice                                        |
| Design - Top and Bottom Segments                                                                           | TWO Separate                               | TWO Separate                               | ONE joined at centre                        | TWO Separate                                | ONE joined at centre                          |
| Recommended for use w/EP & other fabric conv. belts<br>Check tension rating + BH254/BH350 fabric thickness | Confirm Belt and Splice Specs.             | Confirm Belt and Splice Specs.             | Confirm Belt and Splice Specs.              | Confirm Belt and Splice Specs.              | Confirm Belt and Splice Specs.                |
| Belt tension - N/mm (highest ratings in the industry)                                                      | 400 to 800                                 | 600 to 1200                                | 800 to 1600                                 | 1200 to >2000                               | 1200 to >2000                                 |
| Belt Tension – PIW (highest ratings in the industry)                                                       | 285 to 575                                 | 430 to 860                                 | 575 to 1145                                 | 860 to >1430                                | 860 to >1430                                  |
| Reinforcement (based on belt tension)                                                                      | Canvas                                     | Canvas                                     | Canvas or Titanium                          | Canvas or Titanium                          | Canvas or Titanium                            |
| Splice or Repair Width (mm)                                                                                | 120                                        | 180                                        | 254                                         | 260                                         | 350                                           |
| Splice or Repair Width (inches)                                                                            | 4.72                                       | 7.09                                       | 10                                          | 10.2                                        | 13.8                                          |
| Minimum Pulley Diameter (~mm - based tension rating)                                                       | ~250 to 350                                | ~250 to 350                                | ~350 to 400                                 | ~350 to 650                                 | ~500 to 800                                   |
| Screw Dimensions - Metric (number of rows of screws)                                                       | 5 = (5) M4.8                               | 7 = (7) M4.8                               | 7 = (7) M4.8                                | 7 = (2) M4.8 + (5) M6                       | 8 = (4) M5 + (4) M8                           |
| Screw Dimensions - Imperial (number rows of screws)                                                        | 5 = (5) 0.19                               | 7 = (7) 0.19                               | 7 = (7) 0.19                                | 7 = (2) 0.19 + (5) 0.24                     | 8 = (4) 0.20 + (4) 0.31                       |
| Standard Screw + Vulcanized Insert Material                                                                | Carbon Steel                               | Carbon Steel                               | Carbon Steel                                | Carbon Steel                                | Carbon Steel                                  |
| Optional- Anti-Magnetic                                                                                    | 316 Stainless Steel                        | 316 Stainless Steel                        | 316 Stainless Steel                         | 316 Stainless Steel                         | 316 Stainless Steel                           |
| Quantity of Screws (per meter - 3.3 feet)                                                                  | 226 x M4.8                                 | 337 x M4.8                                 | 311 x M4.8                                  | 144 x M4.8 + 162 x M6                       | 203 x M5 + 75 x M8                            |
| Quantity of PZ Bits (included per meter – per 3.3 feet)                                                    | 1                                          | 1                                          | 1                                           | 1                                           | 1                                             |
| Number of Spacers (Included per meter – per 3.3 feet)                                                      | 18                                         | No Spacers                                 | No Spacers                                  | No Spacers                                  | No Spacers                                    |
| When no spacers – Positioning strip attached to bottom                                                     | Multiple spacers                           | Positioning strip vulc. top segment        | Segments joined together at centre          | Positioning strip vulcanized to top seg.    | Segments joined together at centre            |
| Standard Top and Bottom Covers (mm)                                                                        | 5.0 + 3.8<br>6.0 + 3.8                     | 7.5 + 4.5<br>8.5 + 4.5                     | 6.0 + 5.0<br>7.0 + 5.0                      | 8.5 + 5.5<br>10 + 5.5                       | 9 + 5.5 and 11 + 5.5<br>12 + 5.5 and 13 + 5.5 |
| Standard Top and Bottom Covers (inches)                                                                    | 0.20 + 0.15<br>0.24 + 0.15                 | 0.30 + 0.18<br>0.34 + 0.18                 | 0.24 + 0.20<br>0.28 + 0.20                  | 0.33 + 0.22<br>0.39 + 0.22                  | 0.35, 0.43, 0.47<br>and 0.51 + 0.22           |
| Optional: Different Top/Bottom Covers available                                                            | Avail on request                           | Avail on request                           | Available on request                        | Available on request                        | Available on request                          |
| Weight: ~kgs/m (lbs/ft) varies w/covers/tension rating                                                     | ~2.8 (1.8)                                 | ~3.1 (2.1)                                 | ~4.3 (2.9)                                  | ~4.7 (3.2)                                  | ~7.8 (5.2)                                    |
| Standard Rubber Covers: High abrasion & cut resistant                                                      | RMA-1 – 50mm3                              | RMA-1 – 50mm3                              | RMA-1 – 50mm3                               | RMA-1 – 50mm3                               | RMA-1 – 50mm3                                 |
| Optional Covers: Economical choice for standard duty                                                       | RMA-2 - 150mm3                             | RMA-2 - 150mm3                             | RMA-2 - 150mm3                              | RMA-2 - 150mm3                              | RMA-2 - 150mm3                                |
|                                                                                                            | Heat-Resistant                             | Heat-Resistant                             | Heat-Resistant                              | Heat-Resistant                              | Heat-Resistant                                |
|                                                                                                            | Oil-Resistant                              | Oil-Resistant                              | Oil-Resistant                               | Oil-Resistant                               | Oil-Resistant                                 |
|                                                                                                            | Low Temperature                            | Low Temperature                            | Low Temperature                             | Low Temperature                             | Low Temperature                               |
|                                                                                                            | Friction Back                              | Friction Back                              | Friction Back                               | Friction Back                               | Friction Back                                 |
| Available in Custom Kits to suit any belt width (mm)                                                       | 800. 1000, 1200,<br>1400 and 1600 +        | 800. 1000, 1200,<br>1400 and 1600 +        | 800. 1000, 1200,<br>1400 and 1600 +         | 800. 1000, 1200,<br>1400 and 1600 +         | 800. 1000, 1200,<br>1400 and 1600 +           |
| Available in Custom Kits to suit any belt width (inches)                                                   | 31, 39, 47, 55, 63+                        | 31, 39, 47, 55, 63+                        | 31, 39, 47, 55, 63 +                        | 31, 39, 47, 55, 63 +                        | 31, 39, 47, 55, 63 +                          |
| Available in Rolls w/screws & PZ bits (meters and feet)                                                    | 3, 5, 10, 15, 25 m<br>10, 16, 33, 50, 82ft | 3, 5, 10, 15, 25 m<br>10, 16, 33, 50, 82ft | 3, 5, 10, 15, 25 m<br>10, 16, 33, 50, 82 ft | 3, 5, 10, 15, 25 m<br>10, 16,3 3, 50, 82 ft | 3, 5, 10, 15, 25 m<br>10, 16, 33, 50, 82 ft   |
| COMPARE w/Super Screw® models 3                                                                            | Evolution® 35 - 80                         | Original® 85 - 105                         | Original® 85 to 165                         | Original® 125 to 205                        | Original® 125 to 250                          |
| N/mm tension rating (PIW tension rating)                                                                   | 315 to 800<br>(200 to 450)                 | 800 to 1000<br>(450 to 570)                | 800 to 1600<br>(450 to 914)                 | 1250 to 2000<br>(710 to 1140)               | 1250 to >2000<br>(710 to >1430)               |
| Width in mm (in inches)                                                                                    | 62 - 160 (2.4 - 6.3)                       | 156 (6.2)                                  | 156 - 266 (6.2 - 10.5)                      | 156 - 266 (6.2 - 10.5)                      | 266 (10.5)                                    |
| Rubber abrasion resistance rating:  Model: Primary® (150 mm3) + Original®/Evolution® (>\$)                 | 150 or 50 mm3<br>RMA-2 or RMA-1            | 150 or 50 mm3<br>RMA-2 or RMA-1            | 150 or+ 50 mm3<br>RMA-2 or RMA-1            | 150 or 50 mm3<br>RMA-2 or RMA-1)            | 150 or 50 mm3<br>RMA-2 or RMA-1               |

<sup>1</sup> Custom Legend Screw Splice® fastener models are patented - available for any belt width, specification, tension/strength and most thicknesses. Supplied either in rolls to 25 meters (82 feet) or custom kits, delivered complete and ready for immediate installation.

<sup>2</sup> Recommend application of RubbaFIX® rubber to be applied over the top of any fastener. May be required with many fastener installations, including the pricy ones, this to ensure an even, flat top cover for unobstructed scraper operation and to prevent scrapers from damaging contact with uneven cover and very possibly causing downtime to belt operation and splice failure.

<sup>3</sup> Note: For comparison reference purpose use only. Legend® specifications and design may vary and even exceed Super Screw® specifications. Super Screw® specs referenced herein are as supplied by MLT as of 2023. Please contact for more details and for a recommendation to meet or exceed your requirements and a custom quotation. Please request, complete, and return questionnaire. Legend® standard and custom fasteners are readily available from stock to ~2 weeks. E+OE: Any errors or omissions are unintentional.



The Original patented mobile solids transfer pumps and systems. New Technology: Supavac® pumps w/Next Gen Controls provide variable discharge pressure/flow & save ≤30% in compressed air.

#### Master International Distributor. Purchase or rent w/purchase option. Made in Australia. Canadian Systems Integration.









Engineered with mining in mind. Emptying these underground mine drainage sumps.

This extremely thick oily waste can be pumped.









This lined mill water sludge sedimentation lagoon was emptied with solids discharged 4,200 feet through 4" hdpe piping for disposal. Know-how = no damage to pond liner.

Solids can be discharged up to 1000s of feet or more thru piping with force of 100 psi.



Accumulated settled oily waste easily removed for disposal.



Overwhelmed submersible pump was rescued at Vale.



Accumulated mud and hard solids were removed from this canal.



Seven SV110V pumps onsite for BP Gulf emergency spills response.

Large sludge sedimentation lagoons • u/g drainage sumps • Mill upset sumps • Vessels and tanks Reservoir bottoms • Recovery and transfer of valuable spilled product • Emergency response.

Supavac® pneumatic-displacement solids transfer pumps are proven to do what no other pump can do: with 25" Hg, vacuum recover tons and tons of abrasive, corrosive and oily sludge and hazardous waste with hard solids, with only a minimum volume of water, through long suction hose with the force of a vacuum truck, with an adjustable discharge through long piping up to one kilometer or more with the force of up to 100 psi of pressure, all in one automatic operation. And without rotating parts or electricity, high reliability and a recent 20-year and still pumping report is the experience.

Choice of pump model are available for rental, with purchase option. recouping a portion of paid rentals.

Many pumps and systems are in stock and custom systems can usually be shipped within a few weeks. Spare parts and accessories are shipped quickly. Supervision of pumping systems worldwide with training in operation, safety, and maintenance procedures. And we are available long after installation.



# More Supavac solids transfer pumps in underground and surface operation.













Typical mill water sludge lagoon with accumulated solids prior to mobilization of Supavac pump system. Proven know-how to reliably vacuum recover settled sludge w/ hard solids with auto pressure discharge 1000's of feet with no damage to pond liner.





















Radically and consistently cut carry back + Stop belt damage + Extend the effective service life of polyurethane scrapers by much more than 4-times. Ask about Performance Guarantee. Any Size: from 12" thru 96". Lightweight: only ~20 to 50 lbs. Shipped from stock, fully assembled and ready to install.

We are the manufacturer.
Select distributor opportunities are available.



Installation only ~3 hours. Lightweight: weigh only ~20 - 50 lbs complete.



Virtually no maintenance or adjustment required.



Users report: ~95% removal of carry back when primary and secondary Cleaners installed.



Proven highly resistant to abrasion, corrosion, and high heat.



Users have reported: "Cleaning after year two, just like day one."

When polyurethane scrapers have failed due to extremely abrasive or high temperature solids . . . When some sharp tungsten carbide scraper blades have been destroyed due to the destructive effects of corrosive and abrasive materials . . . And have repeatedly damaged belt covers one time too many . . . Then it may be time to consider installing the Performance Guaranteed SSP-770 Ceramic Belt Cleaners®

**No Nonsense Performance Guarantee:** We will supervise the installation of primary and secondary Cleaners®. We will prove within 30 days that abrasive, corrosive, sticky, and hot carry back is radically reduced, belt cover damage is stopped, and the condition of Cleaners® remains virtually like day one, **or you pay nothing**.







Polyurethane scrapers are not able to withstand abrasion and degrade quickly when subjected to high heat (clinker, etc.)





