MIG (GMAW) **WELDING CÓNSUMABLES**



APPLICATIONS	Construction & Infrastructure Commercial Truck & Trailer General Manufacturing & Fabrication Heavy Equipment Rail Ship
SYSTEM COMPONENTS	• Liners • Contact tips • Nozzles • Diffusers • Power pins • Power pin caps
COMPATIBLE WITH	• BTB Series MIG Guns • Miller® MDX™-250 Series MIG Guns • S-Gun™ MIG Guns
WIRE SIZES	• 0.023" to 1/8" (0.6 to 3.2 mm)

IT ALL COMES TOGETHER WITH ACCULOCK™ (a)



Choosing equipment with fewer points of failure and simplified maintenance can reduce welder training and shorten your troubleshooting list leading to increased productivity.

AccuLock™ S Consumables are designed to **DECREASE LINER** TRIM LENGTH ERRORS AND ERRATIC WIRE-FEEDING, WHILE INCREASING CONTACT TIP LIFE.

- **ERROR-PROOF LINER REPLACEMENT** With front load liners. See page 6 for details.
- **OPTIMIZED WIRE-FEEDING** front load liners are locked and concentrically aligned to both the contact tip and power pin to ensure smooth, uninterrupted delivery of the wire to the weld puddle. This means you'll benefit from reduced troubleshooting and downtime caused by burnbacks, birdnests, and erratic arc.
- ENHANCED CONTACT TIP-TO-DIFFUSER DESIGN contact tip is 60% buried within the diffuser for less exposure to the heat of the weld and more cooling from shielding gas for 2-3x longer life.





ERROR-PROOF INSTALLATION

Eliminates measuring the liner simply cut flush with the back of the power pin

COMMON **CONTACT TIP**

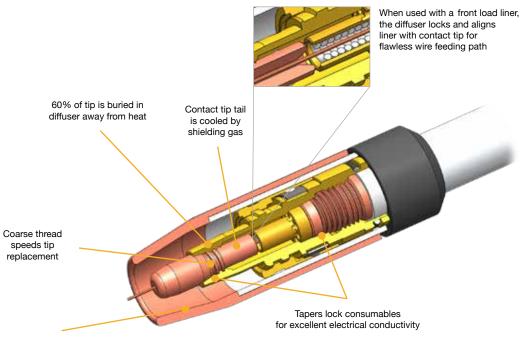
Contact tips can be used on robotic, semi-automatic and fixed automatic guns

DUAL-LOCKED & CONCENTRICALLY **ALIGNED LINER**

Keeps the liner perfectly aligned from the power pin to the contact tip



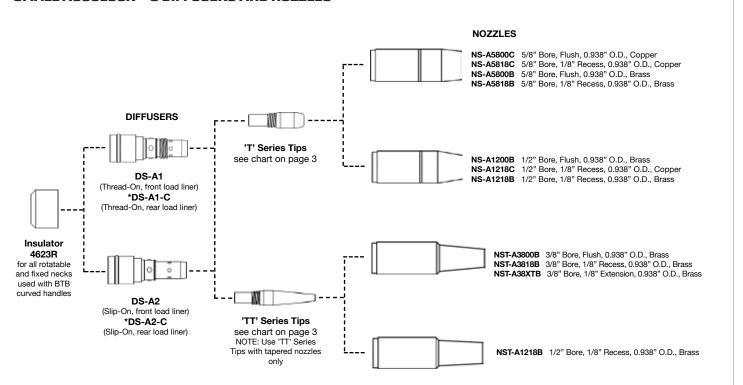
ACCULOCK™ S KEY FEATURES



Nozzle stays in place during use / cleaning due to the steel retaining ring on the diffuser that helps to keep the threaded nozzle from loosening

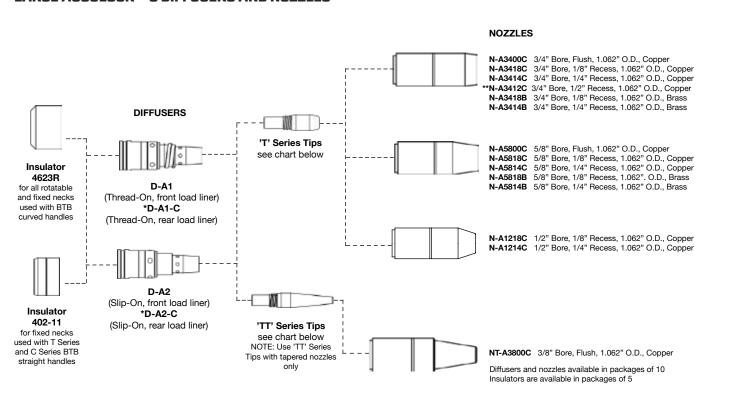
ACCULOCK™ S CONSUMABLES

SMALL ACCULOCK™ S DIFFUSERS AND NOZZLES



NOTE: *NOT ENGINEERED FOR ERROR-PROOF LINER REPLACEMENT AND FLAWLESS WIRE FEEDING. FOR USE WITH REAR LOAD LINERS. REFER TO SPEC SHEET <u>SP-BER-RLL</u> FOR MORE INFORMATION.

LARGE ACCULOCK™ S DIFFUSERS AND NOZZLES



NOTE: *NOT ENGINEERED FOR ERROR-PROOF LINER REPLACEMENT AND FLAWLESS WIRE FEEDING. FOR USE WITH REAR LOAD LINERS. **FOR USE WITH MILLER ELECTRIC HD (HIGH-DEPOSITION) MIG CV GMAW PROCESS. REFER TO SPEC SHEET SP-BER RLL FOR MORE INFORMATION.

ACCULOCK™ CONTACT TIPS

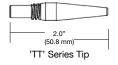
'T' SERIES CONTACT TIPS (0.350" O.D.)



0.023"	(0.6 mm)		
0.030"	(0.8 mm)		
0.035"	(0.9 mm)		
0.039"	(1.0 mm)		
0.045"	(1.2 mm)		
3/64"	(1.2 mm)		
0.052"	(1.3 mm)		
1/16"	(1.6 mm)		
0.072"	(1.8 mm)		
5/64"	(2.0 mm)		
3/32"	(2.4 mm)		
7/64"	(2.8 mm)		
1/8"	(3.2 mm)		
	0.030" 0.035" 0.039" 0.045" 3/64" 0.052" 1/16" 0.072" 5/64" 3/32" 7/64"		

^ ADD "-100" TO THE END OF THE ABOVE 'T' SERIES CONTACT TIP PART NUMBERS FOR QUANTITIES OF 100. *ADD "-1000" TO END OF THE ABOVE 'T' SERIES CONTACT TIP PART NUMBERS LISTED FOR QUANTITIES OF 1000.

'TT' SERIES CONTACT TIPS (0.350" O.D.)



TT-A023CH	0.023"	(0.6 mm)
TT-A030CH	0.030"	(0.8 mm)
TT-A035CH	0.035"	(0.9 mm)
TT-A039CH	0.039"	(1.0 mm)
TT-A045CH	0.045"	(1.2 mm)
TT-A052CH	0.052"	(1.3 mm)
TT-A062CH	1/16"	(1.6 mm)

Bernard® AccuLockTM S and Tregaskiss® AccuLockTM R Consumables share a common contact tip. If you have a combination of robotic and semi-automatic guns in your facility, you'll benefit from reduced costs and simplified inventory.



[•] TORQUE TO 30 IN.-LBS. (3.5 NM)

[•] CONTACT TIPS AVAILABLE IN QUANTITIES OF 10

FRONT LOAD LINERS

		Cable Length				
Wire Size	Liner Color	10' (3.05m)	15' (4.57m)	20' (6.10m)	25' (7.62m)	
0.023" (0.6 mm) - 0.030" (0.8 mm)	Yellow	LA1A-10	LA1A-15	LA1A-20	LA1A-25	
0.030" (0.8 mm) - 0.035" (0.9 mm)	Green	LA2A-10	LA2A-15	LA2A-20	LA2A-25	
0.035" (0.9 mm) - 0.045" (1.2 mm)	White	LAD3A-10	LAD3A-15	LAD3A-20	LAD3A-25	
0.045" (1.2 mm) - 1/16" (1.6 mm)	Red	LAD4A-10	LAD4A-15	LAD4A-20	LAD4A-25	
5/64" (2.0 mm)	Blue	LA6A-10	LA6A-15	LA6A-20	LA6A-25	
3/32" (2.4 mm)	Grey	LA7A-10	LA7A-15	LA7A-20	LA7A-25	
7/64" (2.8 mm) - 1/8" (3.2 mm)	Black	LA8A-10	LA8A-15	LA8A-20	LA8A-25	

ACCULOCK™ S POWER PIN AND POWER PIN CAPS (for use with Bernard® front load liners)

	Power Pin	Power Pin Cap	Cap Washer Color	Compatible Wire Size
	2200206	2200351	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200352	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200353	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
Miller®		2200354	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200355	Blue	5/64" (2.0 mm)
		2200356	Grey	3/32" (2.4 mm)
	2200207	2200357	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
		2200309	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200310	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
	2200210	2200311	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
Lincoln®		2200312	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200313	Blue	5/64" (2.0 mm)
		2200314	Grey	3/32" (2.4 mm)
	2200211	2200315	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
		2200281	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200282	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
	2200150	2200283	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
Tweco® #4		2200284	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200285	Blue	5/64" (2.0 mm)
		2200286	Grey	3/32" (2.4 mm)
	2200151	2200287	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
		2200295	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200296	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
	2200156	2200297	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
Tweco [®] #5		2200298	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200299	Blue	5/64" (2.0 mm)
	2200157	2200300	Grey	3/32" (2.4 mm)
		2200301	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
		2200337	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
		2200338	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200339	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
Euro	2200359 / 2200273	2200340	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200341	Blue	5/64" (2.0 mm)
		2200342	Grey	3/32" (2.4 mm)
		2200343	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)
		2200323	Yellow	0.023" (0.6 mm) - 0.030" (0.8 mm)
ОХОТМ	2200358	2200324	Green	0.030" (0.8 mm) - 0.035" (0.9 mm)
		2200325	White	0.035" (0.9 mm) - 0.045" (1.2 mm)
		2200326	Red	0.045" (1.2 mm) - 1/16" (1.6 mm)
		2200327	Blue	5/64" (2.0 mm)
		2200328	Grey	3/32" (2.4 mm)
		2200329	Black	7/64" (2.8 mm) - 1/8" (3.2 mm)

ACCULOCK™ S CONVERSION SERIES

Convert from your current consumables to our AccuLock™ S Consumables for your Bernard® BTB semi-automatic MIG gun or competitive style MIG guns. Find your MIG gun make and model on the left, then follow the chart to the right for parts needed to upgrade.

Gun Manufacturer	Gun Model	Desired Nozzle / Diffuser Style	Adapter	Insulator	Diffuser	Contact Tip	Nozzle			
Bernard [®]	BTB Semi-Automatic MIG Gun	Small	Not Required 462	4623R	DS-A1-C (thread-on) DS-A2-C (slip-on)		Select from nozzles on pages 2-3 Note: use small nozzles with			
		Large			D-A1-C (thread-on) D-A2-C (slip-on)					
Tweco®	No. 1, No. 2	Small		10012	DS-A1-C (thread-on) DS-A2-C (slip-on)	Select from tips on page				
		Large	1380030		D-A1-C (thread-on) D-A2-C (slip-on)					
	No. 3, No. 4, Tuff-n-Lite, Supra® XT (HD consumables), Spray Master 450	Small	Nat Danimal	10010	DS-A1-C (thread-on) DS-A2-C (slip-on)					
			10012	D-A1-C (thread-on) 3 D-A2-C (slip-on)	small diffusers and large					
Lincoln®	Lincoln®	Magnum® 250	Small	1220020	10010	DS-A1-C (thread-on) DS-A2-C (slip-on)		nozzles with large diffusers		
		Large 1380030 10012	10012	D-A1-C (thread-on) D-A2-C (slip-on)						
		Magnum® 300, 400	Magnum® 300, 400	Magnum® 300, 400	Small	Net De suite d	10012	DS-A1-C (thread-on) DS-A2-C (slip-on)		
		Large	Not Required	10012	D-A1-C (thread-on) D-A2-C (slip-on)					

ABOVE GUN MODELS ARE REGISTERED TRADENAMES OF THEIR RESPECTIVE COMPANIES

ACCULOCK™ S FOR REAR LOAD LINERS STARTER KIT



ALCSK-1

Rear load liner starter kit. Allows welders to convert thier Bernard $^{\!0}$ BTB MIG gun consumables, or select competitor MIG gun consumables, to AccuLock $^{\text{TM}}$ S consumables.

Swap current nozzle, diffuser and contact tip with AccuLock™ S consumables while still using a rear load liner.

QUICK REFERENCE FOR FRONT LOAD LINER INSTALLATION

With $AccuLock^{TM} S$ — the liner replacement process has been error-proofed. No more measuring means no more liners trimmed incorrectly.

THE BELOW LINER INSTALLATION INSTRUCTIONS ARE NOT APPLICABLE FOR REAR LOAD LINER DIFFUSERS (D-A1-C, DS-A1-C, D-A2-C AND DS-A2-C).





SCAN TO VIEW DETAILED FRONT LOAD LINER INSTALLATION INSTRUCTIONS

1. Loosen power pin cap set screw. Remove nozzle, gas diffuser, power pin cap, and liner.



2. Replace the new liner through the neck until brass liner lock bottoms on neck.



3. Lock and center liner by reinstalling the diffuser. Slide power pin cap over exposed liner and tighten the cap snug against power pin shoulder with welding pliers or appropriate wrench.



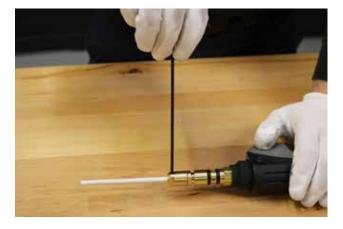
4. Holding a hex wrench as shown, tighten the screw "finger-tight" against the liner.



QUICK REFERENCE FOR FRONT LOAD LINER INSTALLATION

[CONTINUED]

5. Next, hold the hex wrench by the handle and tighten the set screw and additional one-half turn to fully secure the liner.



7. Insert a piece of welding wire into the liner to check for burrs or obstructions. If needed, loosen screw slightly until wire slides freely.



6. Trim liner flush with end of power pin.



QUICK REFERENCE FOR REAR LOAD LINER INSTALLATION

Refer to Rear Load Liner spec sheet <u>SP-BER-RLL</u> for liner installation instructions.

ACCULOCK™ CONTACT TIPS, ACCULOCK™ S NOZZLES, DIFFUSERS AND LINERS ARE MANUFACTURED BY BERNARD®, BERNARD®, MILLER®, TREGASKISS® ARE TRADEMARKS OF ILLINOIS TOOL WORKS, INC. OTHER BRANDS MENTIONED ARE FOR REFERENCE ONLY AND ARE THE REGISTERED TRADEMARKS OF THEIR RESPECTIVE COMPANIES. ILLINOIS TOOL WORKS, INC. IS NOT AFFILIATED WITH THESE OTHER COMPANIES.

SUBJECT TO CHANGE – THE INFORMATION PRESENTED IN THIS SPEC SHEET IS ACCURATE TO THE BEST OF OUR KNOWLEDGE AT THE TIME OF PRINTING. PLEASE VISIT BERNARDTREGASKISS.COM FOR THE MOST UP-TO-DATE INFORMATION.

DISTRIBUTED BY:

→BERNARD*