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# **Centerfire**<sup>™</sup> **Consumable Series**

MIG (GMAW) Welding **Consumables** 



## Quick **Specs**

## **Applications** Shipbuilding

Trailer Fabrication Heavy Equipment Manufacturing

## **System Components**

**Contact Tips** Nozzles Diffusers / Tip Holders Insulators

### Compatible With

BTB Series MIG Guns Clean Air Series Dura-Flux™ Fixed Liner Series FILTAIR™ Fume Extraction Series Legacy Q-Gun™ and S-Gun™ Series

### **Wire Sizes**

0.023" to 1/8" (0.06 to 3.2 mm)

## **Centerfire™ Series Consumables**

are easy-to-use and high performing. Developed with the user's cost consideration in mind, Centerfire Series Consumables provide better arc starts, less spatter and more consistent welds, while lasting up to three times longer than most brands.

Threaded nozzle keeps contact tip centered for better weld placement and less spatter. Holds tips fixed at 1/4" or 1/8" recess, flush, or 1/8" stick out.

Composite insulator extends life and withstands heat abuse.

**Centerfire Nozzles** have a built-in spatter shield that smooths and concentrates gas glow for less weld exidation and contamination.

Centerfire Contact Tips have a tapered base to improve conductivity.

Diffuser mates securely with contact tip for better conductivity.





No tools needed to change nozzles and contact tips



Better arc starts, less spatter, more consistent welds

### **Centerfire HD Consumables**

are designed for shipbuilding, trailer fabrication and other heavy manufacturing operations. These heavy-duty nozzles feature an easily removable and replaceable nozzle cone (the most frequently damaged part of the nozzle), thicker walls and a new, high temperature insulator.





#### **Bernard**

A Divison of Miller Electric Mfg. Co. 449 West Corning Road, Box 667 Beecher, Illinois 60401 USA

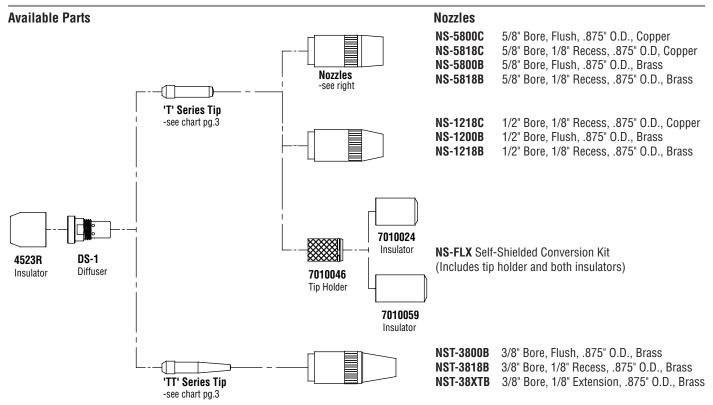
Phone: 1-855-MIGWELD (644-9353) (US & Canada Only) +1-519-737-3000 (International)

708-946-6726

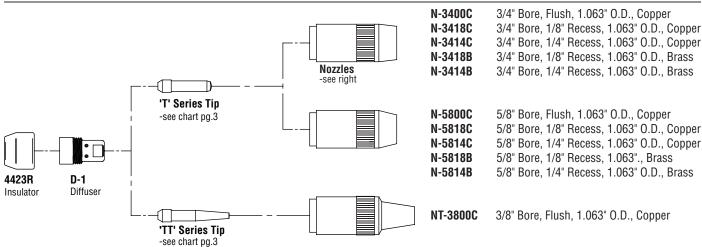
For more information, visit us at BernardWelds.com

## **Centerfire Series**

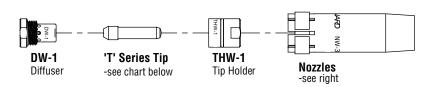
### Small Centerfire™ Gas Diffusers and Nozzles



## Large Centerfire™ Gas Diffusers and Nozzles



Diffusers, nozzles and contact tips are available in packages of 10 and insulators are available in packages of 5

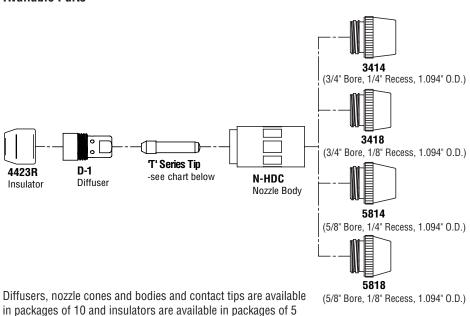


#### Nozzles

NW-3418C 3/4" Bore, 1/8" Recess, 1.000" O.D., Copper 3/4" Bore, 1/4" Recess, 1.000" O.D., Copper NW-3414C

### Centerfire™ HD Gas Diffusers and Nozzles

#### **Available Parts**



#### **Details**

- Couple the Centerfire HD Nozzle Body (N-HDC) with a Centerfire HD Nozzle Cone to form a complete Centerfire HD Nozzle.
- One nozzle body and one nozzle cone required, order separately.
- Use Centerfire HD Nozzles with standard Centerfire 4423R Insulator Caps, D-1 Gas Diffusers and 'T' Series Contact Tips.

#### Centerfire HD Consumbale Series Installation

- Install insulator over neck.
- 2. Trim liner as per the directions below.
- Torque diffuser onto neck to approx. 12ft-lbs.
- 4. Insert contact tip into diffuser.
- 5. Thread nozzle body onto diffuser / contact tip and tighten firmly by hand.
- Thread nozzle cone onto nozzle body and tighten firmly by hand.

## **Centerfire Contact Tips**

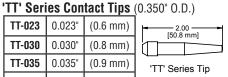
#### 'T' Series Contact Tips (0.350" O.D.)

T-023	0.023"	(0.6 mm)		
T-030	0.030"	(0.8 mm)		
T-035	0.035"	(0.9 mm)		
T-039	0.039"	(1.0 mm)		
T-045	0.045"	(1.2 mm)		
T-052	0.052"	(1.4 mm)		
T-062	1/16"	(1.6 mm)		
T-072	0.072"	(1.8 mm)		
T-078	5/64"	(2.0 mm)		
T-094	3/32"	(2.4 mm)		
T-109	7/64"	(2.8 mm)		
T-125	1/8"	(3.2 mm)		



**TT-023** 0.023" (0.6 mm)

TT-062	1/16"	(1.6 mm)
TT-052	0.052"	(1.4 mm)
TT-045	0.045"	(1.2 mm)
TT-039	0.039"	(1.0 mm)
TT-035	0.035"	(0.9 mm)
TT-030	0.030"	(0.8 mm)
		( /



Standard Installation

- Install insulator over neck.
- 2. Trim liner as per the directions below.
- 3. Torque diffuser onto neck to approx. 12ft-lbs.
- Insert contact tip into diffuser.
- Thread nozzle onto diffuser / contact tip and tighten firmly by hand.

### **Aluminum Specific Contact Tips** (0.350" O.D.)

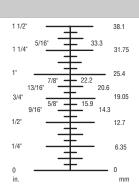
T-035AL	0.035"	(0.9 mm)		
T-047AL	3/64"	(1.2 mm)		
T-062AL	1/16"	(1.6 mm)		

## **Liner Trim Guidelines**

Available in packages of 10 contacts tips.

To know the optimal length to trim your liner simply find your diffuser part number from the list below and trim to the corresponding length.

D-1	9/16" (14.3 mm)	D-1T	13/16" (20.6 mm)
DS-1	9/16" (14.3 mm)	D-1T-5	13/16" (20.6 mm)
DW-1	1/4" (6.4 mm)	DS-1T	5/8" (15.9 mm)



## **Centerfire™ Conversion Series**

Simplify parts management and improve performance by converting all of your MIG guns to Centerfire Contact Tips, Nozzles and Diffusers. Find your MIG gun make and model on the left, then follow the chart to the right for parts needed to upgrade.

#### **Conversion Installation**

- 1. Install conversion adapter (if required).
- 2. Install insulator cap over conversion adapter.
- 3. Proceed with Standard or Centerfire HD Series installation.

Gun Manufacture	er Gun Model	Desired Nozzle / Diffuser Style	Adapter	Insulator	Diffuser	Contact Tip	Nozzle
Bernard®	Q-Gun™, EZ Feed II, H, F	Small	Not Required	4323R	DS-1		
		Large	Not Required	10012	D-1		
Binzel®	ALPHA 2, ALPHA 2 Automatic	Small	Not Required	4323R	DS-1B2		
		Large	N/A	N/A	N/A		
	ALPHA 3, ALPHA 3 Automatic	Small	Not Required	4323R	DS-1B3		
		Large	Not Required	4323R	D-1B3		
	ALPHA 4, ALPHA 4 Automatic	Small	N/A	N/A	N/A		
		Large	Not Required	4323R	D-1B4		
	OMEGA 4	Small	N/A	N/A	N/A		
		Large	Not Required	4323R	D-1B04	4	
Lincoln®	100L	Small	1380020	4323R	DS-1		
		Large	N/A	N/A	N/A	4	
	Magnum 250	Small	1380005	4323R	DS-1		
	Manager 200 Manager 400	Large	1380005	10012	D-1	4	
	Magnum 300, Magnum 400	Small	Not Required	4323R	DS-1T		
	Magnum FOO	Large	Not Required 1380017	4423R	D-1T	4	
	Magnum 500	Small		4323R	DS-1 D-1		
	Magnum Pro 300	Large Small	1380017 N/A	10012 N/A	N/A	4	
	I Wagnum 1 10 300	Large	Not Required	4323R	D-1LP3		Select from nozzles on pages 2-3 Note: use small nozzles with small diffusers and large nozzles with large diffusers
Miller®	XR Edge	Small	1380018	4323R	DS-1	4	
Willion C		Large	1380018	10012	D-1		
	XR30A, XR-W, Roughneck, Python	Small	Not Required	4323R	DS-1	Coloot from tipe	
	73071, 711 TT, HOUGHHOUR, 1 JUION	Large	Not Required	10012	D-1	Select from tips on page 3	
	Aluma-Pro™	Small	Not Required	4323R	DS-1AP		
		Large	Not Required	10012	D-1AP		
ОХО™	APX	Small	Not Required	4323R	DS-1		
		Large	Not Required	10012	D-1		
Tregaskiss®	Former TOUGH GUN™ Semi-Automatic	Small	Not Required	4323R	DS-1T	1	
	Series or the former Bernard T-Gun™	Large	Not Required	4423R	D-1T		
Tweco®	160 Mini Mig	Small	1380020	4323R	DS-1		
		Large	1380020	10012	D-1		
	No. 1	Small	1380019	4323R	DS-1		
		Large	1380019	10012	D-1		
	No. 2	Small	1380005	4323R	DS-1		
		Large	1380005	10012	D-1		
	No. 3, No. 4, Tuff-n-Lite, Supra® XT (HD Consumables)	Small	Not Required	4323R	DS-1T		
		Large	Not Required		D-1T		
	Spraymaster® 450  No. 5	Small	Not Required	4323R (2 Required)	DS-1T		
		Large	Not Required	4423R	D-1T		
		Small	N/A	N/A	N/A		
		Large	Not Required	4423R	D-1T-5		
	ELC 250, ELC 350, Spraymaster® 250, Spraymaster® 350	Small .	1380012	4323R	DS-1		
		Large	1380012	10012	D-1		
	ELC 450, EL 450, EL 600, Supra® XT (EL Consumables)	Small	1380017	4323R	DS-1		
		Large	1380017	10012	D-1		

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