

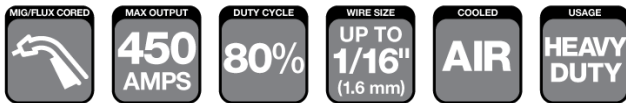
Spray Master Series

Spray Master® 450 AMP MIG Gun Air-Cooled

TWECO
AN ESAB BRAND



400 amps @ 80% Duty Cycle – Mixed Gases
450 amps @ 60% Duty Cycle – Mixed Gases



WELDING PROCESSES:

**MIG (GMAW), Flux Cored (FCAW),
Aluminum (GMAW)**

Standard Options Include:

- Dual Schedule On/Off Control, Locking Trigger, Rear Connector and Knucklehead™ Flexible Conductor Tube
- Standard Conductor Tube – Part No. MS64H-60 (Stock No. 1640-1319) on all guns up to 15 ft (4.6 m)
- Part No. MS64H-45 (Stock No. 1630-1318) on all guns over 15 ft (4.6 m)
- Conduit Liner – 44 Series

Industry

- Ship and Offshore Yards
- Repair and Maintenance
- Steel Industry
- Industrial and General Fabrication
- Automotive

FEATURES

- **Extended Trigger** length (with optional mechanical locking trigger) keeps hands farther away from the arc to reduce radiated heat
- **Compact, Ergonomic Handle Design** is balanced to pivot at the center of the handle for ease of use, thereby reducing operator fatigue
- **Wide Welding Applications** both Spray Transfer Mode & Pulse Welding
- **Increased Productivity** with the use of patented, extended life Eliminator front end consumables, helps the shop floor lower usage cost
- **Split Handle Case** provides access for ease of repairs in the field
- **Durable, Metal-Jacketed, Three-Layer Conductor Tube** rotates easily for different welding positions and lowers heat in the front end
- **Heavy Duty, Thick-Walled Contact Tip and Diffuser** increases tip life, decreases downtime with fewer tip changes and improves performance in high heat applications
- **Front and Rear Steel Spring Strain Relief** provides support to the Cablehoz® coming out of the rear of the handle and minimizes wire feed issues
- **Crimped Front Cablehoz Connection** for improved electrical conductivity
- **Field Repairable** mechanical Cablehoz connections
- **Interchangeable Front End Consumables** between Tweco® Classic No. and Tweco Spray Master series

SPRAY MASTER 450 AMP

SPECIFICATIONS	
Description	Spray Master 450
Welding Output Mixed Gas	400 A at 80%
Wire Diameter, Mild Steel	Up To 1/16" (1.6mm)
Wire Diameter, Stainless	Up To 1/16" (1.6mm)
Wire Diameter, Aluminium	Up To 1/16" (1.6mm)
Wire Diameter, Flux-cored	Up To 1/16" (1.6mm)
Certification Mark (Standards)	CE IEC 60974-7
Operating Temperature	-10 to +40 °C
Cable Length	10 ft. (3 m), 12 ft. (3.6 m), 15 ft. (4.6 m), 20 ft. (6.1 m) and 25 ft. (7.6 m)

Tweco® Style Rear Connector

Adapter kits are available to fit Tweco rear connection to most wire feeders

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	MS410-116	1040-1050
	12 ft (3.6 m)	MS412-116	1040-1051
	15 ft (4.6 m)	MS415-116	1040-1052
	15 ft (4.6 m)	MS415-116K4	1040-1530
	15 ft (4.6 m)	MS415-116LM	1040-1053
	15 ft (4.6 m)	MS415-116EL	1040-1541
	20 ft (6.1 m)	MS420-116	1040-1059
	25 ft (7.6 m)	MS425-116	1040-1058

Lincoln® Style Rear Connector

Fits Lincoln LN7, 8, 9, SP200

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	MS410L-116	1040-1070
	15 ft (4.6 m)	MS415L-116	1040-1072
	15 ft (4.6 m)	MS415L-116K4	1040-1533
	15 ft (4.6 m)	MS415L-116DSRS	1040-1538
	15 ft (4.6 m)	MS415L-116LC	1040-1074
	15 ft (4.6 m)	MS415L-116LM	1040-1073
	25 ft (7.6 m)	MS425L-116	1040-1071

Some Lincoln wire feeders are assembled with their K1500-2 gun receiving bushing that will accept Tweco Style MIG Guns direct from the factory. Control wire Part No. MS354-DSLJ (Stock No. 2060-2137) must be ordered separately.

Miller® Style Rear Connector

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	MS410M-116	1040-1060
	12 ft (3.6 m)	MS412M-116	1040-1061
	15 ft (4.6 m)	MS415M-116	1040-1062
	15 ft (4.6 m)	MS415M-116K4	1040-1531
	15 ft (4.6 m)	MS415M-116DSRS	1040-1536
	15 ft (4.6 m)	MS415M-116LC	1040-1092
	15 ft (4.6 m)	MS415M-116LM	1040-1063
	20 ft (6.1 m)	MS420M-116	1040-1064
	25 ft (7.6 m)	MS425M-116	1040-1068

Euro-Kwik Style Rear Connector

Wire Size	Length	Part No.	Stock No.
Up To 1/16" (1.6 mm)	10 ft (3 m)	MS410X-116	1040-1075
	12 ft (3.6 m)	MS412X-116	1040-1076
	15 ft (4.6 m)	MS415X-116	1040-1077

Suffix "K4" = Knucklehead Conductor Tube – Part No. MS64SFLX4-80 (Stock No. 1640-1308);

"DSRS" = Dual Schedule Rocker Switch; "LC" = Locking Trigger;

"LM" = Long Reach Conductor Tube – Part No. MS64H-60LM (Stock No. 1640-1317);

Suffix "EL" = Eliminator Front End Consumables

Contact Tips – Standard Threaded Style 16S & 16ST Series

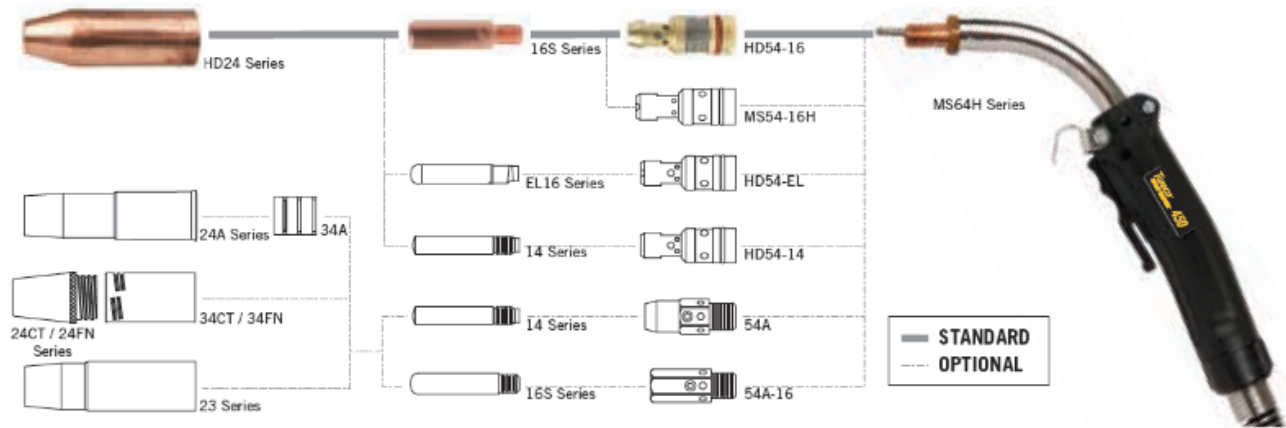
0.375" (9.5 mm) Outside Diameter –

M8 x 1.25 Threads - 1.50" (38.1 mm) Overall Length 25 per pack



Wire Size (in / mm)	Tip I.D. (in / mm)	Standard		Tapered	
		Part No.	Stock No.	Part No.	Stock No.
.035" (0.9 mm)	.044" (1.12 mm)	16S-35	1160-1102	16ST-35	1160-1135
.040" (1.0 mm)	.048" (1.22 mm)	16S-40	1160-1103	NA	
.045" (1.2 mm)	.054" (1.37 mm)	16S-45	1160-1104	16ST-45	1160-1137
.052" (1.3 mm)	.064" (1.65 mm)	16S-52	1160-1105	16ST-52	1160-1138
1/16" (1.6 mm)	.073" (1.85 mm)	16S-116	1160-1106	16ST-116	1160-1139
5/64" (2.0 mm)	.090" (2.29 mm)	16S-564	1160-1109	NA	
3/32" (2.4 mm)	.106" (2.67 mm)	16S-332	1160-1110	NA	
7/64" (2.8 mm)	.120" (3.05 mm)	16S-764	1160-1111	NA	
3/64" AL (1.2 mm)	.059" (1.50 mm)	16AS-364	1160-1113	NA	
1/16" AL (1.6 mm)	.082" (2.08 mm)	16AS-116	1160-1114	NA	

SPRAY MASTER 450 AMP SERIES



Nozzles & Nozzle Insulators – Air-Cooled

HD24 Series

3-Piece Nozzle Design - 1.117" (28.4 mm) Outside Diameter Self Insulated Nozzles.

Use with HD54 Series Gas Diffusers.

2 per pack



Nozzle Style	Bore Diameter	Part No.	Stock No.	Nozzle Design	Nozzle/Contact Tip Relationship
Slip-On	1/2" (12.7 mm)	HD24L-50	1240-1200	Tapered	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	1/2" (12.7 mm)	HD24-50	1240-1240	Standard	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	1/2" (12.7 mm)	HD24L-50F	1240-1204	Standard	Flush To 1/16" (1.6Mm) Tip Recess
	5/8" (15.9 mm)	HD24L-62	1240-1201	Tapered	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	5/8" (15.9 mm)	HD24L-62F	1240-1205	Tapered	Flush To 1/16" (1.6 mm) Tip Recess
	5/8" (15.9 mm)	HD24-62	1240-1241	Standard	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	5/8" (15.9 mm)	HD24-62F	1240-1236	Standard	Flush To 1/16" (1.6 mm) Tip Recess
	3/4" (19.5 mm)	HD24L-75	1240-1202	Tapered	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	3/4" (19.5 mm)	HD24-75	1240-1242	Standard	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	3/4" (19.5 mm)	HD24L-75F	1240-1206	Standard	Flush To 1/16" (1.6Mm) Tip Recess
	3/4" (19.5 mm)	HD24-75F	1240-1237	Standard	Flush To 1/16" (1.6 mm) Tip Recess
	5/8" (15.9 mm)	HD24LB-62	1240-1216	Standard †	1/8" - 5/32" (3.2 mm - 3.97 mm) Tip Recess
	5/8" (15.9 mm)	HD24LB-62F	1240-1219	Tapered †	Flush To 1/16" (1.6 mm) Tip Recess
	5/8" (15.9 mm)	HD26B-62	1260-1285	Standard †	5/32" (3.97 mm) Tip Recess
	3/4" (19.5 mm)	HD26B-75	1260-1286	Standard †	5/32" (3.97 mm) Tip Recess

†Outer Shell made from red brass Alloy 230

Conductor Tubes – Air-Cooled

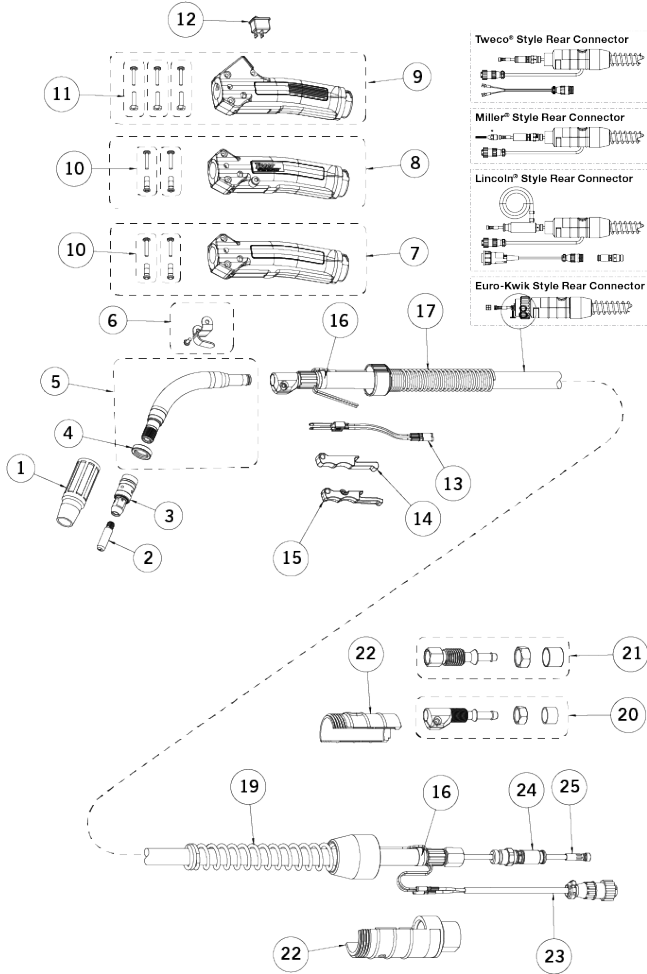
Spray Master® 450

Description	Part No.	Stock No.	Outer Jacket Material	Front End Threads
Heavy Duty 60 Degree with 3" (76.2 mm) Radius	MS64H-60	1640-1319	Metal	I.D. 3/8"-24 UNF-2B O.D. 9/16"-18UNF-2A
Heavy Duty 45 Degree with 3" (76.2 mm) Radius	MS64H-45	1640-1318	Metal	I.D. 3/8"-24 UNF-2B O.D. 9/16"-18UNF-2A
Long Reach 60 Degree with 3" (76.2 mm) Radius	MS64H-60LM *	1640-1317	Metal	I.D. 3/8"-24 UNF-2B O.D. 9/16"-18UNF-2A
Long Reach 45 Degree with 3" (76.2 mm) Radius	MS64H-45LM *	1640-1323	Metal	I.D. 3/8"-24 UNF-2B O.D. 9/16"-18UNF-2A
60 Degree with 3" (76.2 mm) Radius	MS64-60S **	1640-1342	Metal	I.D. M12 x 1.5-6H

* Long reach conductor tube – 2" longer than standard

** Comes standard on all 450 Amp Spray Master MIG guns with the suffix "EL"

Replacement Parts



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Conduit Liners – For Use With Steel Welding Wires

300-450 Amp – Steel Wound

Wire Size	Length	Part No.	Stock No.
.035" - .045" (0.9 - 1.2 mm)	15 ft (4.6 m)	44-3545-15	1440-1103
.035" - .045" (0.9 - 1.2 mm)	25 ft (7.6 m)	44-3545-25	1440-1105
.052" - 1/16" (1.3 - 1.6 mm)	15 ft (4.6 m)	44-116-15	1440-1113
.052" - 1/16" (1.3 - 1.6 mm)	25 ft (7.6 m)	44-116-25	1440-1115
5/64" (2.0 mm)	15 ft (4.6 m)	44-564-15	1440-1123
5/64" (2.0 mm)	25 ft (7.6 m)	44-564-25	1440-1125
3/32" (2.4 mm)	15 ft (4.6 m)	44-332-15	1440-1127

#	Description	Spray Master 450	
		Part No.	Stock No.
1	Nozzle	Refer To Page 3	
2	Contact Tip	Refer To Page 2	
3	Diffuser	HD54-16	1540-1136
4	Nozzle Insulator	66J-3	1660-1836
5	Conductor Tube	Refer To Page 3	
6	Gun Hanger	152	2020-2152
7	Handle (Standard)	MS84	2060-2130
8	Handle (Locking Trigger)	MS84LC	2060-2127
9	Handle (Dual Schedule)	MS84DSRS	2060-2128
10	Binder Posts & Screws (Standard & Locking)	ELC124FM	2060-2646
11	Binder Posts & Screws (Dual Schedule)	122FMS	2020-2123
12	Rocker Switch (Dual Schedule)	MS94RSW	2060-2694
13	Trigger Blade Assembly	ELC94-BL	2060-2671
14	Trigger (Standard)	ELC94	2060-2647
15	Trigger (Locking)	MS94LC	2060-2693
16	Cable Clamp	136	2060-2690
17	Front Strain Relief Spring & Cap	MS144	2060-2131
18	10 ft (3 m) Cablehoz® Assembly (Direct Plug)	—	—
	12 ft (3.6 m) Cablehoz Assembly (Direct Plug)	MS412	1740-2116
	15 ft (4.6 m) Cablehoz Assembly (Direct Plug)	MS415	1740-2117
	25 ft (7.6 m) Cablehoz Assembly (Direct Plug)	MS425	1740-2118
	10 ft (3 m) Cablehoz Assembly (Euro)	MS410X	1740-2121
	12 ft (3.6 m) Cablehoz Assembly (Euro)	MS412X	1740-2122
19	15 ft (4.6 m) Cablehoz Assembly (Euro)	MS415X	1740-2123
	25 ft (7.6 m) Cablehoz Assembly (Euro)	MS425X	1740-2124
	Rear Strain Relief Spring & Cap	235RSSR	2060-2035
20	Front Cable Connector Repair Kit (Direct Plug & Euro)	MS104-RK	2060-2133
21	Rear Cable Connector Repair Kit (Direct Plug)	350-170HK	2035-2169
	Rear Cable Connector Repair Kit (Euro)	174X-M	2040-2181
22	Rear Case (Direct Plug)	C6RC	2060-2041
	Rear Case (Euro)	X6RC	2060-2006
23	Miller® Control Wire	MS354-DSM	2060-2140
24	Connector Plug	—	
25	Conduit Assembly	Refer To Page 4	
NS	Protective Cable Wrap, 50 ft (15.2 m) per box	TCR50	9900-1150



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