

ST443 Torch

NM Straight Cutting Torch



The **ST443 Straight Cutting Torch** offers better ergonomics, a clearer view of the cutting path, visual cues for easier use and enhanced safety. The torch features a contoured, high-strength alloy torch handle that fits naturally in most operators' hands.

The ST443 accepts nozzle-mix style consumables and is suitable for use with both propane and acetylene.

- Exceptionally well-balanced, ergonomic non-slip handle eases stress on the hand.
- Knobs are contoured and spaced further apart for easy adjustment and colour coded with increase/decrease labels.
- In-line stainless tubes for better visibility and reduced profile.
- Forged brass body.
- Stainless steel valves for extended operational life and increased safety

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Industry

- Shipbuilding
- Automotive
- Rail
- Fabrication
- Offshore
- Construction
- Maintenance/Repair

Compatible Consumables:



ANME Acetylene Cutting Nozzle (extended)



PNME Propane Cutting Nozzle (extended)



AGNM Acetylene Gouging Nozzle



ANM Acetylene Cutting Nozzle



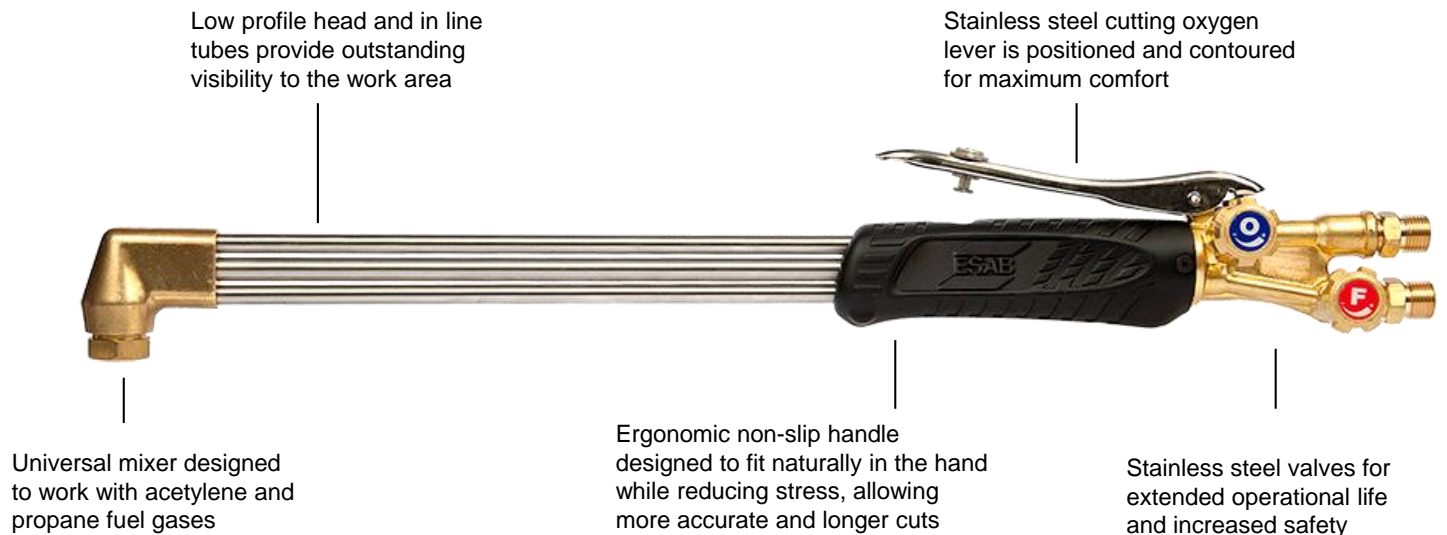
PNM Propane Cutting Nozzle

Technical Data

Model	Gas Service	Length	Cut Capacity	Inlet Connection
ST443LNM Universal Cutter 21/90 (Trigger Latch)	Oxygen/Acetylene Oxygen/Propane	21" / 533 mm	12" / 300 mm	3/8 BSP
ST443NM Universal Cutter 21/90	Oxygen/Acetylene Oxygen/Propane	21" / 533 mm	12" / 300 mm	3/8 BSP
ST443NM Universal Cutter 21/90	Oxygen/Acetylene Oxygen/Propane	27" / 686 mm	12" / 300 mm	3/8 BSP
ST443NM Universal Cutter 27/75	Oxygen/Acetylene Oxygen/Propane	36" / 914 mm	12" / 300 mm	3/8 BSP

Ordering Information

Model	Description	Part Number
ST443LNM Universal Cutter 21/90	ST443 LNM Straight Cutting Torch with trigger latch, 21" / 90° Head	0700017936
ST443NM Universal Cutter 21/90	ST443 NM Straight Cutting Torch, 21" / 90° Head	0700017250
ST443NM Universal Cutter 27/75	ST443 NM Straight Cutting Torch, 27" / 75° Head	0700017251
ST443NM Universal Cutter 36/75	ST443 NM Straight Cutting Torch, 36" / 75° Head	0700017252



Accessories

Description	Part Number
Flashback Arrestor FT 3/8RH (Torch mounted)	0700016556
Flashback Arrestor FT 3/8LH (Torch mounted)	0700016557
Cutting Guide / Circle Cutting Attachment 25mm (1") – 736mm (29") ø	0558002676
NM Propane Super Heating Adaptor	0700017688

Recommended Consumables and Operating Pressures

Acetylene ANM Cutting Nozzles

Metal Thickness		Nozzle Size (in.)	Part Number	Operating Pressure				Gas Consumption					
mm	in.			Oxygen		Fuel Gas		Cutting Oxygen		Heating Oxygen		Fuel Gas	
				Bar	Lbf/in ²	Bar	Lbf/in ²	L/M	ft ³ /H	L/M	ft ³ /H	L/M	ft ³ /H
3 – 6	¼	1/32	0700016610	1.4	20	0.30	4	14.15	30	8.5	18	8.0	17
5 – 12	½	3/64	0700016611	2.1	30	0.35	5	30.7	65	10.4	22	9.4	20
10 – 75	1-3	1/16	0700016612	3.5	50	0.40	6	88.7	188	13.2	28	11.8	25
70 – 100	4	5/64	0700016613	3.1	45	0.31	4.5	121	256	14.6	31	13.2	28
90 – 150	6	3/32	0700016614	3.1	45	0.40	6	175	370	20.0	43	18.4	39
190-300	12	1/8	0700016615	6.2	90	0.45	6.5	434	920	26.0	55	23.5	50

Acetylene ANME Cutting Nozzles

Metal Thickness		Nozzle Size (in.)	Part Number	Operating Pressure				Gas Consumption					
mm	in.			Oxygen		Fuel Gas		Cutting Oxygen		Heating Oxygen		Fuel Gas	
				Bar	Lbf/in ²	Bar	Lbf/in ²	L/M	ft ³ /H	L/M	ft ³ /H	L/M	ft ³ /H
3 – 6	¼	1/32	0700016616	1.4	20	0.30	4	14.15	30	8.5	18	8.0	17
5 – 12	½	3/64	0700016617	2.1	30	0.35	5	30.7	65	10.4	22	9.4	20
10 – 75	1-3	1/16	0700016618	3.5	50	0.40	6	88.7	188	13.2	28	11.8	25
70 – 100	4	5/64	0700016619	3.1	45	0.31	4.5	121	256	14.6	31	13.2	28
90 – 150	6	3/32	0700016620	3.1	45	0.40	6	175	370	20.0	43	18.4	39
190-300	12	1/8	0700016621	6.2	90	0.45	6.5	434	920	26.0	55	23.5	50

Nozzle type ANM / ANME using 6.3mm x 10m fitted hose with resettable flashback arrestors in new condition.

Pressure & consumption rates are based using the nozzle size listed next to it cutting the thickest material in the metal thickness column.

Acetylene cylinders must be manifolded when consumption rates of Acetylene exceed 16.5 litres per minute (35ft³/H).

Acetylene AGNM Gouging Nozzles

Max Groove width		Nozzle Size (in.)	Part Number	Operating Pressure				Gas Consumption					
mm	in.			Oxygen		Fuel Gas		Cutting Oxygen		Heating Oxygen		Fuel Gas	
				Bar	Lbf/in ²	Bar	Lbf/in ²	L/M	ft ³ /H	L/M	ft ³ /H	L/M	ft ³ /H
8	5/16	13	0700016640	4.00	60	0.50	7	61.00	130	16.5	35	15	32
11	7/1	19	0700126810	5.00	75	0.50	7	156	330	31	66	28	60

Propane PNM Cutting Nozzles

Metal Thickness		Nozzle Size (in.)	Part Number	Operating Pressure				Gas Consumption					
mm	in.			Oxygen		Fuel Gas		Cutting Oxygen		Heating Oxygen		Fuel Gas	
				Bar	Lbf/in ²	Bar	Lbf/in ²	L/M	ft ³ /H	L/M	ft ³ /H	L/M	ft ³ /H
3 – 6	¼	1/32	0700016622	2.0	30	0.20	3	14.15	30	22.6	48	5.7	12
5 – 12	½	3/64	0700016623	2.0	30	0.20	3	30.6	65	25.5	54	6.6	14
10 – 75	1-3	1/16	0700016624	3.4	50	0.30	4	99	210	41.5	88	10.4	22
70 – 100	4	5/64	0700016625	3.4	60	0.30	4	113	240	41.5	88	10.4	22
90 – 150	6	3/32	0700016626	4.1	60	0.40	6	160	340	56.6	120	14.2	30
190-300	12	1/8	0700016627	6.2	90	0.62	9	425	900	75.0	160	18.9	40

Propane PNME Cutting Nozzles

Metal Thickness		Nozzle Size (in.)	Part Number	Operating Pressure				Gas Consumption					
mm	in.			Oxygen		Fuel Gas		Cutting Oxygen		Heating Oxygen		Fuel Gas	
				Bar	Lbf/in ²	Bar	Lbf/in ²	L/M	ft ³ /H	L/M	ft ³ /H	L/M	ft ³ /H
3 – 6	¼	1/32	0700016628	2.0	30	0.20	3	14.15	30	22.6	48	5.7	12
5 – 12	½	3/64	0700016629	2.0	30	0.20	3	30.6	65	25.5	54	6.6	14
10 – 75	1-3	1/16	0700016630	3.4	50	0.30	4	99	210	41.5	88	10.4	22
70 – 100	4	5/64	0700016631	3.4	60	0.30	4	113	240	41.5	88	10.4	22
90 – 150	6	3/32	0700016632	4.1	60	0.40	6	160	340	56.6	120	14.2	30
190-300	12	1/8	0700016633	6.2	90	0.62	9	425	900	75.0	160	18.9	40

Nozzle type PNM / PNME using 6.3mm x 10m fitted hose with resettable flashback arrestors in new condition.

Pressure & consumption rates are based using the nozzle size listed next to it cutting the thickest material in the metal thickness column.

Propane Super Heating Nozzles

Nozzle Size	Part Number	Propane Pressure		Oxygen Pressure		Propane Consumption		Oxygen Consumption		Heat Output (Approx)	
		Bar	Lbf/in ²	Bar	Lbf/in ²	L/M	ft ³ /H	L/M	ft ³ /H	W	Btu/H
1H	0700016650	0.14	2	0.7	10	13.8	29	58	121	244,800	72,000
		0.49	7	2.1	30	32	65	122	255	554,200	163,000
2H	0700016651	0.21	3	1.1	15	20	41	80	168	346,800	102,000
		0.56	8	2.5	35	35	75	145	304	639,200	188,000
3H	0700016652	0.28	4	1.8	25	35	75	138	290	622,200	183,000
		1.10	15	5.0	70	68	144	275	575	1,227,400	361,000
4H	0700016653	0.35	5	2.5	35	45	94	177	370	802,400	236,000
		1.30	18	5.7	80	77	162	310	350	1,380,400	406,000
5H	0700016654	0.85	12	3.5	50	53	112	212	444	955,400	281,000
		2.10	30	8.7	125	117	246	467	985	2,101,200	618,000

Flame size and heat output vary considerably with the pressure setting used. Heat output figures are quoted for based on combination torches. 20% higher figures can be obtained using an NM type cutter with a super heating adaptor. Two typical figure sets given for each type of nozzle.



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