

EX-TRAFIRE[®]55SD

BEST IN CLASS PLASMA CUTTING SYSTEM



Automotive
and transportation



Steel mills and
steel service
centers



Structural



Shipyards
and Offshore



Heavy fabrication

EX-TRAFIRE® 55 SD

SPECIFICATIONS

Output current [A]	30-55
Modes	standard cutting / gouging / grid cutting
Duty cycle @ 40° C	50 % @ 55 A, 100 % @ 41 A / 60 % @ 50 A, 100 % @ 41 A
Output voltage [VDC]	170 V @ 3 × 400 VAC
Severance cutting capacity [mm]	30 ⁽¹⁾
Piercing capacity [mm]	16 ⁽¹⁾
Recommended cutting capacity [mm]	16 ⁽¹⁾
Plasma gas	Compressed air / nitrogen
Max. Air flow (cutting) [lpm/bar]	98/5.2
CNC interface	YES
Input voltage [VAC]	CE 3 × 400 VAC ± 15 %
Frequency [Hz]	50/60
Dimensions (L×H×W) [mm]	469.9 × 228.6 × 177
Weight [kg]	11.8
Certification depending on region	CE, C-TICK, CCC
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®105RTX H
Type of machine torch	FHT-EX®105RTX M

⁽¹⁾ Values for low alloy steel, E. G. MS S235JR

⁽²⁾ Suitable for generator use

3 DIFFERENT OPERATION MODES

Lightweight, exceptionally portable system with exact cuts and high duty cycle. System is suitable for generator use. The EX-TRAFIRE® 55 SD plasma cutting system is engineered for professional applications.



Last update of this page: 10/01/2025. See Revision history for details.
For product availability, please check with your local THERMACUT® dealer.

EX-TRAFIRE® 55SD

ORDERING INFORMATION

Description	Length	Part No.
MANUAL PLASMA CUTTING SYSTEMS		
<i>Equipped with CNC interface</i>		
EX-TRAFIRE®55SD/CE/3×400 V / Torch FHT-EX®105RTXH /H Starter Kit	8 m / 26.2'	EX-3-010-034
EX-TRAFIRE®55SD/CE/3×400 V / Torch FHT-EX®105RTXH /H Starter Kit	15 m / 49.2'	EX-3-010-035
MECHANIZED PLASMA CUTTING SYSTEMS		
<i>Equipped with CNC interface</i>		
EX-TRAFIRE®55SD/CE/3×400 V / Torch FHT-EX®105RTXM-NR /M Starter Kit	8 m / 26.2'	EX-3-011-030
EX-TRAFIRE®55SD/CE/3×400 V / Torch FHT-EX®105RTXM-NR /M Starter Kit	15 m / 49.2'	EX-3-011-031
PLASMA POWER SUPPLY UNITS		
<i>Equipped with CNC interface</i>		
EX-TRAFIRE®55SD/CE/3×400 V power supply unit		EX-3-001-001

AVAILABLE BULK PACKS

Information about available bulk packs on the end of Torch Consumables section

AVAILABLE STARTER KITS

Information about available starter kits on the end of Torch Consumables section

AVAILABLE CONSUMABLE KITS

Information about available starter kits on the end of Torch Consumables section

ACCESSORIES

Information about available accesories on the last pages of this section

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FHT-EX® 105RTXH



EXTREMELY FLEXIBLE AND POWERFUL



The extremely high-performant FHT-EX®105RTXH hand torch is ideal for meeting tough demands in continuous industrial operation. This torch is optimally designed for use with EX-TRAFIRE®55SD, 75SD and 100SD power supplies and are suitable for cutting, gouging and grid-cutting. Depending on the power supply used, they can cut plate thickness of up to 50 mm and more precisely and quickly.

Thanks to the THERMACUT® Torch Connection System (TCS), changing the torch is a quick and easy process. These particularly powerful torches are the result of decades of experience in the field of plasma cutting. They feature an extremely robust and durable design in which all consumables can be replaced quickly and easily.

BENEFITS

- Extremely high-performance torches for handheld use
- Ergonomic handheld torches for safe and reliable holding and guiding in all positions
- Compact and particularly flexible for handheld applications, even in the case of tight radii
- 100 % duty cycle at 41 A, optimal for continuous industrial use
- Optimal for plate thicknesses of up to 30 mm, thanks to high power reserves
- Consumables with an extended lifetime
- Quick and tool-free replacement of consumables
- Piercing max. 16 mm
- Perfectly designed for use with EX-TRAFIRE®55SD power supply

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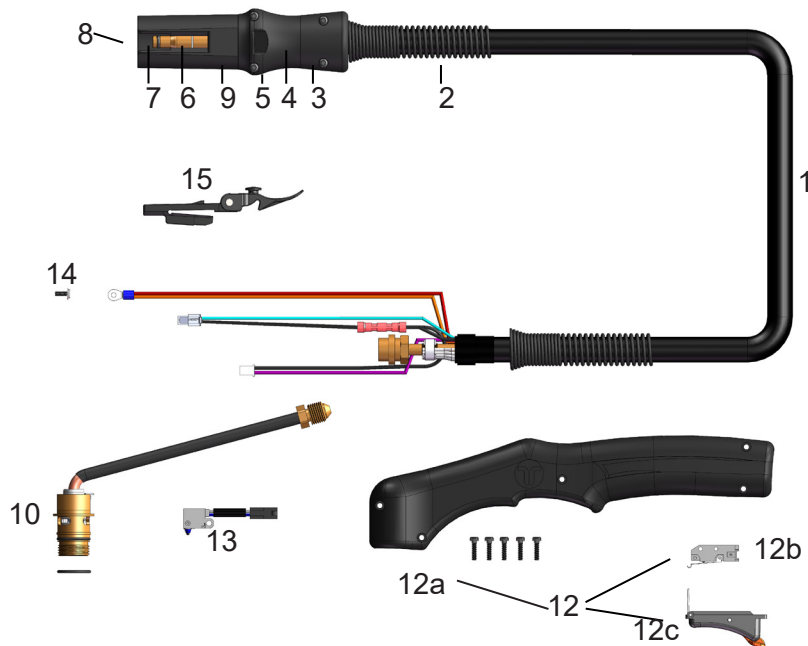
FHT-EX® 105RTXH

HAND TORCH ASSEMBLY AND TORCH COMPONENTS



Item	Part No.	Description	Pcs
1.	EX-5-140-002	FHT-EX®105RTXH Hand Torch w/o consumables w/8m Lead/TCS13	1
	EX-5-140-003	FHT-EX®105RTXH Hand Torch w/o consumables w/15m Lead/TCS13	1
a	2.	EX-0-321-003 Latch w/Key Assembly	1

a LATCH WITH KEY IS NOT CONTENT OF TORCHES ABOVE. IF YOU NEED IT, YOU HAVE TO ORDER SEPARATELY.



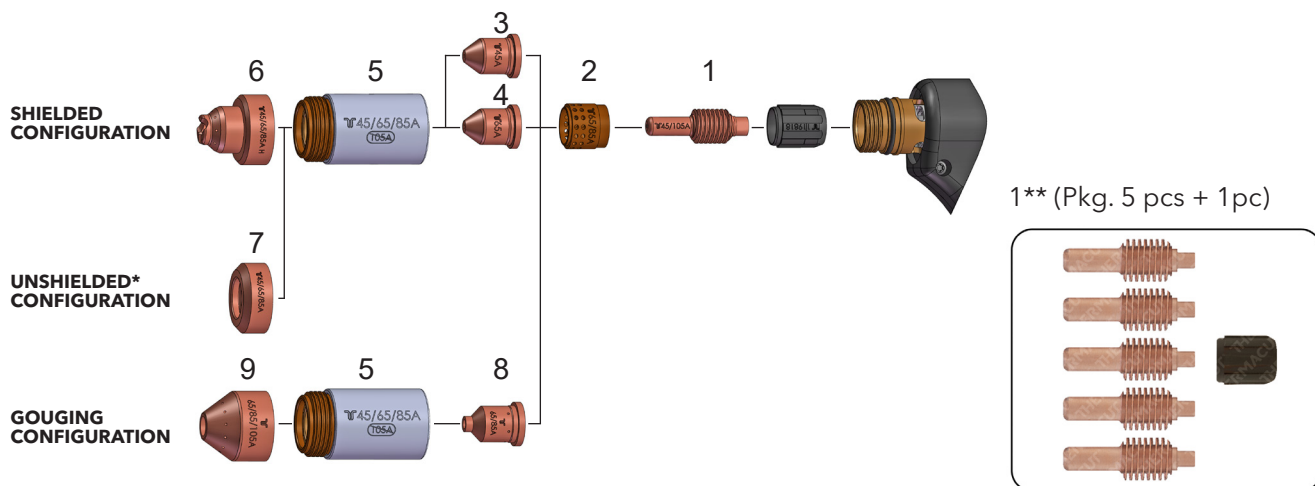
Item	Part No.	Description	Pcs	Item	Part No.	Description	Pcs
1.	EX-5-374-005	FHT-EX®105RTXH Hand Torch Lead Replacement 8m (26')/TCS13	1	10.	EX-5-302-030	Hand Torch Body Replacement Kit	1
1.	EX-5-374-006	FHT-EX®105RTXH Hand Torch Lead Replacement 15m (50')/TCS13	1	11.	EX-5-431-050	Torch Body O-Ring	2
2.	EX-5-318-001	TCS Plug Spring Stain Relief	1	12.	EX-5-314-030	Hand Torch Handle Replacement Kit	1
3.	EX-0-325-015	TCS Clam Shell Screw Kit (incl. 4 screws)	1	12a.	EX-5-308-030	Hand Torch Handle with Screws	1
4.	EX-0-325-002	TCS Clam Shell Upper	1	12b.	EX-5-313-030	Safety Trigger Micro-Switch	1
5.	EX-0-325-001	TCS Clam Shell Lower	1	12c.	EX-5-313-031	Safety Trigger	1
6.	EX-0-325-010	Retaining Ring (Outer circlip ring)	1	13.	EX-5-305-001	Cap Sensor Microswitch Assembly/Hand Torch	1
7.	EX-0-325-009	O-Ring (fitted in the TCS plug)	1	14.	EX-5-372-030	Pilot Cable Screw	1
8.	EX-0-325-005	Male Crimp Pin for TCS Plug	1	a	15.	EX-0-321-003 Latch w/Key Assembly	1
9.	EX-0-323-001	TCS13 Plug Body	1				

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CONSUMABLES

HAND TORCH STANDARD CONSUMABLES - 45-85 A



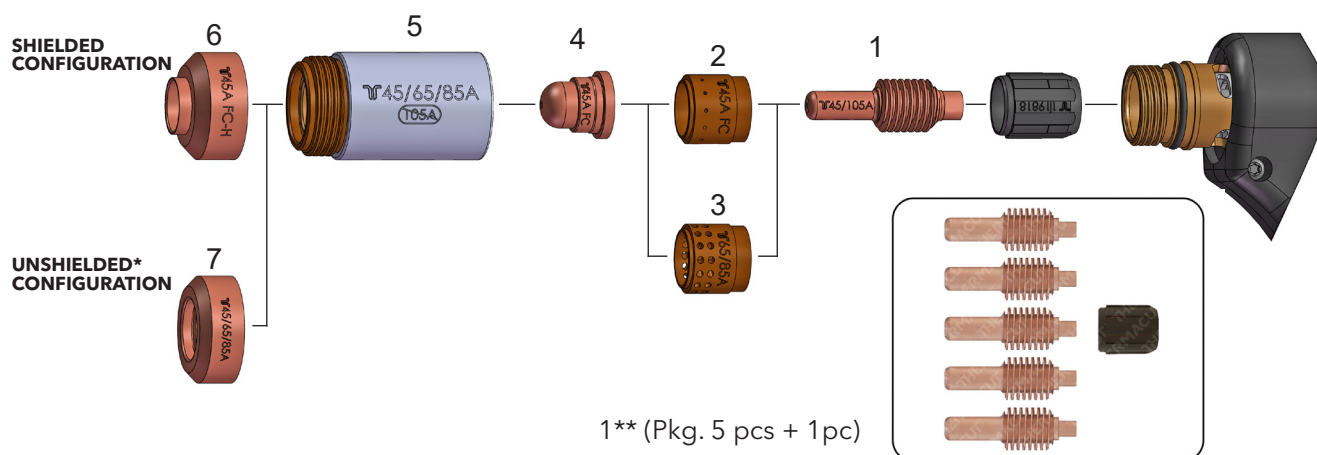
Item	Part No.	Description	Pcs	Item	Part No.	Description	Pcs
1.	EX-5-402-030	Electrode 45-105 A (5pcs package) **	1×5	6.	EX-5-419-030	Shield 45-85 A, Hand	1
2.	EX-5-404-031	Swirl Ring 10-85 A	1	7.	EX-5-423-031	Deflector 45-105 A	1
3.	EX-5-410-036	Nozzle 45 A (5 pcs package) ***	1×5	8.	EX-5-440-031	Nozzle 45-85 A, Gouging (5 pcs package) ***	1×5
4.	EX-5-410-037	Nozzle 55/65 A (5 pcs package) ***	1×5	9.	EX-5-440-030	Shield 45-105 A, Gouging	1
5.	EX-5-415-030	Retaining Cap 45-85 A	1				

* IN COUNTRIES FOLLOWING CE STANDARDS, UNSHIELDED CONSUMABLE CONFIGURATION MAY ONLY BE USED IN MECHANIZED TORCH APPLICATIONS.

** THIS PART IS AVAILABLE IN 5 PCS + 1PC OF SWIRL RING HOLDER SET ONLY

*** THIS PART IS AVAILABLE IN 5 PCS

HAND TORCH CONSUMABLES - SMOOTHLINE



Item	Part No.	Description	Pcs	Item	Part No.	Description	Pcs
1.	EX-5-402-030	Electrode 45-105 A (5 pcs package) **	1×5	6.	EX-5-415-030	Retaining Cap 45-85 A	1
2.	EX-5-404-030	Swirl Ring 45-105 A / Smoothline	1	7.	EX-5-423-030	Deflector 45 A / Smoothline	1
3.	EX-5-404-031	Swirl Ring 10-85 A	1	8.	EX-5-423-031	Deflector 45-105 A	1
4.	EX-5-410-035	Nozzle 45 A / Smoothline (5 pcs package) ***	1×5				

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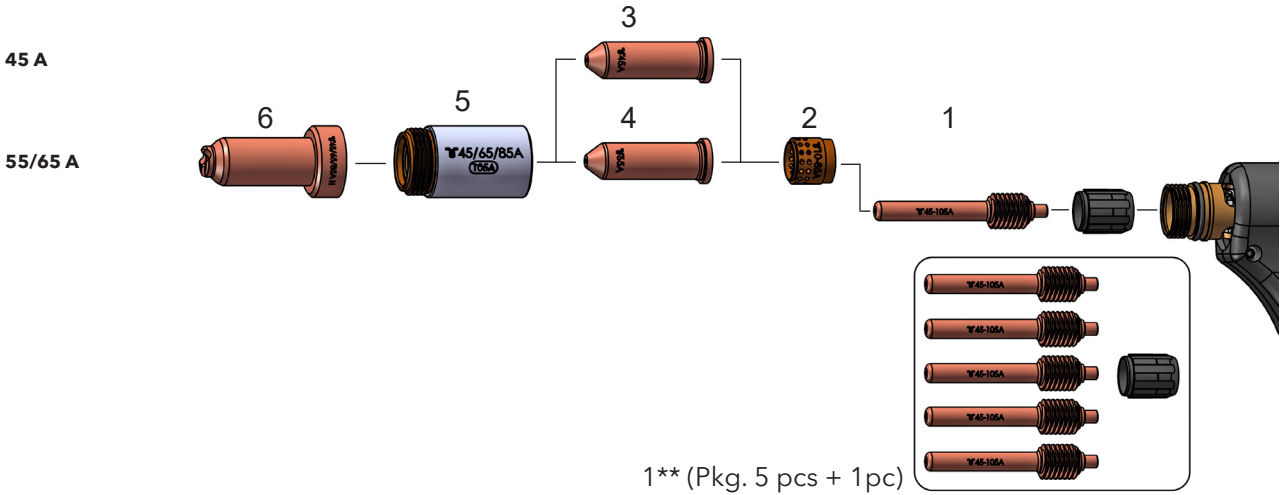
** THIS PART IS AVAILABLE IN 5 PCS + 1PC OF SWIRL RING HOLDER SET ONLY

*** THIS PART IS AVAILABLE IN 5 PCS

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CONSUMABLES

HAND TORCH EXTENDED CONSUMABLES 45-85 A



Item	Part No.	Description.	Pcs	Item	Part No.	Description.	Pcs
1.	EX-5-402-001	Electrode 45-105 A, Extended (5pcs package) - part is available in 5pcs set only *	1 × 5	4.	EX-5-406-002	Nozzle 55/65 A, Extended	5
2.	EX-5-404-031	Swirl Ring 10-85 A	1	6.	EX-5-415-030	Retaining Cap 45-85 A	1
3.	EX-5-406-001	Nozzle 45 A, Extended	5	7.	EX-5-420-001	Shield 45-85 A, Hand Extended	1

* THIS PART IS AVAILABLE IN 5 PCS + 1PC OF SWIRL RING HOLDER SET ONLY



Thanks to the THERMACUT® Torch Connection System (TCS), changing the torch is a quick and easy process. These particularly powerful torches are the result of decades of experience in the field of plasma cutting. They feature an extremely robust and durable design in which all consumables can be replaced quickly and easily.

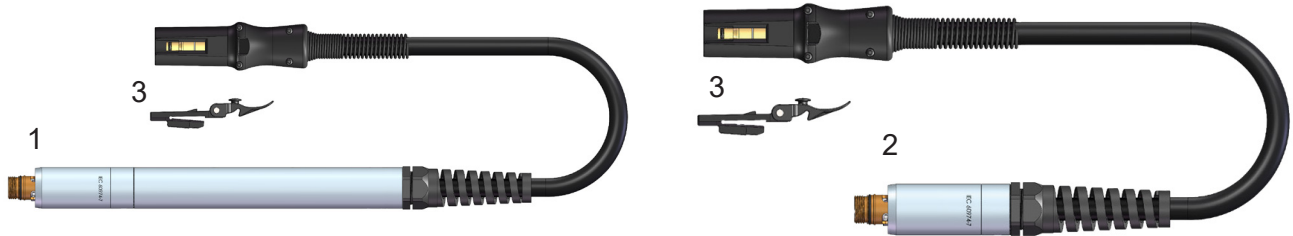
BENEFITS

- Extremely high-performance torches for mechanised applications
- 100 % duty cycle at 41 A, ideal for continuous industrial use
- Optimal for plate thicknesses of up to 30 mm, thanks to high power reserves
- Consumables with an extended lifetime
- Quick and tool-free replacement of consumables
- Piercing max. 16 mm
- Perfectly designed for use with EX-TRAFIRE®55SD power supply

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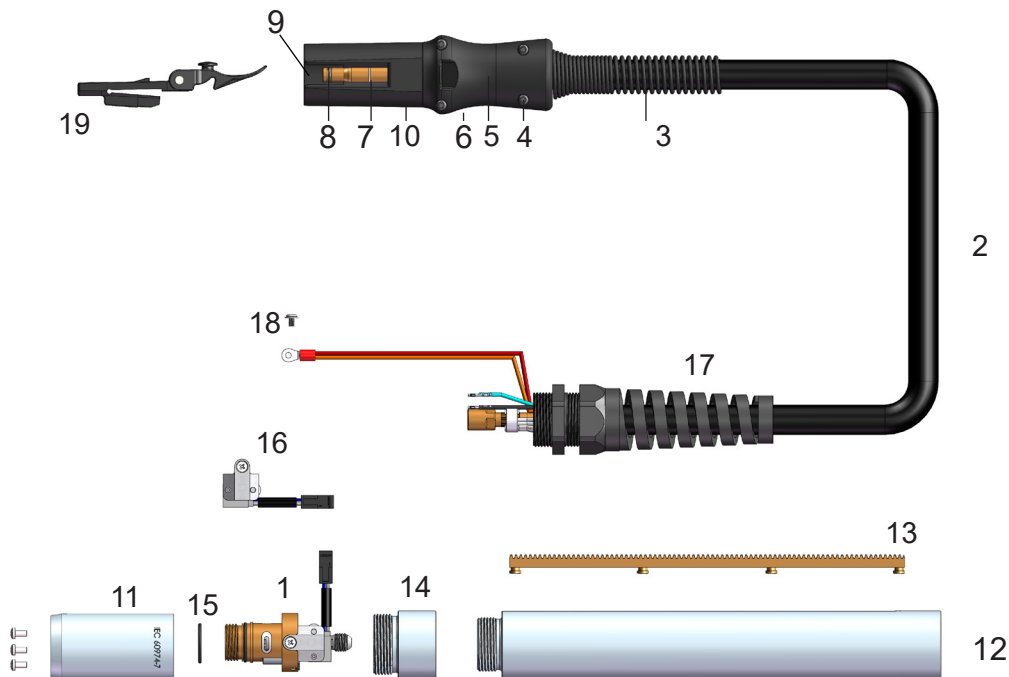
FHT-EX® 105RTXM

MACHINE TORCH ASSEMBLY AND TORCH COMPONENTS



Item	Part No.	Description
1.	EX-5-240-001	FHT-EX®105RTXM Machine Torch Assy-w/o consumables w/8m Lead/ TCS13
	EX-5-240-005	FHT-EX®105RTXM Machine Torch Assy-w/o consumables w/15m Lead/ TCS13
2.	EX-5-240-007	FHT-EX®105RTXSM Short (ROBO) Machine Torch Assy-w/o consumables w/8m Lead/TCS13
	EX-5-240-008	FHT-EX®105RTXSM Short (ROBO) Machine Torch Assy-w/o consumables w/15m Lead/TCS13
a 3.	EX-0-321-003	Latch w/Key Assembly

a LATCH WITH KEY IS NOT CONTENT OF TORCHES ABOVE. IF YOU NEED IT, YOU HAVE TO ORDER SEPARATELY.



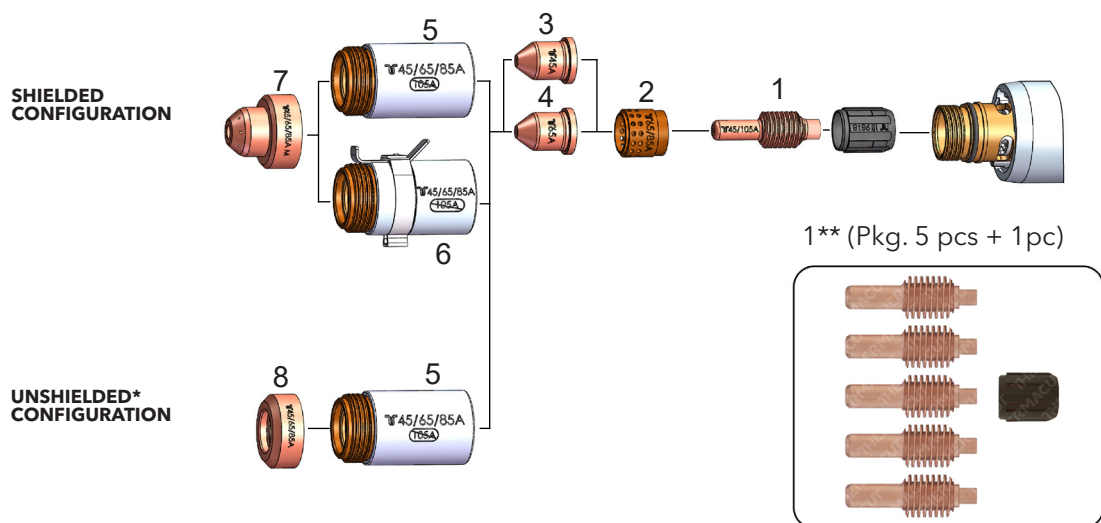
Item	Part No.	Description	Pcs	Item	Part No.	Description	Pcs
1.	EX-5-303-030	Machine Torch Body Replacement Kit	1	9.	EX-0-325-005	Male Crimp Pin for TCS Plug	1
2.	EX-5-375-001	FHT-EX®105RTXM Machine Torch Lead Replacement 8m (26')/TCS13	1	10.	EX-0-323-001	TCS13 Plug Body	1
2.	EX-5-375-002	FHT-EX®105RTXM Machine Torch Lead Replacement 15m (50')/TCS13	1	11.	EX-5-306-030	Torch Mounting Sleeve (incl. 3 screws)	1
3.	EX-5-318-001	TCS Plug Spring Strain Relief	1	12.	EX-5-306-032	Standard Mounting Tube w/o Rack	1
4.	EX-0-325-015	TCS Clam Shell Screw Kit (incl. 4 screws)	1	13.	EX-5-306-033	Gear Rack	1
5.	EX-0-325-002	TCS Clam Shell Upper	1	14.	EX-5-306-031	Standard Mounting Tube Reduction Nut	1
6.	EX-0-325-001	TCS Clam Shell Lower	1	15.	EX-5-431-050	Torch Body O-Ring	1
7.	EX-0-325-010	Retaining Ring (Outer circlip ring)	1	16.	EX-5-304-030	Cap Sensor Replacement Kit with Screws /Machine Torch	1
8.	EX-0-325-009	O-Ring (fitted in the TCS plug)	1	17.	EX-5-317-021	Machine Torch Strain Relief	1
				18.	EX-5-372-030	Pilot Cable Screw	1
				a 19.	EX-0-321-003	Latch w/Key Assembly	1

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CONSUMABLES

MACHINE TORCH STANDARD CONSUMABLES - 45-85 A



Item	Part No.	Description	Pcs	Item	Part No.	Description	Pcs
1.	EX-5-402-030	Electrode 45-105 A (5 pcs package) **	1×5	5.	EX-5-415-030	Retaining Cap 45-85 A	1
2.	EX-5-404-031	Swirl Ring 10-85 A	1	6.	EX-5-415-031	Retaining Cap 45-85 A, IHS Tab	1
3.	EX-5-410-036	Nozzle 45 A	5	7.	EX-5-421-031	Shield 45-85 A, Machine	1
4.	EX-5-410-037	Nozzle 55/65 A (5 pcs package) ***	1×5	8.	EX-5-423-031	Deflector 45-105 A	1

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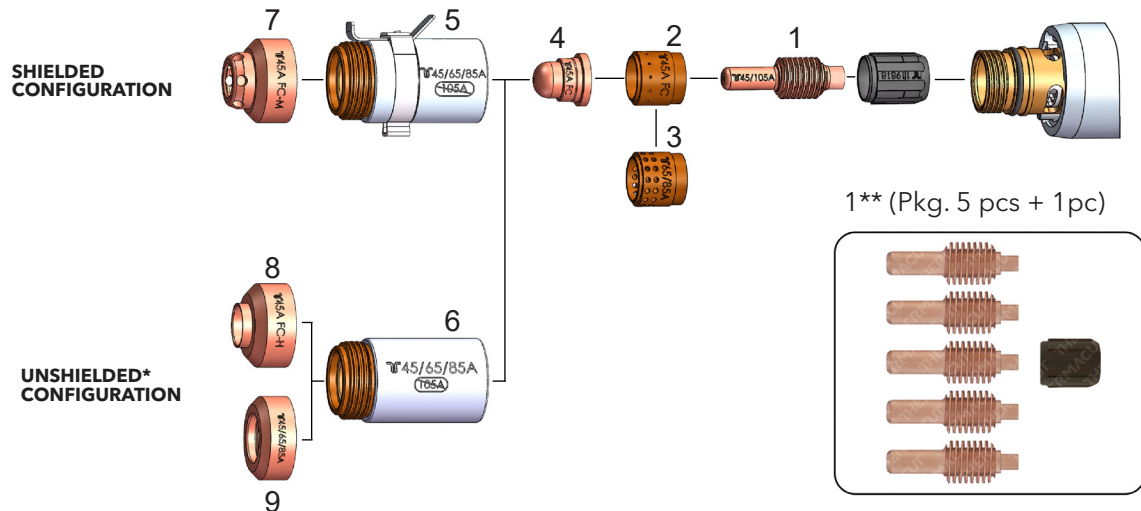
** THIS PART IS AVAILABLE IN 5 PCS + 1PC OF SWIRL RING HOLDER SET ONLY

*** THIS PART IS AVAILABLE IN 5 PCS

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CONSUMABLES

MACHINE TORCH CONSUMABLES - SMOOTHLINE



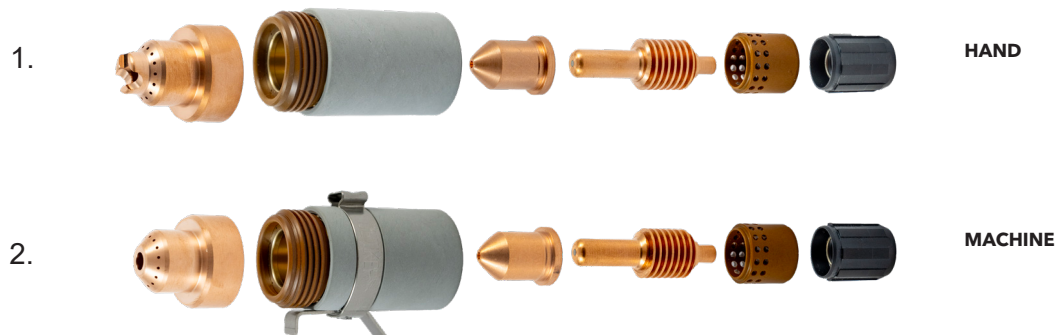
Item	Part No.	Description	Pcs	Item	Part No.	Description	Pcs
1.	EX-5-402-030	Electrode 45-105 A (5 pcs package) **	1×5	6.	EX-5-415-030	Retaining Cap 45-85 A	1
2.	EX-5-404-030	Swirl Ring 45-105 A / Smoothline	1	7.	EX-5-421-030	Shield 45 A, IHS, Smoothline	1
3.	EX-5-404-031	Swirl Ring 10-85 A	1	8.	EX-5-423-030	Deflector 45 A / Smoothline	1
4.	EX-5-410-035	Nozzle 45 A / Smoothline (5 pcs package) ***	1×5	9.	EX-5-423-031	Deflector 45-105 A	1
5.	EX-5-415-031	Retaining Cap 45-85 A, IHS Tab	1				

* IN COUNTRIES FOLLOWING CE STANDARDS, UNSHIELDED CONSUMABLE CONFIGURATION MAY ONLY BE USED IN MECHANIZED TORCH APPLICATIONS.

** THIS PART IS AVAILABLE IN 5 PCS + 1PC OF SWIRL RING HOLDER SET ONLY

*** THIS PART IS AVAILABLE IN 5 PCS

AVAILABLE TORCH CONSUMABLE KITS FOR ASSEMBLING



Item	Part No.	Description	Std. package QTY
1.	EX-3-439-031	RTXH55/65A Consumable kit for assembling of FHT-EX®105RTXH torch	1
2.	EX-3-439-030	RTXM55/65A Consumable kit for assembling of FHT-EX®105RTXM torch	1

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CONSUMABLES

AVAILABLE BULK PACKS



Part No.	Description	Std. package QTY
EX-5-434-001	Bulk Pack BP25 - Electrode 45-105 A (including 5 pcs of the swirl ring holder)	1×25 (+5)



Part No.	Description	Std. package QTY
EX-5-435-001	Bulk Pack BP25 - Nozzle 55/65 A	1×25



Part No.	Description	Std. package QTY
EX-5-437-001	Bulk Pack BP18 - Shield 45-85 A, Machine	1×18

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CONSUMABLES

AVAILABLE STARTER KIT



CONTAIN OF THE PACKAGE

- 4 pcs of electrodes
- 4 pcs of nozzles
- 4 pcs of Hand/Machine shields
- 1 pc of swirl ring
- 1 pc of torch body O-ring

Part No.	Description	Std. package QTY
EX-5-432-030	Starter Kit 55/65 A for Hand Torch FHT-EX®105RTXH	1
EX-5-433-030	Starter Kit 55/65 A for Machine Torch FHT-EX®105RTXM	1

AVAILABLE CONSUMABLE KITS



CONTAIN OF THE PACKAGE

- 5 pcs of electrodes + 1 pc of swirl ring holder
- 5 pcs of nozzles
- 2 pcs of Hand/Machine shields
- 1 pc of retaining cup (Machine version with IHS Tab)
- 1 pc of swirl ring
- 2 pcs of torch body O-ring

Part No.	Description	Std. package QTY
EX-3-443-001	Consumable Kit 55/65 A for Hand Torch FHT-EX®105RTXH	1
EX-3-444-001	Consumable Kit 55/65 A for Machine Torch FHT-EX®105RTXM	1

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ACCESSORIES



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ACCESSORIES

Item	Part No.	Ref. No.	Description	Pcs
1.	T-12452	EX-0-804-001	Filter-EX Compressed Air Filter	1
2.	T-12453	EX-0-804-002	Filter-EX Air Filter Cartridge	8
3.	EX-0-802-001	EX-0-802-001	Quick Connect Plug with male thread G 1/4" *	1
4.	EX-0-802-002	EX-0-802-002	Quick Connect Coupling with male thread G 1/4" *	1
5.	T-0994	EX-0-805-001	Silicone Lubricant 0.8 oz	1
6.	EX-2-801-001	EX-2-801-001	Circle Cut. Guide Kit for FHT-EX®30/40H	1
6.	EX-5-801-002	EX-5-801-002	Circle Cutting Guide Kit for FHT-EX®105RTXH/FHT-EX®105TTH/FHT-EX®45TTH	1
7.	EX-5-801-003	EX-5-801-003	Bevel cutting guide kit FHT-EX®105RTXH/105TTH/45TTH	1
8.	N-21811	EX-0-806-001	THERMACUT® Cutting Gloves	1
9.	EX-0-803-001	EX-0-803-001	CNC Interface 14-pin Plug Kit	1
OD 10.	EX-0-803-003	EX-0-803-003	CNC Interface connection lead 3 m	1
	EX-0-803-004	EX-0-803-004	CNC Interface connection lead 6 m	1
HD OD 11.	EX-0-803-006	EX-0-803-006	CAN bus connection cable 10 m	1
HD OD 12.	EX-0-803-007	EX-0-803-007	CAN bus connection cable 5 m	1
HD OD 13.	EX-0-803-008	EX-0-803-008	RS422 bus connection cable 10 m	1
HD OD 14.	EX-0-803-009	EX-0-803-009	RS422 bus connection cable 5 m	1
HD OD 15.	EX-0-803-010	EX-0-803-010	Universal connection cable 10 m	1
HD OD 16.	EX-0-803-011	EX-0-803-011	Universal connection cable 5 m	1
14.	EX-0-803-005	EX-0-803-005	Plasma Arc START/STOP Remote controller for power supplies equipped with CNCInterface	1
15.	EX-5-543-037	EX-5-543-037	Work lead with clamp 300 A/4 m/16 mm²/EU-plug 35-70 mm²	1
OD 16.	EX-5-543-003	EX-5-543-003	Work lead with clamp 300 A/16 m/16 mm²/EU-plug 35-70 mm²	1
	EX-5-543-002	EX-5-543-002	Work lead with clamp 300 A/23 m/16 mm²/EU-plug 35-70 mm²	1
	EX-5-543-001	EX-5-543-001	Work lead with clamp 300 A/8 m/16 mm²/EU-plug 35-70 mm²	1
16.	EX-1-543-036	EX-1-543-036	Work lead with clamp 300A/4 m/10 mm²/EU-plug 10-25 mm²	1
17.	EX-6-810-001	EX-6-810-001	Hand gouging heat shield	1
18.	EX-0-809-001	EX-0-809-001	Transport case w/foam insert for EX-TRAFIRE®30H/45SD/45HD/55SD	1

HD For HD power supplies equipped with serial communication only
 OD Only ON DEMAND
 * Items for use with Filter EX

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