EX-TRACK® CNC

FACT SHEET

PORTABLE CNC CUTTING SYSTEM BY THERMACUT®

Parameters	
Input voltage	110/230 VAC / 50/60 Hz
Input voltage tolerance	15 %
Effective cutting range	1525 x 3050 mm
Cutting process	plasma and oxy-fuel
Plasma cut - recommended mild steel thickness	up to 35 mm
Oxy-fuel cut - recommended mild steel thickness	up to 100 mm
Flash back protection	yes
Oxy-fuel torch included	yes
Plasma torch included	no
Plasma torch holder size	35 mm
Offline nesting software included	yes
THC control for plasma cutting by arc voltage	yes
Oxy-fuel THC control	manual
Type of gases	Propane
LCD screen	7"
Library of common shapes	50
Internal memory	4 GB
USB port for the drawings loading	yes
Torch lifter stroke	100 mm
Number of solenoid valves	3
Plasma torch collision protection	yes
Weight net/gross	134 kg / 207 kg
Type of plasma ignition	contact

EX-TRAFLAME ®

OXY-FUEL CUTTING TORCH BY THERMACUT®

FACT SHEET

Parameters	
Cutting range	3–300 mm
Fuel gases	oxygen-acetylene, oxygen-propane, natural gas, mixed gases
Maximum cutting speed	750 mm/min. (10 mm)
Average cutting speed	520 mm/min. (30 mm)
Minimum cutting speed	120 mm/min. (300 mm)
Max. cutting oxygen pressure	8.5 bar
Min. preheating oxygen pressure	1.6 bar
Max. acetylene pressure	1.2 bar
Min. acetylene pressure	0.5 bar
Max. propane pressure	1.0 bar
Min. propane pressure	0.2 bar
Assembly	
	fittings flashback arrestors shut-off valves torch consumables fixing nut
Dimensions	
Gases inputs	cutting OXY: G1/4“ preheating OXY: G3/8“ fuel gas: G3/8“ LH
Diameter of the torch body	32 mm
Lenght	250 mm

EX-TRABEAM® PRO

LASER CUTTING HEAD BY THERMACUT®

FACT SHEET

Optical system	
Focal lenght (magnification)	125 mm (1.25) 150 mm (1.50) 175 mm (1.75) 200 mm (2.00)
Adjustment range focusing (horizontal)	±1 mm
Wavelenght	1030 up to 1130 nm
Max. laser power	8 kW
Max. beam parameter acceptance (half angle)	125 mrad
Laser light cable receiver	Optoskand QBH, Trumpf-D
Diameter laser light cable	up to 200 µm

Focus range				
Magnification	1.25	1.50	1.75	2.0
In work piece direction (-)	9 mm	13 mm	18 mm	20 mm
In nozzle direction (+)	6 mm	9 mm	13 mm	15 mm
Correction range / offset Z-axix +/-	1 mm	1.5 mm	2 mm	3 mm

Housing	
Dimensions	118 × 116 × max 388 mm (depending on configuration)
Weight	ca. 5 kg (depending on configuration)
IP-Protection	64 (when the fiber is inserted)

Supply	
Electric	DC 24 V / max. 4 A
Process gas	inert and active gases, max. 25 bar
Cooling gas	Air, max. 5 bar Flow min. 1.5 l/min
Cooling circuit	Operating pressure max. 5 bar

EX-TRAFIRE®30H

PLASMA CUTTING SYSTEM BY THERMACUT®

FACT SHEET

Specifications	
Cutting current	10-30 A
Input voltage	220-240 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE, C-TICK, CCC
Modes	cutting
Frequency	50/60 Hz
Maximum input power	4.9 kVA
Output voltage	92 VDC
Duty cycle @ 40° C	35 % @ 30 A; 100 % @ 21 A
Dimension (L×H×W)	480×290×165 mm
Weight	10.5 kg
Recommended cutting capacity	8 mm*
Severance cutting capacity	10 mm +*
Piercing cutting capacity	8 mm*
Air flow [lpm/bar]	48/4.5
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
Type of hand torch	FHT-EX®30H

*values for low alloy steel, e. g. MS S235JR

FHT-EX®30H

PLASMA CUTTING TORCH BY THERMACUT®

FACT SHEET

Specifications	
Recommended cutting capacity	8 mm*
Maximum capacity	10 mm +*
Piercing capacity	8 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % at 20° C
Application process	plasma cutting
Type of use	manual
Pilot current	10-18 A
Rated current and corresponding duty cycle	30 A / 100 %
Type of gas	compressed air
Gas flow rate	approx. 48 l/min
Operating pressure	dynamic 4.5 bar / static 6.0 bar
Min./max. operating pressure	3.5-5.0 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	fixed
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap sensor)	42 VAC / 0.1-1.0 A
Standard lenght	4 m
Structure of cable	(Bikox) compact cable
Weight	4 m / 1.2 kg

*values for low alloy steel, e. g. MS S235JR

EX-TRAFIRE® 40SD

PLASMA CUTTING SYSTEM BY THERMACUT®

FACT SHEET

Specifications	
Cutting current	10-30 A (120 VAC) / 10-40 A (230 VAC)
Input voltage	100/240 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE, C-TICK, CCC
Modes	cutting / grid cutting
Frequency	50/60 Hz
Maximum input power	3.45 kVA @ 120 VAC / 5.98 kVA @ 230 VAC
Output voltage	140 VDC
Duty cycle @ 40° C @ 230 VAC	40 % @ 40 A, 100 % @ 25 A
Dimension (L×H×W)	469×228×177 mm
Weight	11.8 kg
Recommended cutting capacity	12 mm*
Severance cutting capacity	20 mm +*
Piercing cutting capacity	8 mm*
Air flow [lpm/bar]	120/4.5
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
CNC interface	yes
Preadjusted voltage divider ratio	50:1
Type of hand torch	FHT-EX®40H
Type of standard machine torch	FHT-EX®40M

*values for low alloy steel, e. g. MS S235JR

FHT-EX® 40H/M

PLASMA CUTTING TORCH BY THERMACUT®

FACT SHEET

Specifications	
Recommended cutting capacity	12 mm*
Maximum capacity	20 mm +*
Piercing capacity	8 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % at 20° C
Application process	plasma cutting
Type of use	manual and mechanized
Pilot current	10-18 A
Rated current and corresponding duty cycle	40 A / 100 %
Type of gas	compressed air
Gas flow rate	approx. 120 l/min
Operating pressure	dynamic 4.5 bar/static 6.0 bar
Min./max. operating pressure	3.5-5.0 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	TCS (torch conn.system) - 13 pin
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap sensor)	42 VAC / 0.1-1 A
Standard lenght	4 m / 5 m / 7.5 m / 15 m
Structure of cable	(Bikox) compact cable
Weight	4 m / 1.2 kg 7.5 m / 1.8 kg 5 m / 1.4 kg 15 m / 3.2 kg

*values for low alloy steel, e. g. MS S235JR

EX-TRAFIRE® 45SD 1-phase

FACT SHEET

PLASMA CUTTING SYSTEM BY THERMACUT®

Specifications	
Cutting current	20-25 A @ 120 VAC / 20-45 A @ 230 VAC
Input voltage	120-230 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE / C-TICK / CCC
Modes	cutting / grid cutting / gouging
Frequency	50/60 Hz
Maximum input power	4.4 kVA @ 120 VAC / 7.59 kVA @ 230 VAC
Output voltage	145 VDC
Duty cycle @ 40° C @ 120 VAC	40 % @ 25 A, 100 % @ 16 A
Duty cycle @ 40° C @ 230 VAC	50 % @ 45 A, 100 % @ 32 A
Dimension (L×H×W)	469×228×177 mm
Weight	12.7 kg
Recommended cutting capacity	12 mm*
Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Air flow [lpm/bar]	90/4.5
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	F
CNC interface	yes
Preadjusted voltage divider ratio	50:1
Type of hand torch	FHT-EX®45TTH
Type of machine torch	FHT-EX®45TTM

*values for low alloy steel, e. g. MS S235JR

EX-TRAFIRE® 45SD 3-phase

FACT SHEET

PLASMA CUTTING SYSTEM BY THERMACUT®

Specifications	
Cutting current	20-45 A
Input voltage	3x400 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE / C-TICK / CCC
Modes	cutting / grid cutting / gouging
Frequency	50/60 Hz
Maximum input power	6.48 kVA
Output voltage	145 VDC
Duty cycle @ 40° C	80 % @ 45 A, 100 % @ 40 A
Dimension (L×H×W)	469x228x177 mm
Weight	12.7 kg
Recommended cutting capacity	12 mm*
Severance cutting capacity	25 mm +*
Piercing cutting capacity	10 mm*
Air flow [lpm/bar]	90/4.5
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	F
CNC interface	yes
Preadjusted voltage divider ratio	50:1
Type of hand torch	FHT-EX®45TTH
Type of machine torch	FHT-EX®45TTM

*values for low alloy steel, e. g. MS S235JR

FHT-EX®45TTH / M

PLASMA CUTTING TORCH BY THERMACUT®

FACT SHEET

Specifications	
Recommended capacity	12 mm*
Maximum capacity	25 mm +*
Piercing capacity	10 mm*
Plasma cutting	-10° C to +40° C
Transport and storage	-25° C to +55° C
Relative humidity	up to 90 % @ 20° C
Application process	plasma cutting, gouging
Type of use	manual and mechanized
Pilot current	20 A @ 45 A setting
Rated current and corresponding duty cycle	45 A / 100 %
Type of gas	compressed air / nitrogen
Gas flow rate	approx. 90 l/min
Max. inlet pressure	10 bar
Operating (dynamic) pressure	4.8 bar
Type of voltage	DC direct voltage
Protection type of the power supply-side connections	IP3X (EN 60 529)
Type of connection	TCS (torch conn.system) - 13 pin
Voltage rating	500 V peak value
Rated value of control leads (trigger and cap) sensor)	42 VAC / 0.1-1.0 A
Standard lenght	5 m / 8 m / 15 m
Structure of cable	(Bikox) compact cable
Weight	5 m / 1.5 kg 8 m / 2.2 kg 15 m / 3.6 kg

*values for low alloy steel, e.g. MS S235JR

EX-TRAFIRE® 55SD

PLASMA CUTTING SYSTEM BY THERMACUT®

FACT SHEET

Specifications	
Cutting current	30-55 A
Input voltage	3×220 VAC ± 15 % / 3×400 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE, C-TICK, CCC
Modes	cutting / grid cutting / gouging
Frequency	50/60 Hz
Maximum input power	11.9 kVA @ 3×220 VAC / 13.7 kVA @ 3×400 VAC
Output voltage	140 V @ 3×220 VAC / 170 V @ 3×400 VAC
Duty cycle @ 40° C @ 3×400 VAC	50 % @ 55 A, 100 % @ 41 A
Dimension (L×H×W)	469×228×177 mm
Weight	11.8 kg
Recommended cutting capacity	20 mm*
Severance cutting capacity	30 mm +*
Piercing cutting capacity	20 mm*
Air flow [lpm/bar]	100/5.2
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
CNC interface	optional
Preadjusted voltage divider ratio	50:1
Type of hand torch	FHT-EX®105RTXH
Type of machine torch	FHT-EX®105RTXM

*values for low alloy steel, e.g. MS S235JR

EX-TRAFIRE® 75SD

PLASMA CUTTING SYSTEM BY THERMACUT®

FACT SHEET

Specifications	
Cutting current	30-75 A
Input voltage	3×220 VAC ± 15 % / 3×400 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE, C-TICK, CCC
Modes	cutting / gouging / grid cutting
Frequency	50/60 Hz
Maximum input power	14.71 kVA @ 3x220 VAC / 17.6 kVA @ 3x400 VAC
Output voltage	170 V (extra-boost 220 V)
Duty cycle @ 40° C	100 % @ 75 A
Dimension (LxHxW)	560x400x265 mm
Weight	24 kg
Recommended cutting capacity	25 mm*
Severance cutting capacity	35 mm +*
Piercing cutting capacity	20 mm*
Air flow [lpm/bar]	110/5.2
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
CNC interface	optional
Preadjusted voltage divider ratio	50:1
Type of hand torch	FHT-EX®105RTXH
Type of machine torch	FHT-EX®105RTXM

*values for low alloy steel, e.g. MS S235JR

EX-TRAFIRE® 100SD

PLASMA CUTTING SYSTEM BY THERMACUT®

FACT SHEET

Specifications	
Cutting current	30-100 A
Input voltage	3x400 VAC ± 15 %
Plasma gas	compressed air
Certification depending on region	CE, C-TICK, CCC
Modes	cutting / gouging / grid cutting
Frequency	50/60 Hz
Maximum input power	24.6 kVA
Output voltage	170 V (extra-boost 220 V)
Duty cycle @ 40° C	50 % @ 100 A, 100 % @ 80 A
Dimension (L×H×W)	560×400×265 mm
Weight	24 kg
Recommended cutting capacity	35 mm*
Severance cutting capacity	50 mm +*
Piercing cutting capacity	20 mm*
Air flow [lpm/bar]	135/5.2
Maximum input pressure [bar/psi]	10/145
Protection level	IP23S
Insulation class	H/F
CNC interface	optional
Preadjusted voltage divider ratio	50:1
Type of hand torch	FHT-EX®105RTXH
Type of machine torch	FHT-EX®105RTXM

*values for low alloy steel, e.g. MS S235JR

FHT-EX®105RTXH/M FACT SHEET

PLASMA CUTTING TORCH BY THERMACUT®

Specifications	1st side	
Rated current and corresponding duty cycle	105 A / 100 %	
Recommended capacity	35 mm*	
Maximum capacity	50 mm +*	
Piercing capacity	20 mm*	
Plasma cutting	-10° C to +40° C	
Transport and storage	- 25° C to +55° C	
Relative humidity	up to 90 % at 20° C	
Application process	plasma cutting, gouging, marking	
Type of use	manual and mechanized	
Gas flow rate	105 A / 100 A	approx. 135 l/min
	85 A / 75 A	approx. 110 l/min
	65 A / 55 A	approx. 98 l/min
	45 A	approx. 87 l/min
Gas flow rate - gouging	approx. 230 l/min	
Max. inlet pressure	10 bar	
Operating (dynamic) pressure	5.2 bar	
Type of voltage	DC direct voltage	
Protection type of the machine-side connections	IP3X (EN 60 529)	
Type of connection	TCS (torch connection system) - 13 pin	
Standard lenght	8 m / 15 m	
Structure of cable	(Bikox) compact cable	

*values for low alloy steel, e.g. MS S235JR

FHT-EX®105RTXH/M FACT SHEET

PLASMA CUTTING TORCH BY THERMACUT®

Specifications	2nd side	
Type of gas	Air	Nitrogen
Gas quality specification	Recommended air quality ISO 8573-1 Class 1.2.2 Air max. particle size: 0.1 microns, class 1 ref. to ISO 8573 Air max. oil: 0.1 mg / m^3, class 2 ref.: ISO 8573 Air max. dewpoint: +3° C, class 4 ref. to ISO 8573	Purity ≥ 99.99 %
Gas quality	clean, moisture-free, without oil	
Weight FHT-EX®105RTXH Hand torch	8 m / 3.3 kg 15 m / 5.6 kg	
Weight FHT-EX®105RTXM Machine torch	8 m / 3.4 kg 15 m / 5.9 kg	