

Determining the correct parameters requires profound knowledge and experience, because the parameters highly depend on the application and the material which shall be marked. In case of questions please contact us.

The parameters for individual materials are combined in parameter sets. Parameter sets can be generated and altered using the software. For detailed information on the parameters please refer to the manual of the marking software.

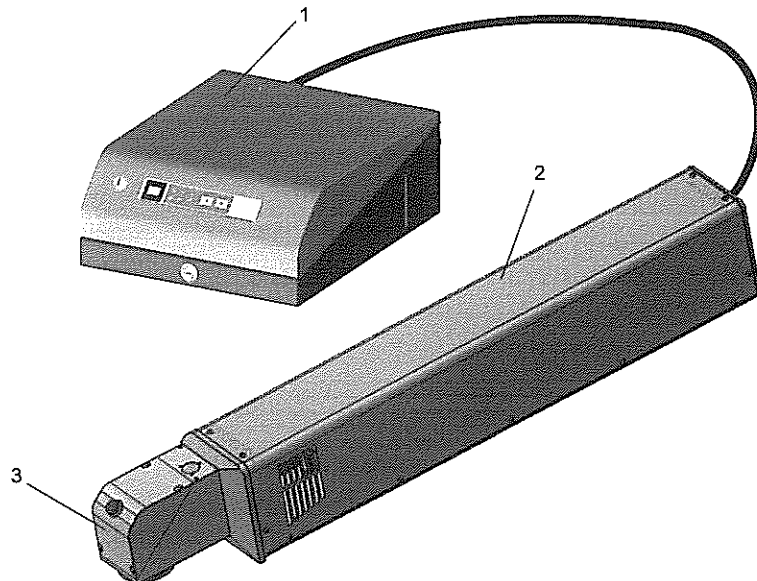
4.6 The Structure of the Laser System

The laser system consists of the supply unit (1) and the marking unit. The marking unit comprises the laser head (2) and the marking head (3). The supply unit is controlled via:

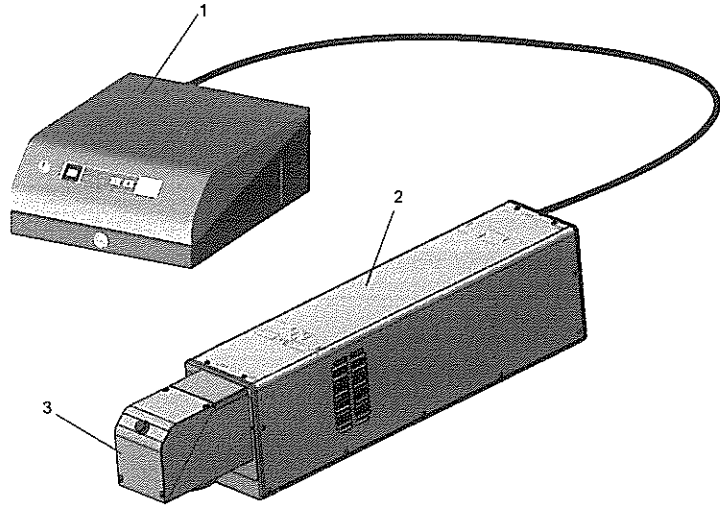
- the Handheld
- the Smart Graph software on a PC
- the Touch PC
- the CLARITY Laser Controller

Optionally, a beam turning unit can be installed between laser head and marking head.

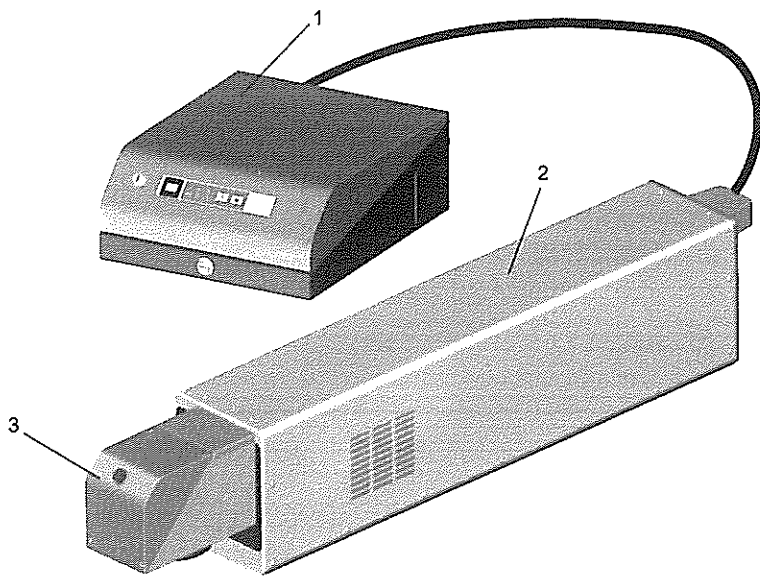
Videojet 3140



Videojet 3340



Videojet 3640



4.7 Technical Data

	Unit	Videojet 3140	Videojet 3340	Videojet 3640
Laser type		sealed-off CO ₂ laser		
Excitation		RF		
Wavelength	µm			
• Standard		10.6	10.6	10.6
• Optional		9.3	9.3 or 10.2	9.3 or 10.2
Laser class		4		
Operating modes		<ul style="list-style-type: none"> • continuous wave (cw) • quasi-continuous 50 Hz to 		
		20 kHz	25 kHz	160 kHz
Laser power typ.	W	10	30	60
Max. power consumption	kW	0.4	0.7	1.15
Input fuse	A	2 x T8A		-
Supply voltage	VAC	100 to 240 (autorange); 1-phase		
Mains frequency	Hz	50 / 60		
Ambient temperature	°C	5 - 40 (typical, depending on operation)		
Rel. humidity	%	10 - 90; non-condensing		
Dimensions	mm	W x D x H	W x D x H	W x D x H
• Supply unit		335 x 400 x 147	335 x 400 x 147	335 x 400 x 147
• Laser head		112 x 721 x 136	145 x 650 x 185	145 x 750 x 185
• SHC 60D		74 x 130 x 94	74 x 130 x 94	74 x 130 x 94
• SHC 100D/SHC 120C		96.5 x 176 x 116	96.5 x 176 x 116	96.5 x 176 x 116
• SHC 150C		-	105 x 185 x 125	105 x 185 x 125
Weight (typical)	kg			
• Supply unit		11.5	11.5	13
• Laser head (IP65)		13 (14)	19.1 (20)	26.5 (27)
• SHC 60D		1.4	1.4	1.4
• SHC 100D/SHC 120C		2.2	2.2	2.2
• SHC 150C		-	3.6	3.6
Sealing		<ul style="list-style-type: none"> • Supply unit IP54 (optional IP65) • Marking unit IP54 (optional IP65) 		
Marking speed ^a	mm/s	1 - 30,000		
Speed of production line	m/s	0 - 10		
Characters/Second ^a		2,000		2,100

	Unit	Videojet 3140	Videojet 3340	Videojet 3640
Focal length of laser scan lens • SHC 60D • SHC 100D/SHC 120C • SHC 150C	mm		64; 95; 127; 190; 254	63,5 ^b ; 85 ^b ; 100; 150; 200; 300; 351; 400 100; 150; 200; 300; 351; 400; 500; 600
Focus diameter (min.)	µm		70 (depending on installed optics)	
Line width		depending on the material and the laser parameters		
Fonts		any standard font (special characters on demand for additional charge)		
Cooling		integrated air-cooling		
maximum distance marking unit - supply unit	m		3, 5 or 10 (others on demand)	
Min. bending radius of supply line	mm		150	
Interfaces		Network interfaces, I/O interfaces		
Control		Handheld and/or Windows-compatible PC with Smart Graph software, Touch PC or CLARITY Laser Controller		

^a Any statements referring to marked characters or actual markings are typical values. These values highly depend on the material and may only be taken as a guideline. These are no specifications!

^b **Only 10/30 W**

Due to Videojet Technologies Inc.'s policy of continuous improvement, technical data is subject to change without notice.

4.7.1 Fuses

Name	Size in mm	Position
8 A / 250 V / T (time delay)	Ø 5 x 20	at the back of the supply unit, IP sealing must be removed, see I9 in section Elements on the Supply Unit (only 10/30 W)
1.6 A / 250 V / T (time delay)	Ø 5 x 20	in the supply unit, at the internal cables of the connection for Handheld and Touch PC I3 (transparent fuse holder), see I3 in section Elements on the Supply Unit
13 A / 250 V	Ø 6.3 x 25.4	inside mains plug (only for UK)

NOTICE

For 60 W laser systems:

In case of a short circuit the device uses the electrical protection of the building.

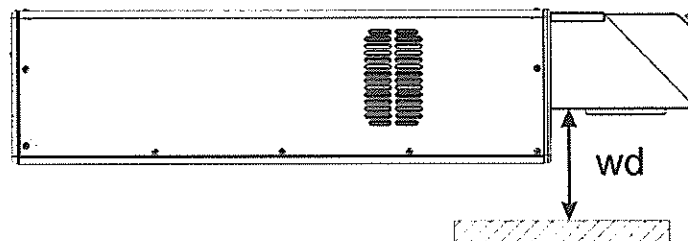
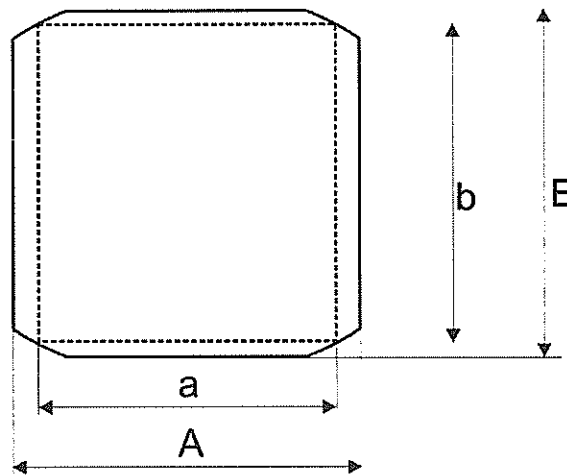
4.8 Working Distance and Marking Field

NOTICE

The actual marking field depends on the configuration of the system.

The actual working distance can deviate up to $\pm 10\%$ of the focal length.

This tolerance might be exceeded slightly in rare cases with the focal lengths F500 and F600.



Marking Head SHC 60D (all values in mm)

f	wd	A	B	a	b
64	67	44.7	44.7	32.2	41.9
95	96.5	66.3	66.3	47.8	62.3

f	wd	A	B	a	b
127	125	88.7	88.7	63.9	83.2
190	182	132.6	132.6	95.6	124.5
254	236	177.3	177.3	127.8	166.5

Marking Head SHC 100D (all values in mm)

f	wd	A	B	a	b
63.5 ^a	89	30.8	38.2	21.8	27.0
85 ^{a,b}	89	47.1	62.6	33.3	44.2
100	94	73.3	101.2	56.7	81.3
150	142	110.0	151.8	85.0	122.0
200	191	146.6	202.5	113.3	162.7
300	278	219.9	303.7	170.0	244.0
351	338	257.3	355.3	198.9	285.5
400	385	294.7	406.9	227.8	326.9

^a. Only 10/30 W

^b. The max. marking field size only is available, when the exhaust nozzle and the exhaust adapter are removed from the focussing module! In the case of using the exhaust nozzle, the marking field size is reduced to a circular area of 46 mm diameter!

Marking Head SHC 120C (all values in mm)

f	wd	A	B	a	b
63.5 ^a	89	29.1	36.2	20.6	25.6
85 ^{a,b}	89	44.2	58.8	31.3	41.6
100	94	73.3	87.3	53.7	77.6
150	142	110.0	130.9	80.6	116.4
200	191	146.6	174.5	107.5	155.2
300	278	219.9	261.8	161.2	232.7
351	338	257.3	306.3	188.6	272.3
400	385	294.7	350.8	216.0	311.9

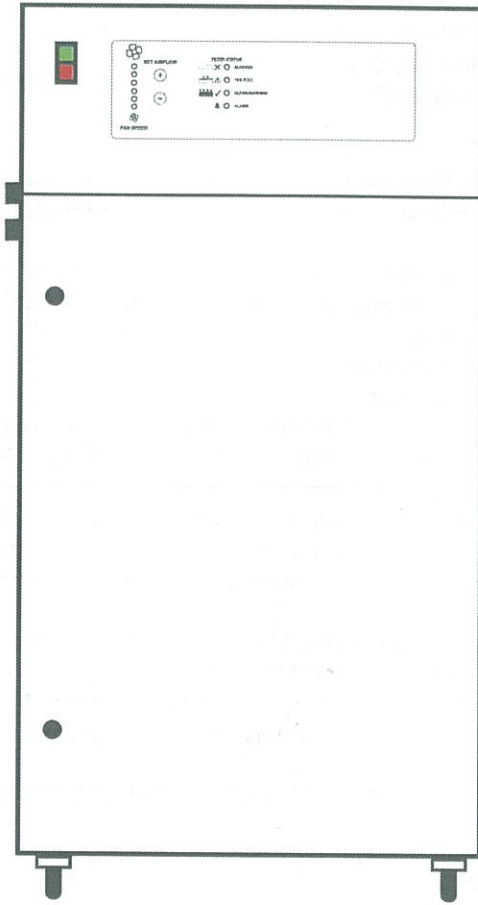
^a. Only 10/30 W

^b. The max. marking field size only is available, when the exhaust nozzle and the exhaust adapter are removed from the focussing module! In the case of using the exhaust nozzle, the marking field size is reduced to a circular area of 46 mm diameter!

Marking Head SHC 150C (all values in mm)

f	wd	A	B	a	b
100	89	66.7	100.1	47.1	81.6
150	139	100.1	150.2	70.7	122.4
200	189	133.4	200.3	94.3	163.2
300	286	200.2	300.5	141.5	244.8
351	341	234.2	351.6	165.6	286.5

f	wd	A	B	a	b
400	393	285.9	402.7	202.1	346.3
500	480	355.6	500.9	251.4	430.7
600	576	439.8	601.0	329.1	555.4



ADVANTAGE ORACLE FUME EXTRACTION UNIT

OPERATIONAL INSTRUCTIONS

CE

AD ORACLE

System Specifications

Unit: Advantage Oracle

Capacity:	380 m3/hr
Size:	Height 980mm
Depth	430mm
Width	430mm
Weight:	75 Kg
Exhauster	Centrifugal Fan
Output:	1.1Kw
Electrical supply:	115v - 230v 1ph 50/60hz
Full Load Current:	12.5A
Noise level:	below 60dB(A)
Filters:	Pre Filter Surface area 12.0 m ²
Efficiency F8	85% @ 0.8μ
HEPA Filter	Efficiency H13 99.997% @ 0.3μ
Gas Filter	Impregnated Carbon
	Blend 15 Kg

Environmental Operating Range

Temperature
Humidity

+5°C to +40°C
Max 80 % RH up to 31°C
to Max 50% RH at 40°C