



**DGSHAPE Engraver** 

# INTUITIVE AND INTELLIGENT ENGRAVING







## Intuitive and Intelligent Engraving



#### **Quick and Simple Production**

Powered by a 20,000 rpm DC brushless motor for impressively fast production, the DE-3 harnesses advanced surface detection and other automatic features to make set-up and engraving quick and simple.

### Accurate Personalisation at Your Fingertips

A laser pointer accurately defines the origin point and displays an engraving path preview on the material. Set the engraving position at the touch of a button for high-precision production, every time.

#### **Precise Engraving**

Easy-to-apply nose cones can be added to the user-replaceable spindle unit to automatically regulate engraving depth on the material surface delivering consistent high-quality results.

## **Ethernet Connectivity** for Flexible Production

With remote machine management capabilities the DE-3 offers USB and LAN connectivity for multiple machine engraving. Power up your production with the DE-3.



### Discover a World of Applications with DGSHAPE Engraving

Whether you are an entrepreneurial print service provider looking to expand your portfolio, a manufacturer who wants to produce durable labels and signage in-house, or an awards and gifts supplier looking for a versatile personalisation solution to add value to your product line, the intuitive and intelligent DE-3 desktop engraver is the ideal turnkey solution for engraving precise text and graphics onto an impressive range of materials and objects. Offering a fully enclosed engraving area for safe and clean operation, with the DE-3 you can create custom signs, directional signage and nameplates for indoor and outdoor display. Personalise gifts, awards, promotional items and mementos to transform them into treasured high-value products. Produce highly durable industrial labels and benefit from variable data engraving functionality for a range of product marking applications.









Specifications					
Work table size		305 mm x 230 mm			
Maximum work area (Work Envelope)		X, Y, Z: 305 mm × 230 mm × 40 mm			
XYZ axis drive system		Stepper motor, 3-axis simultaneous control			
Operating speed	XY axis	0.1 - 60 mm/sec.			
	Z axis	01- 30 mm/sec.			
Software resolution		0.01 mm/step			
Mechanical resolution	XYZ axis	0.00125 mm/step			
Spindle Motor		Brushless DC Motor			
Spindle Speed		5000 - 20000 rpm			
Tool loading		Cutter Holder, Collet Type			
Maximum material thickness		40 mm (38 mm when using the nose cone)			
Connection		USB or Ethernet (10 BASE-T/ 100 BASE-TX)			
Machine language		RML-1			
Power supply	Voltage and frequency	AC 100 to 240V ±10%, 50/60 Hz (overvoltage category: II, IEC 60664-1)			
	Rated current	1.0 A			
Power consumption		80 W			
Operating noise	During operation	63 dB (or less)			
	During standby	40 dB (or less)			
External dimensions		616 mm × 587 mm × 390 mm			
Machine weight		35 kg			
Installation environment		Indoor use, altitude: 2000 m or less, Temperature 5 to 40 °C, humidity 35 to 80% (no condensation), Environment pollution degree 2			
Included items		DGSHAPE software package CD, Power cable, Power adapter, USB cable, Nose cone unit (resin / metal components), Nose unit set screw (fixing screw, spring), Spare set screw (for cutter holder), Solid collet (ø 3.175 mm), Spanner wrench, Hex wrench, Hex driver, Adhesive sheet, Dust collector adapter, Setup Guide			

Specifications, designs and dimensions listed may be subject to change without notice.

Accessories - Cutters						
Item	Model	Description				
	ZEC-A2013	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.127 mm (W)				
	ZEC-A2025	Cemented carbide dia. = $3.175 \text{ mm} \times 114 \text{ mm}$ (L) $\times 0.254 \text{ mm}$ (W)				
	ZEC-A2051	Cemented carbide dia. = $3.175 \text{ mm} \times 114 \text{ mm}$ (L) $\times 0.508 \text{ mm}$ (W)				
Engraving cutters	ZEC-A2076	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.762 mm (W)				
(for plastic)	ZEC-A4013	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.127 mm (W)				
	ZEC-A4025	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.254 mm (W)				
	ZEC-A4051	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.508 mm (W)				
	ZEC-A4076	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.762 mm (W)				
	ZEC-A2013-BAL	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.13 mm (W)				
Engraving cutters	ZEC-A2025-BAL	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.25 mm (W)				
(for aluminum or brass)	ZEC-A4013-BAL	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.13 mm (W)				
	ZEC-A4025-BAL	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.25 mm (W)				
	ZEC-A2150	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 1.52 mm (W)				
	ZEC-A2190	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 1.91 mm (W)				
	ZEC-A2230	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 2.29 mm (W)				
	ZEC-A2320	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 3.175 mm (W)				
Parallel engraving	ZEC-A4150	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 1.52 mm (W)				
cutters (for plastic)	ZEC-A4190	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 1.91 mm (W)				
	ZEC-A4230	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 2.29 mm (W)				
	ZEC-A4320	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 3.175 mm (W)				
	ZEC-A4380	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 3.81 mm (W)				
	ZEC-A4430	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 4.34 mm (W)				
	ZEC-A2013-QR	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.13 mm (W)				
Quarter round cutters	ZEC-A2025-QR	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.25 mm (W)				
(for plastic)	ZEC-A4013-QR	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.13 mm (W)				
	ZEC-A4025-QR	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.25 mm (W)				
Diamond engraving	ZDC-A2000	Diamond dia. = 3.175 mm x 127 mm (L)				
cutters	ZDC-A4000	Diamond dia. = 4.36 mm x 178 mm (L)				

Other Accessories and Consumables					
Item	Model	Description			
	ZC-23	Diameter 6 mm, 5 mm, 4 mm, and 3 mm collets: 1 pc. each			
	ZC-23-3	Diameter 3 mm collet: 1 pc.			
Collets for end-mill	ZC-23-4	Diameter 4 mm collet: 1 pc.			
	ZC-23-6	Diameter 6 mm collet: 1 pc.			
	ZC-23-3175	Diameter 3.175 mm collet: 1 pc.			
	ZC-23-6.35	Diameter 6.35 mm collet: 1 pc.			
Collet for 4.36 diameter cutters	ZC-E436	Diameter 4.36 mm collet: 1 pc.			
N	ZDN-200 (Metal)	Inner diameter 2 mm, outer diameter 4.2 mm, for engraving text			
Nose cone	DN-500R (Plastic)	Inner diameter 5 mm, outer diameter 8 mm, for engraving text			
Spindle unit	ZS-35S	Replacement spindle unit			
Adhesive sheet for securing material	AS-10	210 mm x 140 mm, 10 sheets			
Centre vice	ZV-23CS	Loadable material using jig for nameplate: 152 mm (X) x 148 mm (Y), and 35 mm (H) Loadable material using jig for either pen or tube: 90 mm (X) x 146 mm (Y), and max. 20 mm thick			
T-slot table	ZTT-35	Table size: 292 mm (X) x 220 mm (Y) Dimensions: 355 mm (W) x 230 mm (D) x 40 mm (H)			

dia. = shank diameter, L = overall length, W = blade width, unit = mm All 4.36 diameter tools require ZC-E436 Collet

Roland Care Warranty



Enjoy the peace of mind of having one of the most comprehensive warranty packages in the industry, included with the DE-3.

#### DGSHAPE Corporation

At the forefront of advanced machine manufacturing for more than 35 years, Roland provides practical and reliable technology with unmatched service and support. DGSHAPE further builds on this reliability promise by improving user experience with fast and effortless engraving machines, designed for those just starting out and for engraving experts looking for a more intuitive solution.

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