DGSHAPE

INTUITIVE
AND INTELLIGENT
ENGRAVING

by Roland

Intuitive and Intelligent Engraving

More than 30 years of engraving expertise in one device

The DGSHAPE DE-3 builds on over 3 decades of Roland engraving innovation to deliver impressive versatility and fast, user-friendly automated production. Featuring laser-pointing technology, ethernet connectivity, automatic depth regulation and a host of intelligent enhancements, the DE-3 offers simple set-up and operation to precisely engrave a huge range of delicate and durable materials such as brass, aluminium, copper, engraving laminates and plastics, wood items and more. Compact yet powerful, the DE-3 is the ideal engraving solution for use within office, classroom, workshop and retail environments.

DE-3 DESKTOP ENGRAVER

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.

Model shown with optional centre vice

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.

Open Architecture and Intelligent New Software

For optimum choice and versatility, the DE-3 works out-of-the box with popular engraving software, industry-standard tools and materials. Dr. Engrave Plus, included with the DE-3, offers exciting user benefits to maximise the ease and speed of production.

Dr.Engrave Plus

Ai.

SUPPORTS AI FILES AND STANDARD GRAPHIC/ VECTOR DATA.

IMPORT EXCEL AND CSV DATABASES FOR FAST ENGRAVING OF SERIAL DATA JOBS.

ENABLES STANDARD ENGRAVING AS WELL AS SURFACE LEVELLING AND HOLE DRILLING.

Hand-Held Control
Without the need for a computer, users can store data and perform machine operations.

DE-3

DGSHAPE ENGRAVER

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	0.1 - 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
Engraving cutters (for plastic)	ZEC-A2013	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.127 mm (W)
	ZEC-A2025	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.254 mm (W)
	ZEC-A2051	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.508 mm (W)
	ZEC-A2076	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.762 mm (W)
	ZEC-A4013	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 0.13 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)
Engraving cutters (for aluminum or brass)	ZEC-A2013-BAL	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.13 mm (W)
	ZEC-A2025-BAL	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.25 mm (W)
	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)
Parallel engraving cutters (for plastic)	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)
	ZEC-A4150	Cemented carbide dia. = 4.36 mm x 165 mm (L) x 1.52 mm (W)
	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)
Quarter round cutters (for plastic)	ZEC-A2013-QR	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.13 mm (W)
	ZEC-A2025-QR	Cemented carbide dia. = 3.175 mm x 114 mm (L) x 0.25 mm (W)
	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 cutters	ZDC-A2000	Diamond dia. = 3.175 mm x 127 mm (L)
	ZDC-A4000	Diamond dia. = 4.36 mm x 178 mm (L)

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

Other Accessories and Consumables

Item	Model	Description
Collets for end-mill	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.
	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.
Nose cone	ZDN-200 (Metal)	Inner diameter 2 mm, outer diameter 4.2 mm, for engraving text
	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)

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.

DGSHAPE

AUTHORISED DEALER:

www.rolanddgn.com