

Spray gun selection guide

Find the right spray gun for your industry sector

How to select the right spray gun?

A matching combination of nozzle and air cap is essential to achieve perfect results. Several factors have to be considered to make the right choice: the function of the coating, paint properties like viscosity and solid content, shape and kind of the substrate which needs to be treated. A significant role plays the expertise and experience of the sprayer too. This guide will help you to get better understanding of which spray gun will fit your needs among different industry sectors.



FACTORS TO CONSIDER WHEN SELECTING COATING EQUIPMENT

[Paint kind & function](#)

[Production quantity](#)

[Painter experience](#)

[Part complexity](#)

[Paint layer thickness](#)

[Solid content & Viscosity](#)

[Required quality](#)

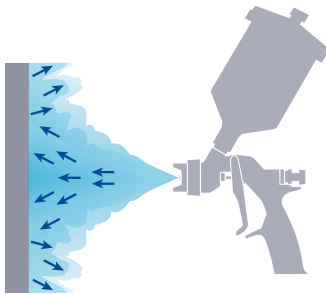
Coating technologies overview

	Atomization method	Equipment	Paint supply options
Air Spray HVLP / LVLP	Atomization of paint by air flow. Paint pressure up to 5 bar. High flexibility, compliant with legislation. Finish quality is comparable to Air Spray Conventional but with slower coverage and coarser atomisation. Limited to atomize heavy coatings.	Manual or automatic air spray guns EcoGun AS MAN or EcoGun AS AUTO	gravity cups, pressure pots, diaphragm pumps, dosing unit EcoDose
Air Spray Conventional	Atomization of paint by air flow. Paint pressure up to 5 bar. field of use: small areas or batches, high glossy varnishes. High flexibility, provides the finest finish quality and the lowest transfer efficiency.	Manual or automatic air spray guns EcoGun AS MAN or EcoGun AS AUTO	gravity cups, pressure pots, diaphragm pumps, dosing unit EcoDose
Air Assist	High pressure application (typically from 50 to 250 bar) with additional air to smooth and regulate spray pattern shape. Ideal for high production levels and smooth finish alongside with high transfer efficiency.	Airless manual or automatic spray guns EcoGun AA MAN / EcoGun AA AUTO . Nozzles with different orificies and spray angles.	high pressure vertical piston pumps e.g. EcoPump VP package, dosing unit EcoDose
Airless	High pressure application (typically from 50 to 300 bar). Ideal for thick coatings and high production rates, e.g. protective, rather than decorative coatings, good penetration on recessed areas of work pieces.	Airless manual or automatic spray guns EcoGun AL MAN / EcoGun AL AUTO . Reversible and non-reversible nozzles with different orificies and spray angles.	high pressure vertical piston pumps e.g. EcoPump VP package, dosing unit EcoDose
Electrostatic Air Spray	Atomization of paint by air flow with the help of electromagnetic field. High transfer efficiency combined with a uniform coating.	Manual air spray guns EcoGun AS MAN DC (direct charge) or EcoGun AS MAN EC (external charge).	pressure pots, diaphragm pumps (an isolated material supply is necessary in case of water-borne paints applied with a direct charged gun)

Air Spray methods

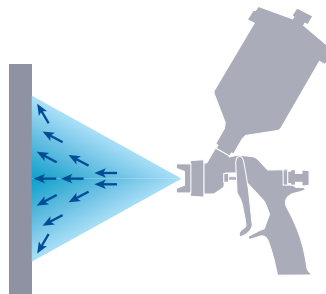
CONVENTIONAL

Extremely fine atomization and great surface coverage. The higher dynamic energy compared to LVLP / HVLP technology often keeps the transfer efficiency (TE) considerably below those achieved with LVLP / HVLP guns. This is due to particle bounce back from the object and increased overspray.



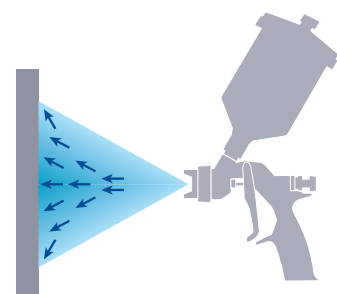
HVLP (HIGH VOLUME LOW PRESSURE)

Low spray pressure technology. Terminology for an internationally recognized low-pressure technology whereby the transfer efficiency rate has to exceed 65 %, while the maximum air pressure under the air cap is below 0.7 bar.



LVLP (LOW VOLUME LOW PRESSURE)

Further development of HVLP technology to achieve a TE comparable to that of HVLP technology but still being able to spray difficult materials with good quality results.



ELECTROSTATIC COATING

Functional Principle

Paint is charged by high voltage to ensure attraction on the part.

Part needs to be grounded by opposite polar.

Important condition for electrostatic coating is suitable paint and conductive substrate. For wooden substrate - a wood moisture ratio of 10-12 % with a relative humidity of the ambient air of no less than 60-70 % and/or a precoat with a conductive coating that will allow the product to be grounded. Used paints should be pre-formulated for electrostatics.

Equipment

EcoGun AS MAN EC/DC

electrostatic manual air spray guns with direct or external charge.

Field of use

Aircraft and aerospace

Automotive

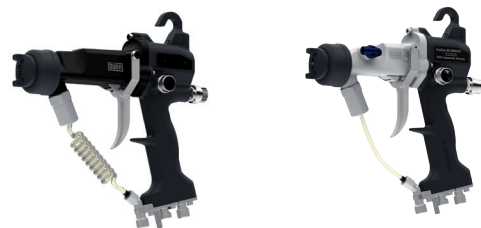
Commercial and off road vehicles, fork lift trucks, trailer, chassis

Agricultural machines and machinery

Railway carriages, rolling stock

General metal finishing, e.g. wire frames

Wood (window frames, chair and bed legs, rounded parts)



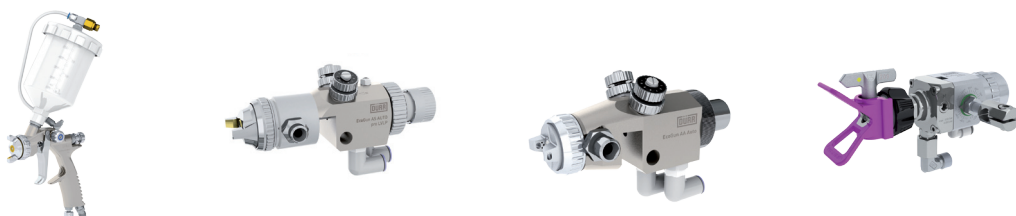
Wood industry

PRIMERS



Manual spray guns

Type	EcoGun AS MAN 1GS (116)	EcoGun AS MAN 1PS (246)	EcoGun AA MAN 1P (256)	EcoGun AA MAN 2P (2100)	EcoGun AL MAN 300
Part No.	N36200006V	N36200008V	N36220001V	N36220002V	N36240002V
Air Cap	AL	PC / HM (HVLP)	—	—	—
Nozzle sizes	1.6-2.2 mm	1.4-1.8 mm	0.28 - 0.38 mm (0.011" - 0.015")	0.28-0.38 mm (0.011"-0.015")	0.28-0.38 mm (0.011"-0.015")



Manual spray guns

Automatic spray guns

Type	EcoGun AS MAN 1AF	EcoGun AS AUTO pro	EcoGun AA AUTO	EcoGun AL AUTO
Part No.	N36320001V	N36210012V	N36230001V	N36250001V
Air Cap	LC	CF / LF (LVLP)	—	—
Nozzle sizes	1.4-2.2 mm	1.2-1.8 mm	0.33-0.48 mm (0.013"-0.019")	0.33-0.48 mm (0.013"-0.019")

STAINS



Manual spray guns

Automatic spray guns

Type	EcoGun AS MAN 1GS (116)	EcoGun AS MAN 1PS (246)	EcoGun AS AUTO	EcoGun AA AUTO
Part No.	N36200006V	N36200008V	N36210008V	N36230001V
Air Cap	AL	PC / HM (HVLP)	HM (HVLP)	—
Nozzle sizes	1.0-1.2 mm	1.0-1.2 mm	1.0-1.2 mm	0.18-0.23 mm (0.007"-0.009")

Wood industry

BASE COATS / CLEAR COATS



Manual spray guns

Type	EcoGun AS MAN 2GF (910)	EcoGun AS MAN 1GF (119)	EcoGun AS MAN 2PF (910S)	EcoGun AS MAN 1PF (249)	EcoGun AA MAN 1P (256)	EcoGun AA MAN 2P (2100)
Part No.	N36200003V	N36200005V	N36200001V	N36200007V	N36220001V	N36220002V
Air Cap	CF / LF (LVLP)	LW / LH (HVLP)	CF / LF (LVLP)	LP / LC	—	—
Nozzle sizes	1.6-2.0 mm / 1.2-1.4 mm (for small areas)	1.6-2.0 mm	1.0-1.4 mm	1.0-1.4 mm	0.23-0.38 mm (0.007"-0.015")	0.23-0.38 mm (0.007"-0.015")



Automatic spray guns

Type	EcoGun AS AUTO pro	EcoGun AS AUTO	EcoGun AA AUTO
Part No.	N36210012V	N36210008V	N36230001V
Air Cap	CF / LF (LVLP)	PL / HM (HVLP)	—
Nozzle sizes	1.0-1.4 mm	1.0-1.2 mm	0.23-0.38 mm (0.007"-0.015")

UV COATS



Automatic spray guns

Type	EcoGun AS AUTO pro	EcoGun AA AUTO
Part No.	N36210012V	N36230001V
Air Cap	LF (LVLP)	—
Nozzle sizes	1.0-1.4 mm	0.23-0.33 mm (0.009"-0.013")

Wood industry

ADHESIVES



METALLIC COATS



	Manual spray guns		Automatic spray guns	
Type	EcoGun AS MAN 2PF (910S)	EcoGun AS AUTO pro	EcoGun AS AUTO Mini HD	
Part No.	N36200001V	N36210012V	N36210010V	
Air Cap	CF *	CF * / LF [LVLP] *	—	
Nozzle sizes	1.0-1.4 mm *	1.0-1.5 mm *	0.5-1.5 mm	

	Manual spray guns
Type	EcoGun AS MAN 1PF (249)
Part No.	N36200007V
Air Cap	LP
Nozzle sizes	1.2-1.4 mm

* Please, contact our customer support or your local distributor for the right air cap / nozzle size configuration.

Metal (general) industry

FILLERS / PRIMERS



	Manual spray guns				
Type	EcoGun AS MAN 1PS (246)	EcoGun AS MAN 1AF	EcoGun AA MAN 1P (256)	EcoGun AA MAN 2P (2100)	EcoGun AL MAN 300
Part No.	N36200008V	N36320001V	N36220001V	N36220002V	N36240002V
Air Cap	PC	LC	—	—	—
Nozzle sizes	1.2-2.2 mm	1.6-2.2 mm	0.28-0.48 mm (0.011"-0.015")	0.28-0.48 mm (0.011"-0.015")	0.28-0.48 mm (0.011"-0.015")



	Automatic spray guns			
Type	EcoGun AS AUTO	EcoGun AS AUTO pro	EcoGun AA AUTO	EcoGun AL AUTO
Part No.	N36210008V	N36210012V	N36230001V	N36250001V
Air Cap	PC	CF / LF	—	—
Nozzle sizes	1.6-2.2 mm	1.2-3.0 mm	0.28-0.53 mm (0.011"-0.017")	0.28-0.53 mm (0.011"-0.017")

Metal (general) industry

PUTTY / BLOCK FILLERS



	Manual spray guns	Automatic s. guns
Type	EcoGun AS MAN 1PS (246)	EcoGun AS AUTO pro HD
Part No.	N36200008V	N36210013V
Air Cap	PC / EL / GL	FLRD
Nozzle sizes	2.2 / 2.8 / 4.0 mm	2.0-6.0 mm

UV COATS



	Automatic spray guns	
Type	EcoGun AS AUTO pro	EcoGun AA AUTO
Part No.	N36210012V	N36230001V
Air Cap	LF (LVLP)	—
Nozzle sizes	1.0-1.4	0.23-0.43 mm (0.009"-0.013")

BASE / TOP COATS



	Manual spray guns				
Type	EcoGun AS MAN 1PF (249)	EcoGun AS MAN 2PF (910S)	EcoGun AA MAN 1P (256)	EcoGun AA MAN 2P (2100)	EcoGun AL MAN 300
Part No.	N36200007V	N36200001V	N36220001V	N36220002V	N36240002V
Air Cap	LC	CF / LF (LVLP)	—	—	—
Nozzle sizes	1.3-2.2 mm	1.2-2.0 mm	0.23-0.48 mm (0.009"-0.015")	0.23-0.48 mm (0.009"-0.015")	0.23-0.48 mm (0.009"-0.015")



	Automatic spray guns		
Type	EcoGun AS AUTO pro	EcoGun AA AUTO	EcoGun AL AUTO
Part No.	N36210012V	N36230001V	N36250001V
Air Cap	CF / LF (LVLP)	—	—
Nozzle sizes	1.2-2.0 mm	0.23-0.48 mm (0.009"-0.015")	0.23-0.48 mm (0.009"-0.015")

Metal (general) industry

METALLIC COATS



	Manual spray guns		Automatic spray guns	
Type	EcoGun AS MAN 1PF (249)		EcoGun2 AS AUTO	
Part No.	N36200007V		N36210005V	
Air Cap	LP		797	
Nozzle sizes	1.2 / 1.4 mm		1.1/1.4 mm	

Plastic industry

BASE / TOP COATS



	Automatic spray guns			
Type	EcoGun AS AUTO	EcoGun AS AUTO pro	EcoGun AS AUTO Mini FS	EcoGun AS AUTO Mini RS
Part No.	N36210008V	N36210012V	N36210006V	N36210007V
Air Cap	PL / HM (HVLP)	CF / LF (LVLP)	—	—
Nozzle sizes	0.8-1.2 mm	0.8-1.2 mm	0.6-1.0 mm	0.6-1.0 mm

FILLERS / PRIMERS



	Automatic spray guns		
Type	EcoGun AS AUTO	EcoGun AS AUTO pro	EcoGun2 AS AUTO
Part No.	N36210008V	N36210012V	N36210005V
Air Cap	PC	CF	797
Nozzle sizes	1.6-1.8 mm	1.3-1.8 mm	1.1 / 1.4 mm

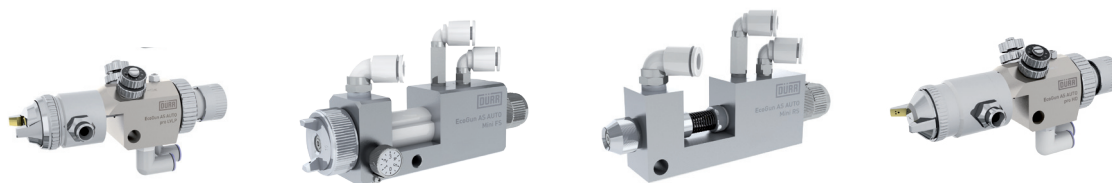
METALLIC COATS



	Automatic spray guns	
Type	EcoGun AS AUTO pro	EcoGun2 AS AUTO
Part No.	N36210012V	N36210005V
Air Cap	CF / LF (LVLP)	797
Nozzle sizes	1.0-1.2 mm	1.1 / 1.4 mm

Glass (cosmetic) industry

BASE / CLEAR COATS



Automatic spray guns

Type	EcoGun AS AUTO pro	EcoGun AS AUTO Mini FS	EcoGun AS AUTO Mini RS	EcoGun AS AUTO Pro HD
Part No.	N36210012V	N36210006V	N36210007V	N36210013V
Air Cap	SF	—	—	Rd
Nozzle sizes	0.5-1.0 mm	0.6-1.0 mm	0.6-1.0 mm	0.5-1.0 mm

Ceramic industry

GLAZES / ENAMELS



Manual spray guns

Automatic spray guns

Type	EcoGun AS MAN 1PS (246)	EcoGun AS MAN 1PF (249)	EcoGun AS AUTO pro HD
Part No.	N36200008V	N36200007V	N36210013V
Air Cap	PS	LC	FLRD
Nozzle sizes	1.4-2.2 mm (hardened)	1.4-2.2 mm (hardened)	1.2-2.5 mm (TiN-coated)



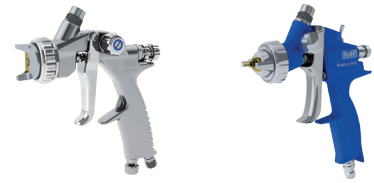
Car refinishing

UHS PRIMERS



Manual spray guns		
Type	EcoGun AS MAN 1GS (116)	EcoGun AS MAN 1AF
Part No.	N36200006V	N36320001V
Air Cap	AL / EL	LC
Nozzle sizes	2.2 / 2.8 mm	1.6-2.2 mm

BASE COATS



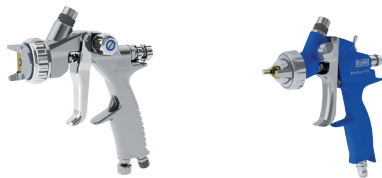
Manual spray guns		
Type	EcoGun AS MAN 1GF (119)	EcoGun AS MAN 2GF (910)
Part No.	N36200005V	N36200003V
Air Cap	LA / LW / LH	CF / LF (LVLP)
Nozzle sizes	1.3 / 1.3-1.4 / 1.4 mm	1.3-1.4 / 1.4 mm

FILLERS PRIMERS



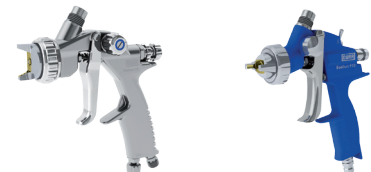
Manual spray guns			
Type	EcoGun AS MAN 1GS (116)	EcoGun AS MAN 1GF (119)	EcoGun AS MAN 2GF (910)
Part No.	N36200006V	N36200005V	N36200003V
Air Cap	AL	LA / LW	CF / LF (LVLP)
Nozzle sizes	1.6-2.0 mm	1.6-2.0 / 1.4-1.8 mm	1.8-2.0 / 2.0 mm

CLEAR / TOP COATS



Manual spray guns		
Type	EcoGun AS MAN 1GF (119)	EcoGun AS MAN 2GF (910)
Part No.	N36200005V	N36200003V
Air Cap	LA, LW / LH	CF / LF (LVLP)
Nozzle sizes	1.2-1.3 / 1.3 mm	1.2-1.3 / 1.3 mm

SPOT REPAIR



Manual spray guns		
Type	EcoGun AS MAN 1GF (119)	EcoGun AS MAN 2GF (910)
Part No.	N36200005V	N36200003V
Air Cap	LA	CF
Nozzle sizes	1.2 mm	0.8-1.2 mm

Spray gun accessories

EXTENSIONS



Type	LPS	NP 250	NS 250
Part No.	M19140010 / M19140011 / M19140012 / M19140013 /	M19140014 / M19140016	M19140015 / M19140017
Length	300 / 500 / 600 / 1.000 / 1.500 mm	250 mm	250 mm
Nozzle sizes	2.2 mm	1.0 / 1.2 mm	1.0 / 1.2 mm
Compatible spray guns	EcoGun AS MAN 1GS [116] EcoGun AS MAN 1PS [246]	EcoGun AS MAN 1GS [116] EcoGun AS MAN 1PS [246]	EcoGun AS MAN 1GS [116] EcoGun AS MAN 1PS [246]



Type	LPS 300 / 500	K 150-900	Rotary joint / Direct joint
Part No.	M19140022 (300 mm) M19140023 (500 mm)	M19140001 / M19140002 / M19140003 / M19140004 / M19140005	M22150012 / M01010201
Length	300 / 500 mm	150 / 300 / 450 / 600 / 900 mm	—
Nozzle sizes	2.2 mm	all airless nozzles available	—
Compatible spray guns	EcoGun AS AUTO	EcoGun AL MAN / AUTO	EcoGun AL MAN / AUTO

OTHERS



Inline filters and strainers

Brackets and adjusting plates

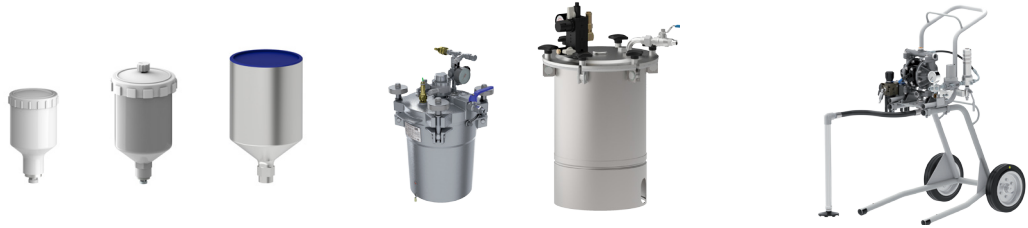
Cleaning kits

DIN cups

Part numbers and other useful accessories can be find on our webshop.durr.com

Feeding & Dosing equipment

FEEDING EQUIPMENT - AIR SPRAY



Type	Gravity cups	Pressure pots	EcoPump AD package
Part No.	N08010032, 125 ml Nylon N08010034, 600 ml Nylon N08010035, 750 ml Aluminium	N08160001V, 2-60 liter without built-in agitator N08170001V, 10-60 liter with built-in agitator	N92120001V
Suitable spray guns	EcoGun AS MAN 1GS / 1GF / 2GF EcoGun AS AUTO pro / pro HD	EcoGun AS MAN 1PS / 1PF / 2PF / DC / EC EcoGun AS AUTO	EcoGun AS MAN 1PS / 1PF / 2PF / DC / EC EcoGun AS AUTO

FEEDING EQUIPMENT - AIR ASSIST/AIRLESS



Type	EcoPump VP package
Part No.	N92110001V
Suitable spray guns	EcoGun AA MAN 1P / 2P EcoGun AL MAN 300 EcoGun AA AUTO EcoGun AL AUTO

DOSING EQUIPMENT



Type	EcoDose 2K/3K
Part No.	N10100003V / N10110001V
Field of use	Electronic mixing equipment for 2K or 3K paints or glues. For low or high pressure applications.

Your local Dürr contact:



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