



PROFESSIONAL / HERKULES

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PROFESSIONAL + HERKULES — AIRLESS HIGH PERFORMANCE UNITS



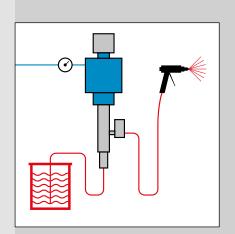


WIWA PROFESSIONAL

WIWA HERKULES

New standards for efficiency and performance under extreme conditions WIWA is globally renowned through its premium-quality, robust pumps for all areas of application. The equipment in the PROFESSIONAL and HERKULES series is setting new standards for efficiency and performance. It particularly highlights its strengths in the toughest of everyday uses, e.g. for large surface coverage and thick coatings in the marine, offshore and pipe coating industries or for structural and corrosion protection. However, high performance also means the highest demands on all components. This is where WIWA's long standing global experience

comes to bear; premium quality materials, a sophisticated design and precise manufacturing make the equipment in the PROFESSIONAL and HERKULES series durable and easy to service. All Airless paint spraying units in the PROFESSIONAL and HERKULES series are also available as, or can be converted into Hot Job spraying units or Air Combi units for finer finishes. These pumps are pneumatically driven and rated explosion proof. Let WIWA's 60+ years of experience work for you!



WIWA PROFESSIONAL and HERKULES, available as Airless spraying units

AIRLESS High pressure

Economical, environmentally friendly spraying method with excellent surface area coverage at high pressures.

The high pressure pump draws the spraying agent from any desired container and transfers it to the spray gun under high pressure via a high pressure hose.

Fine, airless atomisation is achieved through a specially designed spray nozzle. The spray jet is directed onto the material at high speed, thereby providing an optimal finish.

The benefits at a glance:

- Effective painting and coating of large surfaces
- Higher coating thickness in just one pass
- Saves materials and solvent
- Closed, uniform spray pattern
- Better use of energy due to minimal air consumption
 Environmental friendly as no spray

mist when correctly configured

reby Ideal for highly refined painting tasks on large surface areas as well as for angular components and shaped or small workpieces.

The benefits at a glance:

- The finest atomisation generates first class finishes
- High material savings
- Soft, controllable spray pattern

finishing systems for painting lines and

The Air Combi combines the advan-

tages of Airless and conventional

Using this painting method, the spraying agent is transferred to the spray

gun under moderate pressure and pre-

atomised. The fine spray distribution

is achieved by applying regulated com-

pressed air as the paint is discharged.

A soft, controllable spray jet is pro-

duced with minimum paint mist.

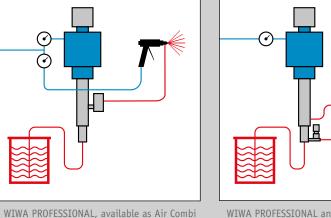
paint circulation systems

spraying techniques.

AIR COMBI Air-assisted painting

- Low operating costs due to minimal air consumption
- Low pump wear due to low material pressure
- Environmentally friendly due to minimal overspray

Existing Airless spraying units can be converted into the Air Combi system.



WIWA PROFESSIONAL and HERKULES, also available as Hot Job units with integrated fluid heater

HOT SPRAYING SYSTEMS

WIWA Hot Job systems for high film builds, short drying times, highest surface quality and extremely viscous coating materials.

During the hot spray process, the material is heated to the desired spraying temperature using the WIWA material flow heater.

This eliminates the need to use solvents to lower the viscosity.

An adjustable circulation system maintains a constant material temperature providing even coating and high finish quality.

The benefits at a glance:

- Highly viscous materials can be effortlessly processed
- High film builds
- Short drying periods
- Excellent surface coverage
- Glossier surfaces due to improved paint dispersion
- Environmentally and user friendly as no solvents are required



PROFESSIONAL — AIRLESS AND AIRLESS HOT SPRAYING IN THE HIGH PERFORMANCE CLASS



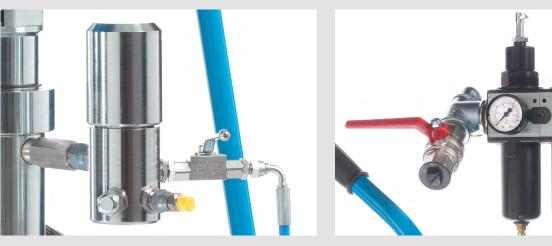


The art of WIWA Airl particularly guaranteed perfected: enquiries a most of th WIWA PROFESSIONAL

WIWA Airless paint spraying units from the PROFESSIONAL series particularly demonstrate their strengths during the toughest use. This is guaranteed by their impressive, globally renowned durability. Spare parts enquiries are still received for units that are more than 20 years old, with most of these parts still being available. Could there be any better argument?

The simplest solution is the best. However, the demands on items that are ,brilliantly simple' are enormous. Original WIWA Airless paint spraying

units from the PROFESSIONAL series fulfill the high demands placed on simple solutions thanks to the years of experience of our development and production teams, carefully selected, high quality materials and our own production technology with the highest demands for perfection. Global recognition is also given to the return on investment during everyday use in the shipbuilding industry, the marine and offshore industry, the steelwork and bridge industry, pipe line construction and other areas of application of heavy-duty corrosion protection and multiple gun applications.



Standard high pressure filter on the pump outlet

Maintenance unit

THE ADVANTAGES OF THE PROFESSIONAL SERIES

- Dual action pump with long stroke and fixed packings.
- Maintenance free, low noise compressed air motor.
- Thorough cleaning through an innovative flushing system.
- A closed lubrication chamber separates the air motor and the material pump. The lubricant prevents paint from drying onto the piston rod and protects the packings.
- Large valve and material passages make processing highly viscous materials simple.
- Pre-tensioned, self adjusting packings reduce wear and tear and lower main-tenance costs.
- Above-average service life due to hard chromed dual pistons, carbide faced valve plates and stainless steel valve balls.
- Dual filter system prevents downtime.
- The air motor is largely prevented from freezing by the standard, integrated air maintenance unit.
- Efficient use through the simultaneous feeding of several spray guns, depending on the nozzle size and the viscosity of the coating material.
- Environmentally friendly thanks to noise levels being kept to a minimum by the optimised control system and the large muffler.
- Perfect surfaces and larger area coverage.
- The low number of components makes maintenance simple.



PROFESSIONAL



PROFESSIONAL — CONFIGURATION OPTIONS

PROFESSIONAL pumps for highly	viscous coati	ng materials	5						
Model	24071		280	28064		053	28048		
Max. output	24 l,	/min	28 l,	28 l/min		/min	28 l/min		
Pressure ratio	71	:1	64	:1	53:1		48:1		
Pump capacity per double stroke	138 cm ³		153	153 cm ³		138 cm ³		cm ³	
Max. air inlet pressure	6,5 bar		7	bar	8 bar		8 bar		
Max. permissible operating pressure	460 bar		450 bar		420 bar		380 bar		
Piston diameter of the air motor	230 mm		230 mm		200 mm		200 mm		
Piston stroke of the air motor	120 mm		120 mm		120 mm		120 mm		
Version	Ν	R	N	R	N	R	N	R	
Pump with cart and maintenance unit (compact)	0639061	0639180	0639063	0639184	0639279	0639282	0639285	0639288	
Pump on lift cart with maintenance unit (compact)	0640057	0640058	0640018	0640017	0640055	6490056	0640059	0640060	
Pump with wall mount and maintenance unit (compact)	0639062	0639181	0639064	0639185	0639280	0639283	0639286	0639289	

PROFESSIONAL pumps for medium and low-viscosity coating materials, automated spray and fluid circulation												
Model	38	042	44032		380)32	24026		44024		28023	
Max. output	38 l	/min	44 l	/min	38 l,	/min	24 l,	/min	44 l/min		28 l/min	
Pressure ratio	42	:1	32:1		32	:1	. 26		24:1		23:1	
Pump capacity per double stroke	235	cm ³	306 cm ³		235	cm ³	138 cm ³		306 cm ³		153 cm ³	
Max. air inlet pressure	8	bar	8 bar		8	bar	8 bar		8 bar		8 bar	
Max. permissible operating pressure	335	bar	255 bar		255	bar	210 bar		190 bar		185 bar	
Piston diameter of the air motor	230	mm	230 mm		200	mm	140 mm		200 mm		140 mm	
Piston stroke of the air motor	120	mm	120 mm		120 mm 120		120 mm 120) mm 120 mm		mm	
		-						-		-		-
Version	Ν	R	N	R	N	R	N	R	N	R	N	R
Pump with cart and maintenance unit (compact)	0639301	0639304	0639313	0639316	0639307	0639310	0643189	0643190	0639319	0639322	0643191	0643192
Pump on lift cart with maintenance unit (compact)	0640065	0640066	0640069	0640070	0640063	0640064	-	-	0640067	0640068	-	-
Pump with wall mount and maintenance unit (compact)	0639302	0639305	0639314	0639317	0639308	0639311	0643176	0643177	0639320	0639323	0643178	0643179

Version	38042	44032	38032	24026	44024	28023
Mounting kits for hot spraying units on cart without circulation	0640926	0640926	0640926	0630498	0640926	0630498
Mounting kits for hot spraying units on wall mounts without circulation	0640929	0640929	0640929	0630525	0640929	0630525
Mounting kits for hot spraying units on cart with circulation	0640078	0640078	0640078	0629398	0640078	0629398
Mounting kits for hot spraying units on wall mounts with circulation	0640928	0640928	0640928	0630531	0640928	0630531

Scope of delivery of the mounting kits: WIWA 3500 material flow heater with backflow regulator, temperature display and all necessary connection hoses and attachments

• Manifold 3 x 1/4"

• Standard nozzle 40° – 0.53 mm

Spray accessory kit no. 05 for the `ready-to-spray' version Order no. 0621676 comprising:

WIWA 500 D Airless spray gun (with swivel joint)
NW 6 material hose (600 bar, 1/4", 15 m),
REV-GUARD™ reversible guard with nozzle 627

Spray accessory kit no. 07 for the `ready-to-spray' Spray accessory kit no. 12 for the `ready-to-spray´ version Order no. 0640932 comprising: version for hot spraying units in the N and R versions: Order no. 0621935 comprising: • WIWA 500 F Airless spray gun (with swivel joint) • 2 x NW 6 material hose (410 bar, 7.5m) • WIWA 500 F Airless spray gun NW 10 material hose (500 bar, 3/8", 15m)
NW 6 material hose (600 bar, 1/4", 7.5 m) • 1 x NW 4 material hose (410 bar, 1.0 m) • REV-GUARD[™] reversible guard with nozzle 627

N = Mild steel version R = Stainless steel version

We recommend our special versions with an open system for glassflake materials.

DESIGN FEATURES OF THE **PROFESSIONAL SERIES**

Air motor:

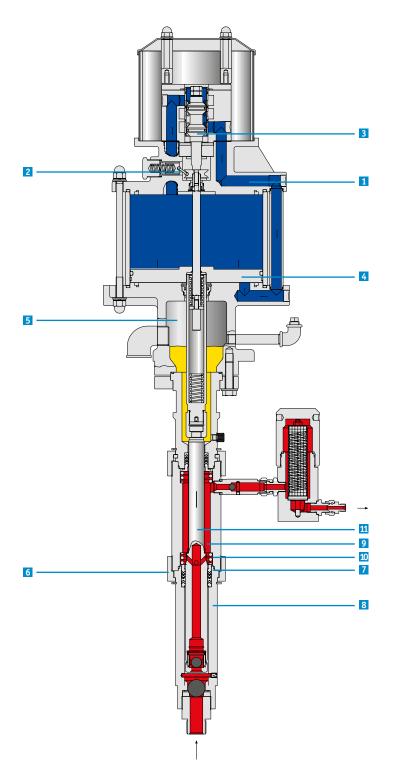
- 1 The low number of components makes the motor easy to assemble and disassemble.
- 2 The toggles are clearly visible and thus easy to install.
- **3** Pulsation is barely noticeable thanks to the high stroke change-over speed.
- 4 Pressure ratio can be varied by changing the air motor piston diameter.

Lubrication chamber

5 A closed lubrication chamber separates the air motor and the material pump. The closed design prevents foreign objects such as blasting material from entering the pump system from the outside. The lubricant also prevents paint from drying onto the piston rod and protects the packings.

Material pump:

- **6** The pump components are quick to assemble and disassemble as they are simply connected by union nuts or by being screwed together.
- **Z** Sealing rings located in front of the threads prevent the threads from sticking and make disassembly easier.
- 8 Precision bushings ensure simple and exact alignment of components and thus less wear and tear.
- **9** Large openings and voluminous fluid passages reduce pressure loss.
- **10** Better flushing due to large fluid passages and short packing tension springs.
- **11** The displacement and pressure ratio can be changed by exchanging the piston rod and packings.





PROFESSIONAL - AREAS OF APPLICATION



We recommend		PROFESSIONAL PUMPS for highly viscous coating materials				PROFESSIONAL pumps for medium and low-viscosity coating materials, automated spray and fluid circulation					
Model	24071	28064	24053	28048	38042	44032	38032	24026	44024	28023	
Max. output	24 l/min	28 l/min	24 l/min	28 l/min	38 l/min	44 l/min	38 l/min	24 l/min	44 l/min	28 l/min	
Pressure ratio	71:1	64:1	53:1	48:1	42:1	32:1	32:1	26:1	24:1	23:1	
Pump capacity per double stroke	138 cm ³	153 cm ³	138 cm ³	153 cm ³	235 cm ³	306 cm ³	235 cm ³	138 cm ³	306 cm ³	153 cm ³	
Areas of application											
Large surfaces	•	•	•	•	•	•	•	•	•	٠	
Ship painting	•	•	•	•	•	•	•	0	0	0	
Steel and hall construction	•	•	•	•	•	•	•	0	0	0	
Railcar construction	•	•	•	•	•	•	•	•	0	0	
Paint and finishing shops	•	•	•	•	•	•	•	0	0	0	
Offshore industry	•	•	•	•	•	•	•	0	0	0	
Industrial coatings	•	•	•	•	•	•	•	0	0	0	
Structural and corrosion protection	•	•	•	•	•	•	•	0	0	0	
Insulation	•	•	•	•	•	•	•	•	0	0	
Fire prevention	0	0	0	0	•	•	•	-	-	-	

					-	-	-		-	
Spraying agent										
Abrasive materials*	0	0	0	•	•	•	•	•	•	•
Flame protection materials	-	0	0	•	•	0	0	-	-	-
Glassflake	•	•	•	•	0	0	0	-	-	-
Insulated and thick-film materials	0	•	0	•	•	0	0	-	-	-
Anti-foulings	•	•	•	•	•	-	-	-	-	-
Cold bitumen	•	•	•	0	0	-	-	-	-	-
Materials with short fibres	•	•	•	0	0	0	-	-	-	-
Low-solvent and solvent-free paints	•	•	•	•	0	0	0	0	-	-
Sprayable paints and varnishes	•	•	•	•	•	•	•	•	•	•
Two component and tar/epoxy paints**	•	•	•	•	•	-	—	-	-	-
• Very suitable • Suitable - Unsuitable		* With l	ow to mediu	um viscosity	, such as zir	ıc primer, m	icaceous iro	n ore, solve	nt-based zir	nc silicate

* With low to medium viscosity, such as zinc primer, micaceous iron ore, solvent-base ** Highly viscous and coarsely pigmented

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AREAS OF APPLICATION FOR THE PROFESSIONAL SERIES

- Large surfaces
- Ship building
- Steel and hall construction
- Railcar construction
- Paint and finishing shops
- Offshore industry
- Industrial coatings
- Structural and corrosion protection
- Insulation
- Fire prevention
- Coating and finishing systems

Units with higher pressure ratios

Particularly suited for use with highly viscous, low-solvent and solvent free materials with a high solids content. Optimally suited for larger nozzle bores, long hoses and high pressures. Significant pressure reserves compensate for low or fluctuating air supply pressure

Units with higher displacement and lower pressure ratio

For use with coarsely pigmented or abrasive materials with low to medium viscosity. These units are also particularly suited for use with large tips and multiple spray guns.

Professional units with a lower pressure ratio are also optimally suited for paint supply systems in the Airless or Air-Combi procedures and for circulation lines for supplying paint.



PROFESSIONAL

Transfer pumps



HERKULES — AIRLESS AND AIRLESS HOT SPRAYING EQUIPMENT HIGH PERFORMANCE CLASS



WIWA HERKULES: maximum performance and durability under extreme conditions Power, perfection and precision! The globally successful WIWA Airless pump range is achieving new levels of performance with the new WIWA HERKULES series. With pressure ratios of up to 75:1 and outputs of up to 550 cm³ per cycle, WIWA HERKULES pumps are the world's most powerful airless spraying units. Even materials that were previously non-sprayable or only sprayable under certain circumstances can be processed. The high delivery volume and the associated slow piston speed maintain a low level of wear even with large nozzle

bores and materials with high solids contents. The extraordinarily high performance data makes the WIWA HERKULES series ideal for use in shipyards and the offshore sector, structural and fire protection, automatic spraying systems and other major projects that require top performance and no downtime.





Standard 1" maintenance unit

Low noise thanks to the voluminous muffler

W/W

THE ADVANTAGES OF THE HERKULES SERIES

- Efficient coating of large surfaces.
- Large area output and high film builds.
- Can be easily operated with hose lengths in excess of 100 m.
- Maximum performance even in the toughest conditions.
- Several spray guns can be used, even with extremely long hoses.
- Large power reserves even if the pressure is low on the compressed air supply network.
- Economical due to the robust unit technology and high durability.
- Quick maintenance due to simple installation.
- Large valve and material passages make processing highly viscous materials simple.
- Self adjusting packings reduce wear and tear and lower maintenance costs.
- Above average service life due to hard chromed dual pistons, tungsten carbide valve seats and stainless steel balls.
- Dual filter system prevents downtime.
- 1" maintenance unit installed as standard.
- Environmentally friendly thanks to noise levels being kept to a minimum by the optimised control system and the large built in muffler.
- Ideal for automated spraying systems and paint circulation systems.



HERKULES

Standard high pressure filter on the pump outlet

10



HERKULES - CONFIGURATION OPTIONS

Technical data	ical data for extremely abrasive materials			o highly viscous terials	for coating systems and paint circulation systems		
Model	35075	35061	48057	48046	60036	60028	
Max. output	35 l/min	35 l/min	48 l/min	48 l/min	60 l/min	60 l/min	
Pressure ratio	75:1	61:1	57:1	46:1	36:1	28:1	
Pump capacity per double stroke	275 cm ³	275 cm ³	360 cm ³	360 cm ³	550 cm ³	550 cm ³	
Max. air inlet pressure	6 bar	7 bar	7 bar	8 bar	8 bar	8 bar	
Max. permissible operating pressure	450 bar	427 bar	399 bar	368 bar	288 bar	224 bar	
Piston diameter of the air motor	333 mm	300 mm	333 mm	300 mm	333 mm	300 mm	
Piston stroke of the air motor	120 mm	120 mm	120 mm	120 mm	120 mm	120 mm	
Version	R	R	R	R	R	R	
Pump w. cart and R1" maintenance unit (3-piece)*	0641375	0641376	0641377	0641378	0642026	0642025	
Pump on lift cart and R1" maintenance unit (3-piece)*	0641729	0641728	0641731	0641730	0642028	0642027	
Pump w. wall mount and R1" maintenance unit (3-piece)*	0642037	0642036	0642039	0642038	0642031	0642030	
Accessories set for ຈັéລັດິງຈຸເຫຼັວຈອກ່າວງ versioຄ = stainless steel	version (RS on request)		Nr.	04	Nr. 04		
Version	35075	35061	48057	48046	60036	60028	
Mounting kits for hot spraying units on cart without circulation	0642222	0642238	0642222	0642222	On request	On request	
Mounting kits for hot spraying units on cart with circulation	0642215	0642237	0642237	0642215	On request	On request	

Scope of delivery of the mounting kits:

WIWA 3500 material flow heater with backpressure regulator, temperature display and all necessary fittings and attachments.



Spray accessory no. 04 Order no. 0621668 comprising:

WIWA 500 D Airless spray gun (with swivel joint)
NW6 material hose (410 bar, 1/4", 15 m)
Reversible guard with reversible nozzle 627

Spray accessory no. 05 Order no. 0621676 comprising:

WIWA 500 D Airless spray gun (with swivel joint)
NW6 material hose (600 bar, 1/4", 15 m)
Reversible guard with reversible nozzle 627

Accessories

• Suction filter and suction sieve for different pigment sizes. (Accessories)

- Stirrer mounting kit for continuous agitation of zinc materials or other separating fillers (Accessories)
- Hot spraying unit mounting kit Heating extremely viscous coating materials makes it possible to vastly improve results and reduce solvent use. The WIWA material flow heater is also suitable for use with high ratio pumps. (Accessories)

• WIWA HERKULES with wall bracket

• WIWA HERKULES on lift trolley

DESIGN FEATURES OF THE HERKULES SERIES

Air motor

- The low number of components makes the motor easy to assemble and disassemble.
- 2 The toggles are clearly visible and thus easy to install.
- 3 Minimal pulsation due to short change over time.
- Pressure Ratio can be varied by changing the air motor piston diameter.

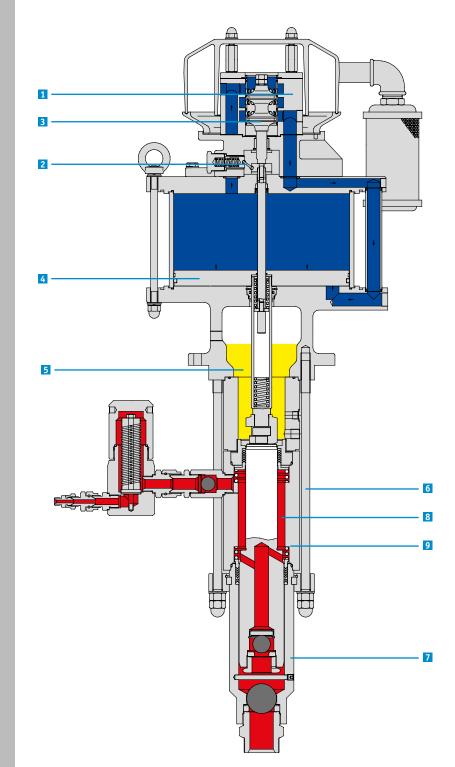
Lubrication chamber

A closed lubrication chamber separates the air motor and the material pump. The closed design prevents foreign objects such as blasting material from entering the pump system from the outside.

The lubricant also prevents paint from drying onto the piston rod and protects the packings.

Material pump

- **6** The pump components are quick to assemble and disassemble.
- Precision guides ensure simple and exact alignment of components and thus less wear and tear.
- 8 Large fluid passages reduce pressure loss.
- Better flushing due to large fluid passages and short packing retention springs.



HERKULES



HERKULES - AREAS OF APPLICATION



We recommend						
Model	35075	35061	48057	48046	60036	60028
Max. output	35 l/min	35 l/min	48 l/min	48 l/min	60 l/min	60 l/min
Pressure ratio	75:1	61:1	57:1	46:1	36:1	28:1
Pump capacity per double stroke	275 cm ³	275 cm ³	360 cm ³	360 cm ³	550 cm ³	550 cm ³
Areas of application		-	-	-	-	
Fire prevention	0	0	•	•	•	-
Large surfaces	•	٠	٠	٠	٠	•
Ship building	٠	٠	٠	٠	٠	•
Steel and hall construction	٠	٠	•	•	٠	•
Railcar construction	•	٠	•	٠	٠	•
Offshore industry	•	•	•	•	0	-
Industrial coatings	٠	•	•	•	•	-
Structural and corrosion protection	٠	•	•	•	•	-
Insulation	٠	•	•	•	•	0
Paint supply systems	_	-	-	•	•	•
Automated coating systems	٠	•	•	•	•	•
c 1	_	_	_	_	_	_
Spraying agent						
Glassflake	0	•	•	•	0	-
Anti-foulings	•	•	•	•	0	-
Cold bitumen	•	•	•	0	0	-
Low-solvent and solvent-free paints	•	•	•	0	0	-
Materials with short fibres	-	•	•	•	•	-
Sprayable paints and varnishes	•	•	•	•	•	•
Two component and tar/epoxy paints*	•	•	•	•	0	
Abrasive materials (zinc silicates and similar)	-	-	0	•	•	•
Flame protection Insulated high-build materials	-	0	•	•	•	-

THE AREAS OF APPLICATION OF THE HERKULES SERIES

- Fire preventions
- Large surfaces
- Ship building
- Steel and hall construction
- Railcar construction
- Offshore industry
- Industrial coatings
- Structural and corrosion protection
- Insulation
- Paint supply systems
- Automated coating systems

WIWA HERKULES 35075 and 35061

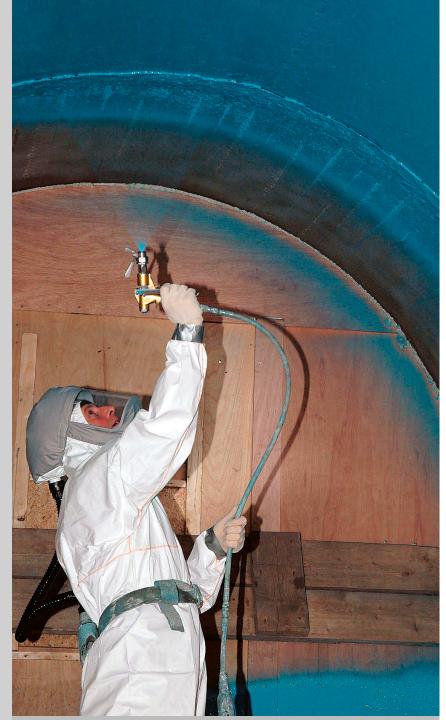
The enormous pressure ratios make both of these models particularly suited for use with extremely viscous and solvent free materials with a high solids content. Significant pressure reserves compensate for low or fluctuating air supply pressure.

WIWA HERKULES 48057 und 48046

The higher output makes these units suitable for use with coarsely pigmented and abrasive materials or with fibre-filled coating materials with a medium to high viscosity.

WIWA HERKULES 60036 und 60028

The enormous output of 550 cm³ per double stroke makes these units ideal for use in multiple gun (automated or manual) spraying systems. They are also well suited for paint circulation systems and can be used for both Airless and Air-Assisted Airless applications



HERKULES

• Very suitable • Suitable - Unsuitable * highly vis



PRODUCT RANGE EXAMPLES



Headquarters and Production

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WIWA FLEXIMIX Electronic 2K Paint Spraying and Coating Equipment



WIWA DUOMIX Plural Component Airless Paint Spraying Equipment



WIWA POWERPACK XXL 2K Hydraulic Systems



WIWA Fluid Transfer Pumps for diverse applications



WIWA Airless, Air-Combi and Hot Spraying Systems



WIWA PU 460 Olyurea Systems

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