



PROFESSIONAL / HERKULES



## PROFIT + PHOENIX – UNIQUELY VERSATILE FOR YOUR SUCCESS



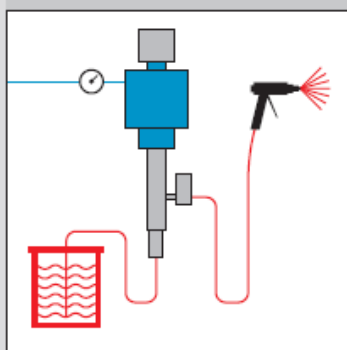
WIWA PROFIT



WIWA PHOENIX

Trusted by tens of  
thousands of customers  
around the world and  
subject to continual  
optimisation!

The WIWA PROFIT and PHOENIX series offer versatile, high quality pump systems for almost all areas of application. The varied performance data and broad range of equipment options enable us to offer units for almost all application techniques in the wood and metalworking industries, as well as for the painting and finishing trades. Our decades of experience, continual development activities in close cooperation with paint and finishing product manufacturers and our inhouse precision manufacturing of all components have led to our success in the decorative and protective surface coating sector. The equipment in the PROFIT and PHEONIX series is available in rust and acid proof versions and therefore ideally suited to processing water based coatings. The pressure ratio can be adjusted to different conditions by replacing a small number of parts, thereby saving on additional investment. Carefully selected, premium quality materials create high durability and reduce the wear and tear of all parts that come into contact with the fluid. Minimal repair costs and downtime create satisfied customers all over the world. Robust, reliable and versatile WIWA technology to your benefit.



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.

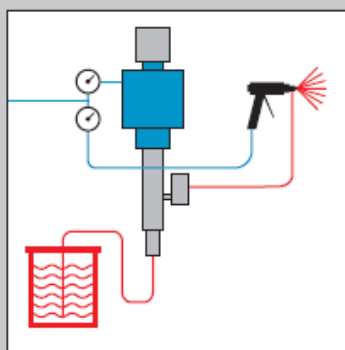
The high pressure pump draws the spraying agent from any desired container and transfers it to the spray gun under high pressure via a high pressure hose.

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

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



WIWA PROFESSIONAL, available as Air Combi finishing systems for painting lines and paint circulation systems

## AIR COMBI Air-assisted painting

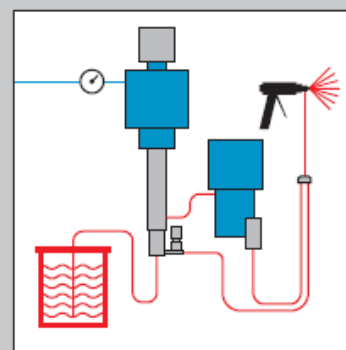
The Air Combi combines the advantages of Airless and conventional spraying techniques.

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 compressed air as the paint is discharged. A soft, controllable spray jet is produced with minimum paint mist.

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



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





because it works

## PERFORMANCE CLASS

### 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 maintenance 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



## DESIGN FEATURES OF THE PROFESSIONAL SERIES

### Air motor:

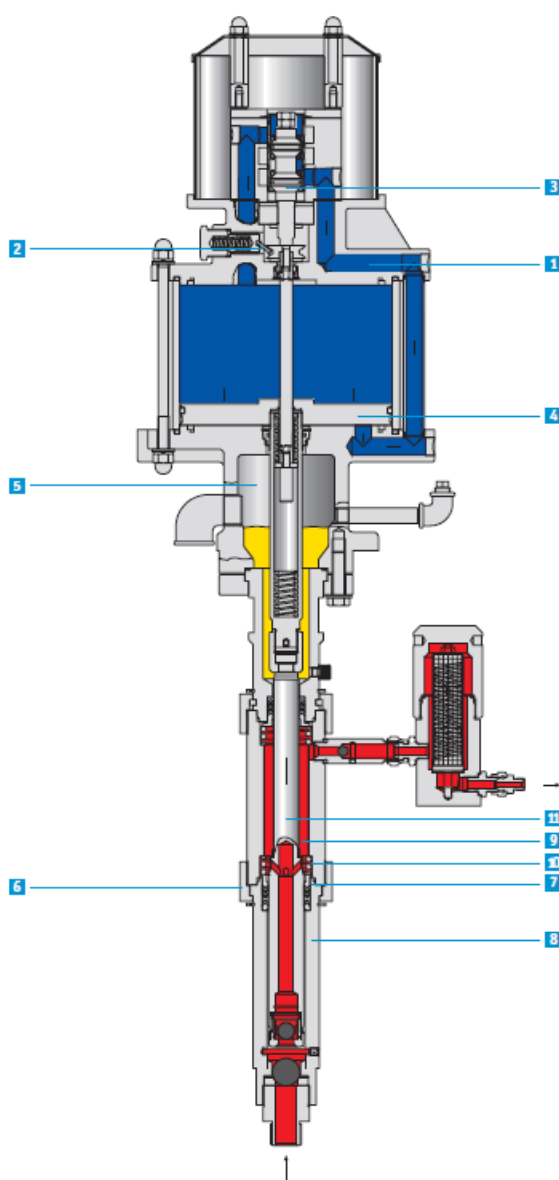
- 1 The low number of components makes the motor easy to assemble and disassemble.
- 2 The toggles are clearly visible and thus easy to install.
- 3 Pulsation is barely noticeable thanks to the high stroke change-over speed.
- 4 Pressure ratio can be varied by changing the air motor piston diameter.

### 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.
- 7 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



## 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 <sup>3</sup>	153 cm <sup>3</sup>	138 cm <sup>3</sup>	153 cm <sup>3</sup>	235 cm <sup>3</sup>	306 cm <sup>3</sup>	235 cm <sup>3</sup>	138 cm <sup>3</sup>	306 cm <sup>3</sup>	153 cm <sup>3</sup>
Areas of application										
Large surfaces	●	●	●	●	●	●	●	●	●	●
Ship painting	●	●	●	●	●	●	●	○	○	○
Steel and hall construction	●	●	●	●	●	●	●	○	○	○
Railcar construction	●	●	●	●	●	●	●	●	○	○
Paint and finishing shops	●	●	●	●	●	●	●	○	○	○
Offshore industry	●	●	●	●	●	●	●	○	○	○
Industrial coatings	●	●	●	●	●	●	●	○	○	○
Structural and corrosion protection	●	●	●	●	●	●	●	○	○	○
Insulation	●	●	●	●	●	●	●	●	○	○
Fire prevention	○	○	○	○	●	●	●	—	—	—
Transfer pumps	—	—	—	—	○	○	○	—	●	—
Spraying agent										
Abrasive materials*	○	○	○	●	●	●	●	●	●	●
Flame protection materials	—	○	○	●	●	○	○	—	—	—
Glassflake	●	●	●	●	○	○	○	—	—	—
Insulated and thick-film materials	○	●	○	●	●	○	○	—	—	—
Anti-fouling	●	●	●	●	●	—	—	—	—	—
Cold bitumen	●	●	●	○	○	—	—	—	—	—
Materials with short fibres	●	●	●	○	○	○	—	—	—	—
Low-solvent and solvent-free paints	●	●	●	●	○	○	○	○	—	—
Sprayable paints and varnishes	●	●	●	●	●	●	●	●	●	●
Two component and tar/epoxy paints**	●	●	●	●	●	—	—	—	—	—

\* Very suitable    ○ Suitable    — Unsuitable

\* With low to medium viscosity, such as zinc primer, micaceous iron ore, solvent-based zinc silicate

\*\* Highly viscous and coarsely pigmented





## 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



## HIGH PERFORMANCE CLASS

### 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





## HERKULES – CONFIGURATION OPTIONS

Technical data	for extremely abrasive materials		for medium to highly viscous materials		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 <sup>3</sup>	275 cm <sup>3</sup>	360 cm <sup>3</sup>	360 cm <sup>3</sup>	550 cm <sup>3</sup>	550 cm <sup>3</sup>
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 ready-to-spray version	Nr. 05		Nr. 04		Nr. 04	
* 3/4" optional      R = stainless steel version (RS on request)						
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



**WIWA®**

because it works

## DESIGN FEATURES OF THE HERKULES 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** Minimal pulsation due to short change over time.
- 4** Pressure Ratio can be varied by changing the air motor piston diameter.

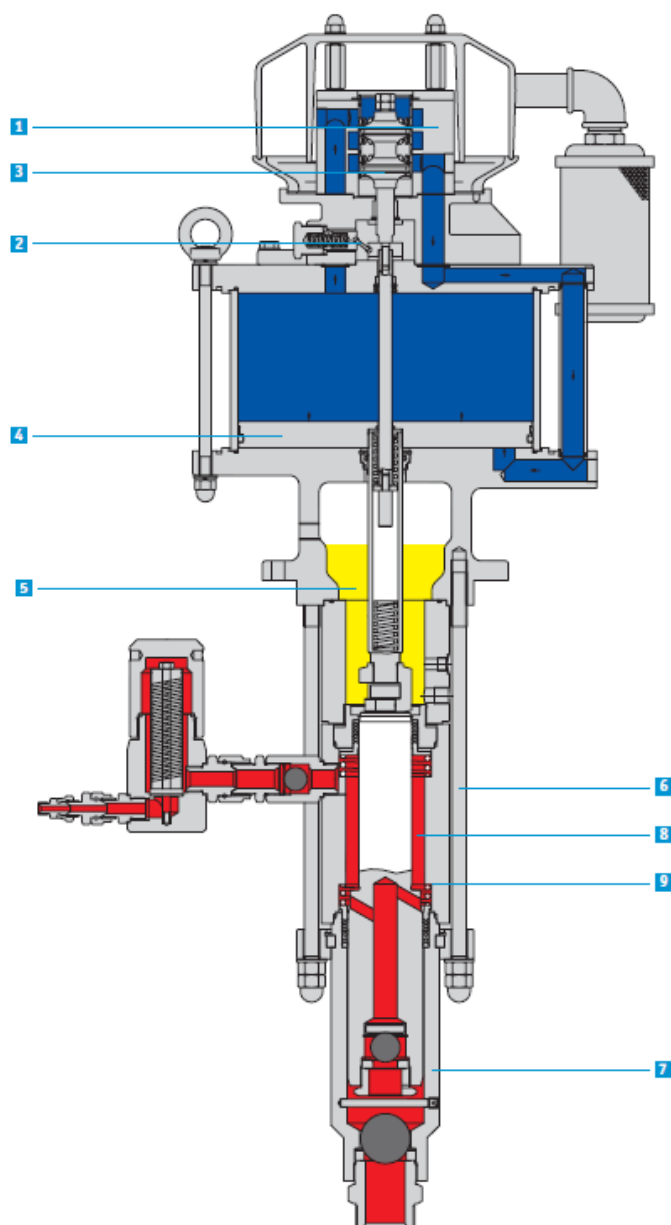
### Lubrication chamber

- 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.
- 7** Precision guides ensure simple and exact alignment of components and thus less wear and tear.
- 8** Large fluid passages reduce pressure loss.
- 9** Better flushing due to large fluid passages and short packing retention springs.



# HERKULES



## HERKULES – AREAS OF APPLICATION



### We recommend

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### Areas of application

Fire prevention	○	○	●	●	●	—
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	●	●	●	●	●	●

### Spraying agent

Glassflake	○	●	●	●	○	—
Anti-foulings	●	●	●	●	○	—
Cold bitumen	●	●	●	○	○	—
Low-solvent and solvent-free paints	●	●	●	○	○	—
Materials with short fibres	—	●	●	●	●	—
Sprayable paints and varnishes	●	●	●	●	●	●
Two component and tar/epoxy paints*	●	●	●	●	○	—
Abrasive materials (zinc silicates and similar)	—	—	○	●	●	●
Flame protection	—	○	●	●	●	—
Insulated high-build materials	—	—	○	●	●	—

● Very suitable    ○ Suitable    — Unsuitable

\* highly viscous and coarsely pigmented





## 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 cm<sup>3</sup> 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