TEMPSPRAY GUIDE

IMPROVED PROPERTIES THANKS TO PAINT HEATING

- Function
- Benefits
- Product details

CONTENTS

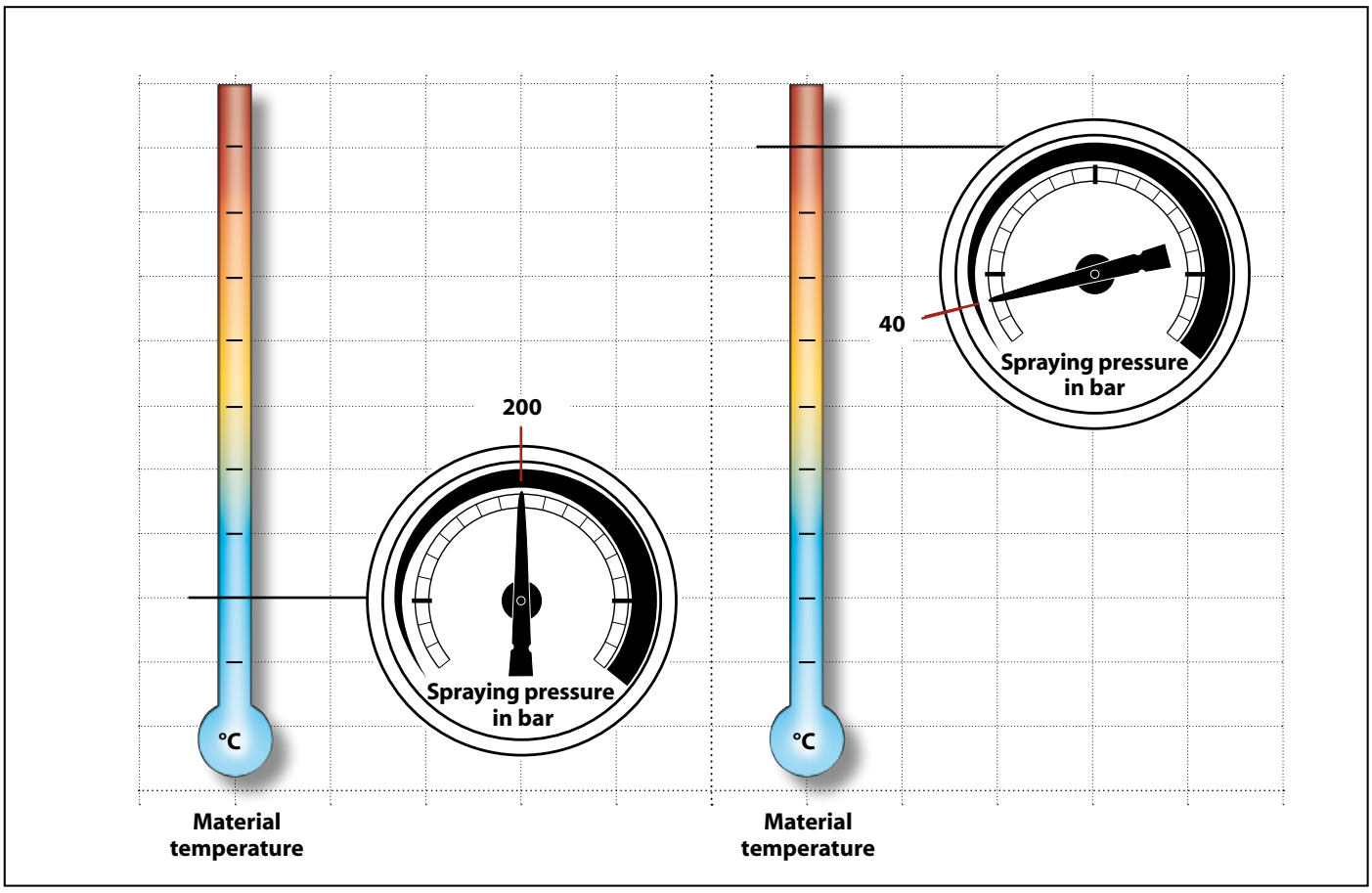
INTRODUCING TEMPSPRAY

The effects of heating the material

The innovation - heating instead of diluting:
To make coating materials sprayable they usually have to be diluted. Thanks to the heating hose system for airless units from Wagner not only can the solvents be reduced but also the applied film thicknesses can be increased. These are only a few advantages that show these innovative systems.

TempSpray offers the opportunity to set the temperature of the material variably depending on the application. The heating brings about a reduction of the material viscosity allowing a lower spraying pressure to be set.

Material heating = spraying pressure reduction



THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

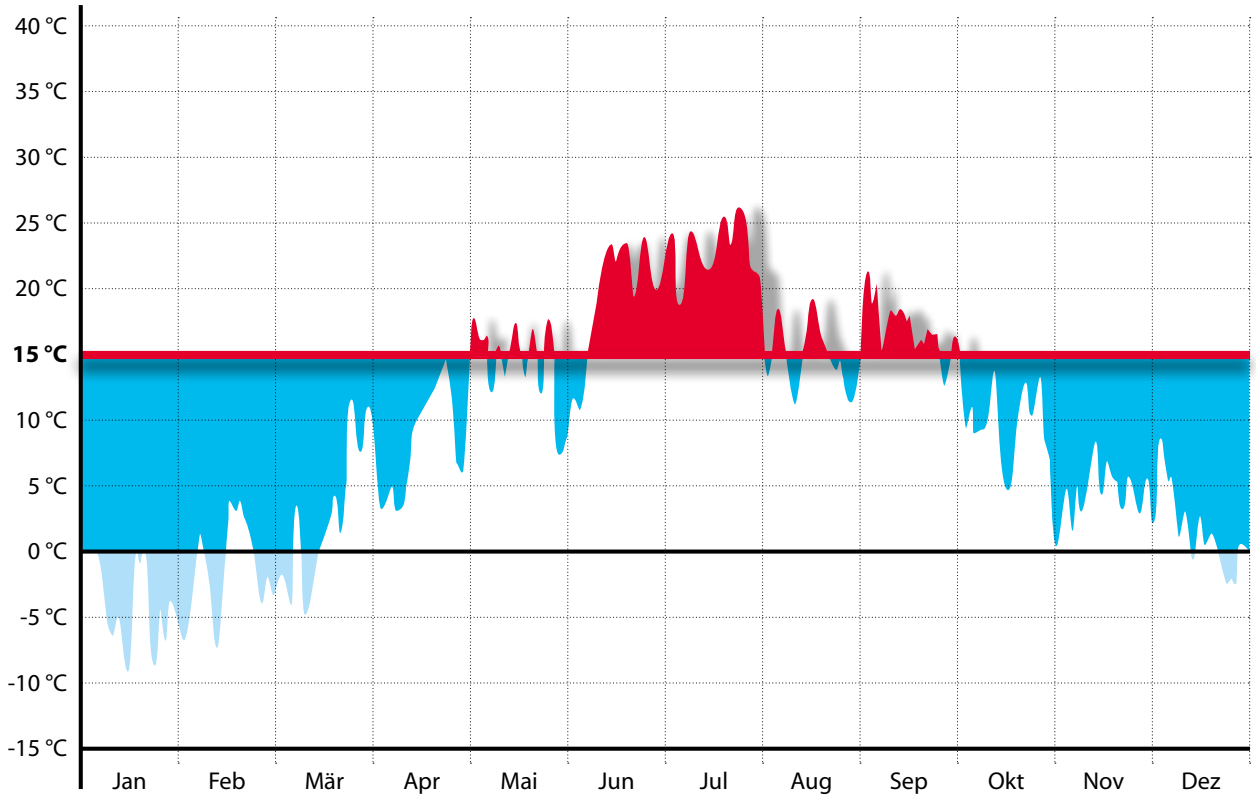
- Constant paint temperature even at low outside temperatures
- Considerably better working of high viscosity coating materials
- Increase in the atomisation quality
- Adherence to Stage 2 of the VOC guidelines
- Excellent edge coverage
- Increase in the flow characteristics ➔ optimal surface quality due to very soft spray jet
- Increased application efficiency
- Savings in solvents due to reduction in viscosity
- Paint savings due to minimised overspray
- Shortened drying time / evaporation time of the coating materials
- Lower equipment wear since a lower material pressure is needed
- Adaptable to all airless units
- Smooth regulation from 20° C - 60° C

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Constant paint temperature even at low outside temperatures

Thanks to being heated in the heating hose the coating materials are always at the ideal working temperature - regardless of the seasonal temperature fluctuations



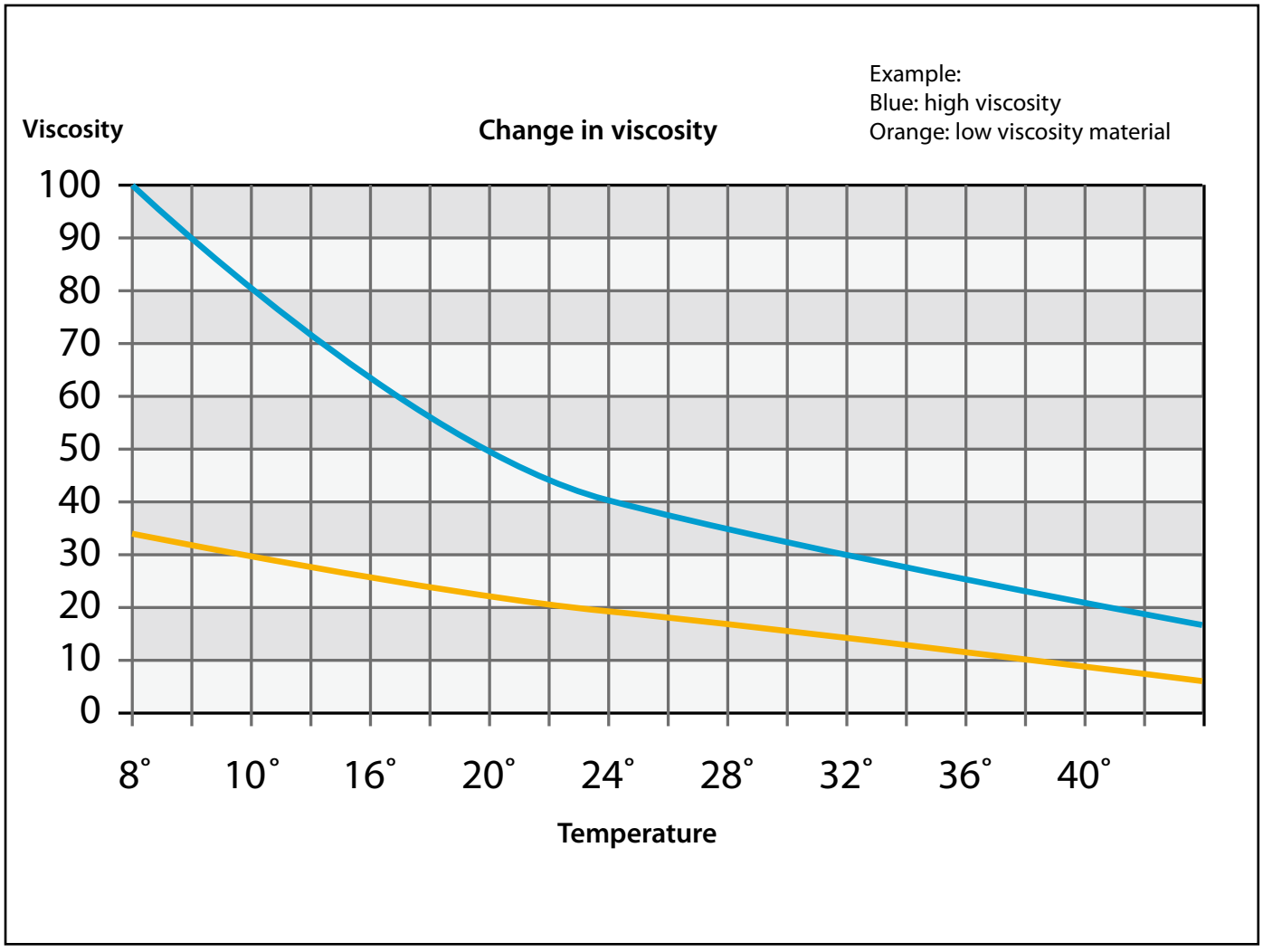
Temperature distribution in Germany 2006

The ideal working temperature for the coating materials is ensured by the TempSpray at all times regardless of whether the materials have been stored too cold on the building site.

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Considerably better working of high viscosity coating materials



The optimal viscosity - along with the right working technique and equipment - is decisive for a good result when spraying. If the material is too thick the result is an irregular spray pattern and a poor paint distribution.

THE BENEFITS OF TEMPSPRAY

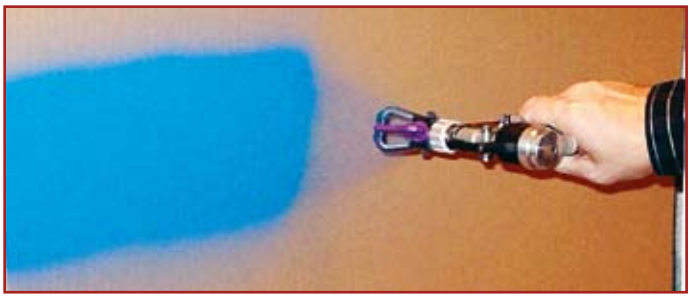
TempSpray H 106 / H 206 / H 306

- Considerable increase in the atomisation quality

cold spraying

with edge streaks

warm spraying



without edge streaks

...at the same pressure!

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Lower equipment wear as a lower material pressure is needed
- Increase in the flow characteristics --> optimal surface quality

cold material

heated material

...at the same pressure, without a nozzle!

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Considerably better edge coverage

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Smooth regulation from 20° C - 60° C

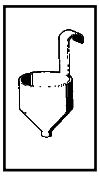
When the unit is switched on the regulator automatically heats up to 40° C. The temperature can be smoothly adjusted with the two arrow keys. For safety and to raise the user's awareness of the temperature change the selected temperature must be confirmed by pressing the OK button, otherwise the regulator sets the temperature back to the last set value.

The display also starts to flash as long as the set temperature exceeds 43° C. Paints and lacquers require increased attention above a temperature of 40° C.

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- The impact of Stage 2 of the VOC guidelines from 01.01.2010

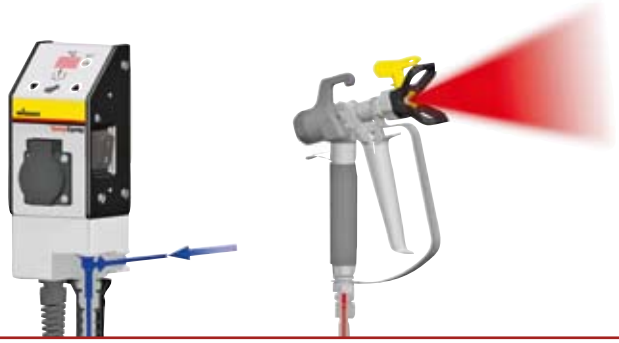


Coating materials will have a higher solids content and thus be more viscous

Manual application with paintbrush and roller will get more and more difficult: An advantage for ***machine application equipment***

Working with coating materials with a higher viscosity requires a greater pressure

TempSpray from WAGNER



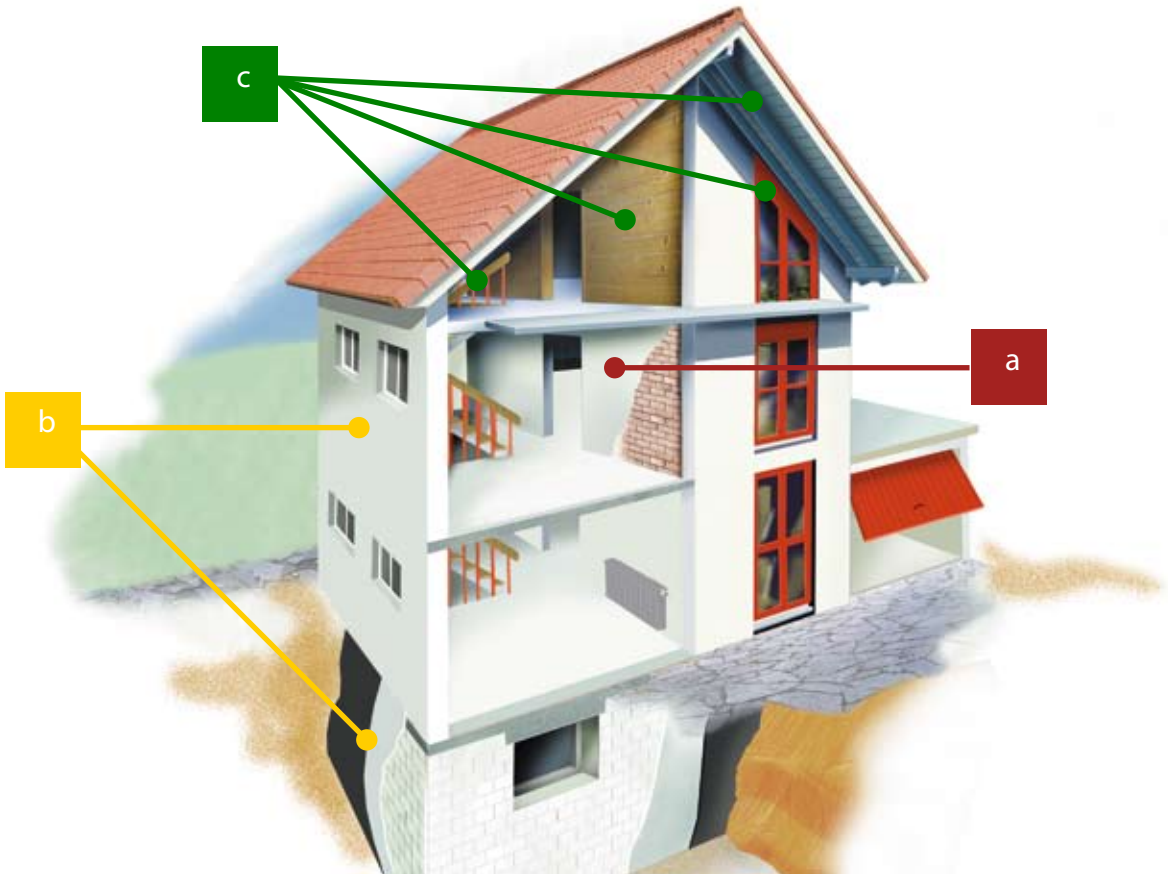
The flow characteristics of coating materials are set by the manufacturer through the content of solvents or water. The reduction in these limits in the paints and lacquers affected by CHemVOC Farb V drastically affects their viscosity. This requires adaptation of the equipment technology in order to safeguard the quality of the working results.

The flow characteristics can be regulated by heating up the coating materials. This allows the viscosity, the tendency to run, the distribution and the possible film thickness to be optimally determined.
At the same time fluctuations of temperature in the working environment can be compensated for.

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- 3 examples of the tightening of the VOC guidelines:



Product category		Solvent based (Lb) VOC in g/l*		Water based (Wb) VOC in g/l*	
		2007	2010	2007	2010
a	Matt coating materials for interior walls and ceilings	400	30	75	30
b	Coating materials for exterior walls made of mineral building material	450	430	75	40
c	Coating materials for timber, metal or plastics and decorative building elements (indoors and outdoors)	400	300	150	130

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Adaptable to all airless units

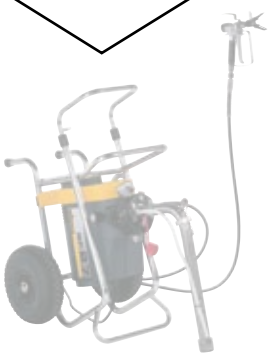
Cobra

Pro 20

HeavyCoat

Finish

ProSpray



SuperFinish

THE BENEFITS OF TEMPSPRAY

TempSpray H 106

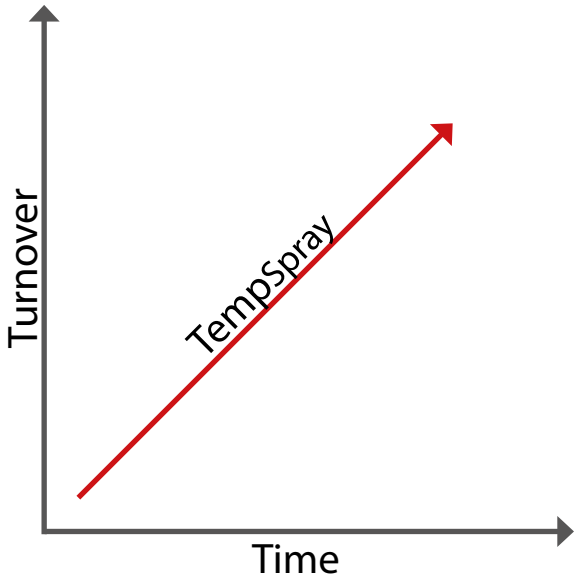
- Also adaptable with Air Coat

WAGNER-TempSpray H 106 with AC 4600 P is easily adaptable to the Air Coat process

THE BENEFITS OF TEMPSPRAY

TempSpray H 106 / H 206 / H 306

- Paint savings due to minimised overspray
- Savings in solvents due to reduction in viscosity
- Shortened drying time / evaporation time of the coating materials
- Increased application efficiency



Meeting working deadlines

Economical working method

PRODUCT DESCRIPTION

TempSpray H 106

■ **TempSpray H 106: 10 m, DN 6 stainless steel hose**

The Wagner TempSpray H 106 is a small compact unit in which the temperature can be smoothly regulated from 20° C - 60° C. The DN 6 hose is made of stainless steel and measures 10 metres. This small handy unit can be optionally adapted to all airless systems and is ideally suited for any kind of paint and primer materials. In addition the TempSpray H 106 is low in weight and conforms to the highest Wagner quality. Its building site compatible construction guarantees easy handling in working applications.

TempSpray H 106

PRODUCT DESCRIPTION

TempSpray H 206 / H 306

The Wagner H 206 / H 306 TempSpray units are also very compact and handy. They are available with the following hose lengths

H 206 ➜ DN 8 / 15 m

H 306 ➜ DN 10 / 30 m

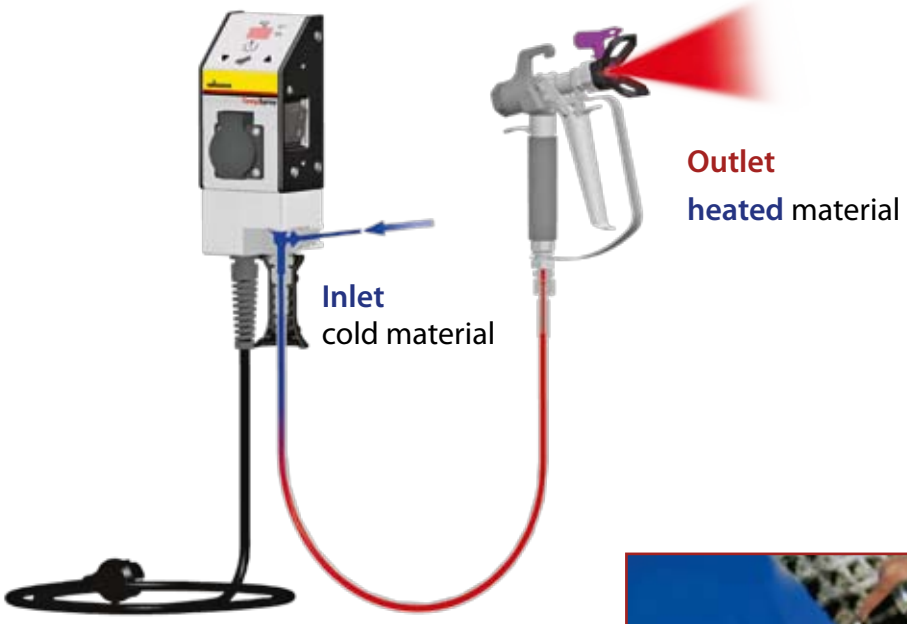
The temperature can be smoothly regulated between 20° C and 60° C.

Due to the larger hose cross section compared to the TempSpray H 106 these two systems are ideally suited to all high viscosity materials.
The Wagner TempSpray H 206 / H 306 units are extremely easy to handle and can be transported and stowed away without problems thanks to their hose reel.

These two units of course are also optionally adaptable to all airless systems and conform to the highest Wagner quality.

FUNCTIONAL DESCRIPTION

TempSpray functional principle



Temperature °C
before heating

The paint material flows around the built-in heating wire in the hose and is thus uniformly heated to the desired temperature.

Temperature °C
after heating

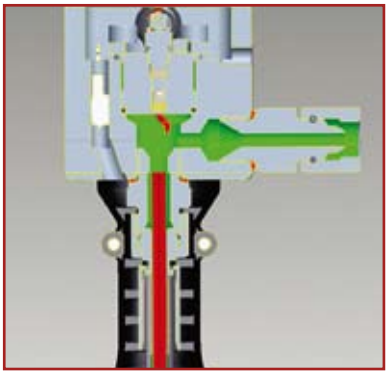
The heating up of the coating material takes place uniformly over the whole hose length. Due to its microprocessor control the heating system guarantees that the desired temperature is maintained even in work breaks. There is no thermal damage to the sprayed material due to this.

FUNCTIONAL DESCRIPTION

TempSpray H 106

Control unit for temperature regulation

Socket for easy connection of the airless unit



Connection to the unit = entry of cold material

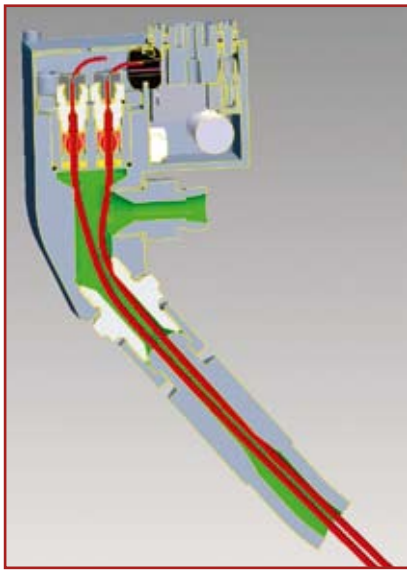
Cutaway view of the heating hose

FUNCTIONAL DESCRIPTION

TempSpray H 206 / H 306

Control unit for temperature regulation

Socket for easy connection of the airless unit



Heating wire integrated in the hose

Heating element connection

TECHNICAL DATA

TempSpray H 106

Technical Data:	TempSpray H 106
Voltage	230 V / 50 Hz
Heating power	600 Watt
Socket	230 V / 50 Hz max. 2.3 kW
Mains connection lead	4 metres
Stainless steel hose	DN 6 / 10 metres
Max. pressure	25 MPa (250 bar)
Temperature regulator	stepless 20° C - 60° C
Weight	3.5 kg

TECHNICAL DATA

TempSpray H 206 / H 306

Technical Data:	TempSpray H 206	TempSpray H 306
Voltage	230 V / 50 Hz	230 V / 50 Hz
Heating power	1000 Watt	1200 Watt
Socket	230 V / 50 Hz max. 2.3 kW	230 V / 50 Hz
Mains connection lead	6 metres	6 metres
Stainless steel hose	DN 8 / 15 metres, PU-sheathing	DN 10 / 30 metres, PU-sheathing
Max. pressure	25 MPa (250 bar)	25 MPa (250 bar)
Temperature regulator	stepless 20° C - 60° C	stepless 20° C - 60° C
Weight	11.5 kg	16.5 kg

SYSTEM CONFIGURATION

TempSpray H 106 / H 206 / H 306

Basic units

TempSpray H 106
Includes DN 6 / 10 m stainless steel hose
Article No. 0341 930

TempSpray H 206
Includes hose reel, DN 8 / 15 m heating hose,
1 / 4“ DN 4 / 1 m hose wand
Article No. 0341 940

TempSpray H 306
Includes hose reel, DN 10 / 30 m heating hose,
1 / 4“ DN 4 / 1 m hose wand
Article No. 0341 950

Spraypacks



TempSpray H 106 Spraypacks
Includes AG 14 airless gun and
FineFinish 410 nozzle
Article No. 0341 931



TempSpray H 206 Spraypack
Includes AG 14 airless gun and
choice of TradeTip nozzle
Article No. 0341 941



TempSpray H 306 Spraypack
Includes AG 14 airless gun
and choice of TradeTip nozzle
Article No. 0341 951

APPLICATION AIDS

TempSpray H 106

Buildings

Nozzle recommendation

TradeTip 2 FineFinish
Airless painting nozzle
H 106 max. nozzle size 0.014 inches (0.36 mm)

Sprayable materials

H 106	Solvent and water diluted materials
■	Wood impregnation agents
■	Oils
■	Stains
■	Glazes
■	Primers
■	Undercoats
■	Fillers
■	Lacquers

■ Ideally suited ❒ Suitable — Not suitable

APPLICATION AIDS

TempSpray H 206 / H 306

■ Buildings

■ Nozzle recommendation

Trade Tip 2
H 206 max. nozzle size 0.021 inches (0.53 mm)
H 306 max. nozzle size 0.035 inches (0.90 mm

■ Sprayable materials

H 206	H 306	Solvent and water diluted materials
❐	—	2 K materials (watch the pot life)
■	❐	Thick film materials
■	❐	High solids
■	❐	Emulsions
■	❐	Latex paints
■	❐	Facade protection
■	❐	Roof coating
■	❐	Corrosion protection
—	■	Heavy corrosion protection
—	■	Bituminous media
—	■	Adhesives

■ Ideally suited ❐ Suitable — Not suitable

TempSpray H 106 / H 206 / H 306

Setting the optimal TempSpray operating point with reference to temperature, pressure and material

AIM

An optimal spray pattern with the lowest possible spraying pressure. Reduction of spray mist.

Procedure

1. Set the temperature to 40° C and start at the customary spraying pressure.

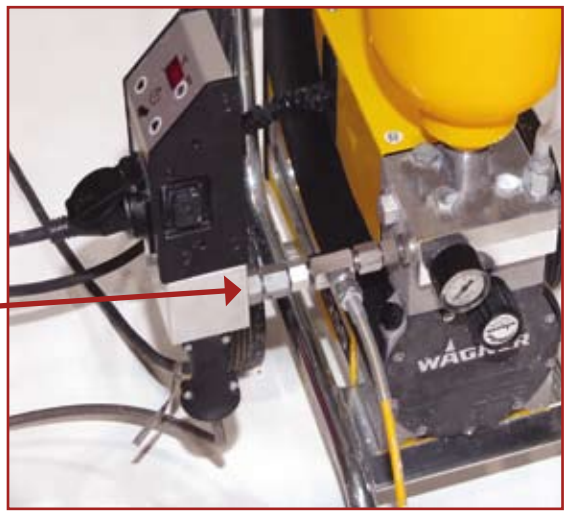
2. If the spray pattern is OK, slowly reduce the pressure until edge streaks form.

3. In the next step the temperature can be successively increased in order to get the desired spray pattern again.
   (N.B. You will find the appropriate flash point and respectively the thermal tolerance of the particular material in the technical data sheet).

4. Repeat step 2 and 3 until the minimum possible pressure is reached at which the optimal spray pattern occurs.

DEMONSTRATION SET UP

Demonstration of TempSpray H 106



Demonstration of TempSpray H 106

Finish 270 Airless Paint with AG 14	
consisting of:	
• Finish 270 basic unit	0252 040
• 5 litre hopper	0341 265
• AG 14 Airless gun	0502 166
• HP hose DN 3 - ND 270 1/4“	9984 583
• FineFinish nozzle 410	0556 410
• Gun filter, red	0034 383

Also needed:	
• TempSpray H 106, inc. DN6; 10 m stainless steel hose	0341 930
• Airless gun AG14; F-thread 1/4“	0502 166
• Gun filter, red	0034 383
• T-piece	0254 218
• 2 x nipple; l=M16x1.5 x A=1/4“	0097 201
• Nipple; l=1/4“ x A=M16x1.5	0034 041
• TradeTip 2 nozzle 411	0552 411

DEMONSTRATION GUIDELINES

TempSpray H 106

1. Check paint spraying system for leaks by using water.
2. Fill both hoses with paint and set TempSpray to 60 ° C
   (N.B See the appropriate flash point in the technical data sheet).
3. Set the spraying pressure to 250 bar and start the demonstration with the DN 3 cold hose and TradeTip2 411 nozzle.
4. Reduce the pressure in steps of 50 bar until edge streaks become apparent in the spray pattern.
5. To demonstrate the better spray pattern between standard nozzle and the special FineFinish paint nozzle the standard nozzle is now swapped for the FineFinish 410 nozzle. At the same pressure and with a cold gun a spray pattern without edge streaks now appears.
6. Ensure that the heating wire has now brought the material in the hose up to temperature, if necessary spray the material in the circuit without a nozzle holder (into the hopper) until the gun gets warm.
7. At the same pressure setting the FineFinish 410 nozzle is now fitted into the TempSpray gun and a further spray pattern produced.
8. The spraying pressure can now be further reduced with a consistently good spray pattern. In contrast to the cold system this could be up to 100 bar less.
9. Note: The filling and cleaning of the system takes place at reduced pressure and without nozzle.

TempSpray H 106 / H 206 / H 306

With the heated hoses special water thinned and also solvent based materials can be processed without problems.

In the painting areas all three heating hoses can be used, but the safety regulations must be observed especially for explosion protection.

Since the units are **not made to be explosion protected** care must be taken to ensure that only coating materials with a flash point **at least greater than 21 °C** are sprayed.

It applies generally that the instructions from the paint manufacturer (technical data sheets for the paints) are to be taken into account before the relevant materials are worked.

Detailed explanations with regard to safety instructions for the heated hoses should be taken from the enclosed operating instructions before putting into operation.

The innovation - heating instead of diluting:

To make coating materials sprayable they usually have to be diluted. Thanks to the heating hose system for airless units from Wagner not only can the solvents be reduced but also the applied film thicknesses can be increased.

www.wagner-group.com

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