

## APP Nr 190279

NTools FDS 1000 - The NTools FDS1000 Infrared Radiator is equipped with one 1000 W lamp and an electromechanical timer. It is designed for quick and small SPOT/SMART repairs. The radiator emits short-wave infrared radiation. The colour of the lamp is red (ruby). Significantly reduces the drying time of any paint materials. Effectively heats only the repair area. The temperature starts to build up from the metal to the surface of the layer being dried.

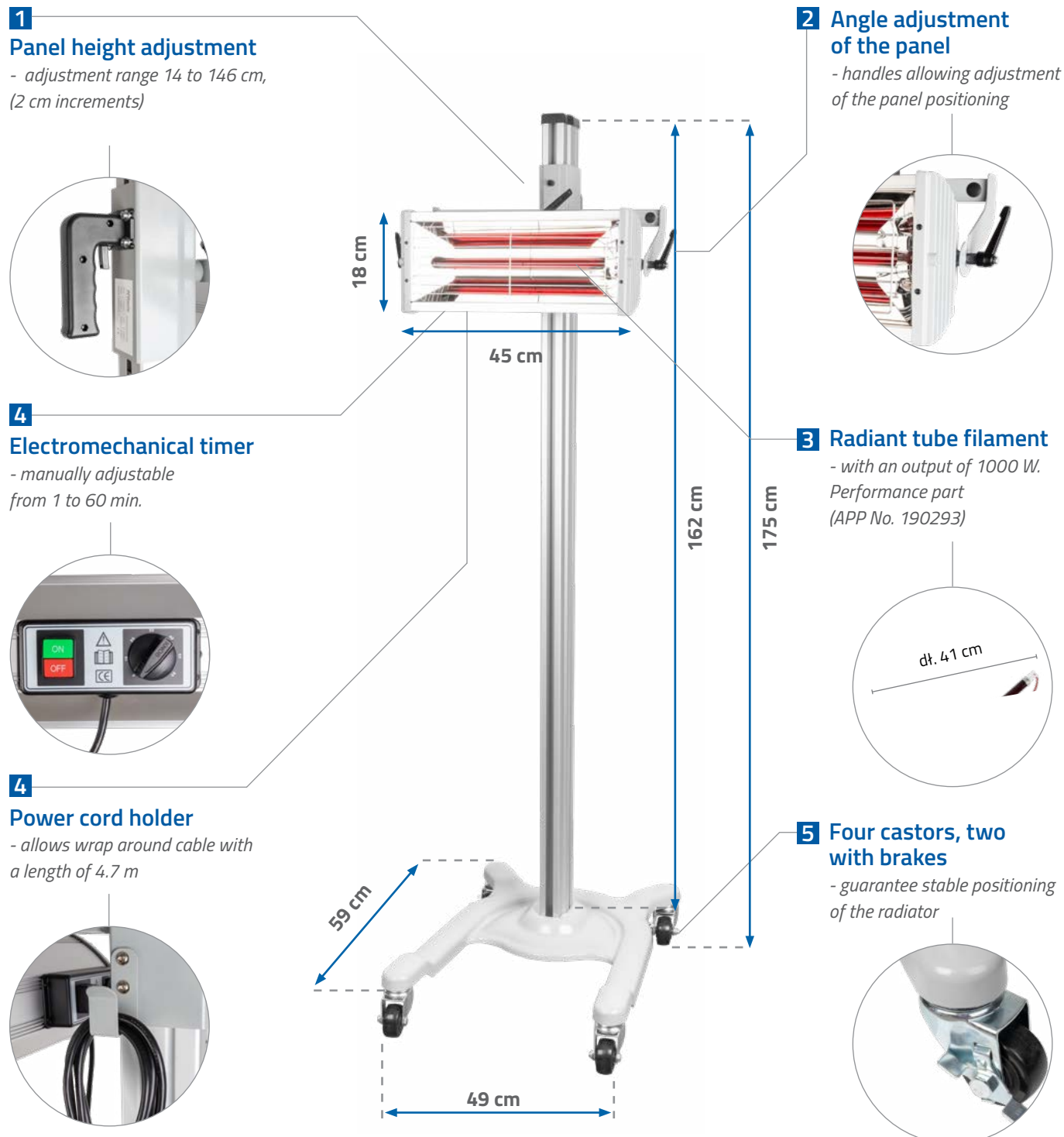
The infrared wave energy passes almost losslessly through the air and immediately affects the area to be repaired.

The mirror reflector, housing and heat sink made of aluminium dissipate the heat well from the radiant heater.

## Technical data

Model	FDS 1000
Power supply	Single phase 230 V, 50/60 Hz
Power input	1 x 1000W
Surface to be dried	800 x 500 mm
Temperature	30-80oC
Time settings	Manual from 1 to 60 min
Light output adjustment	none
Dimensions of the cassette	450 x 180 mm
Radiant heater dimensions	490 x 590 x 1750 mm
Panel height adjustment	14 to 146 cm (increments of 2 cm)

## Design:



### Use:



IN TUNNEL DRYING AND  
IN WORKSHOPS MECHANICAL



IN PAPER DRYING



IN DRYING INKS  
(SCREEN PRINTING)

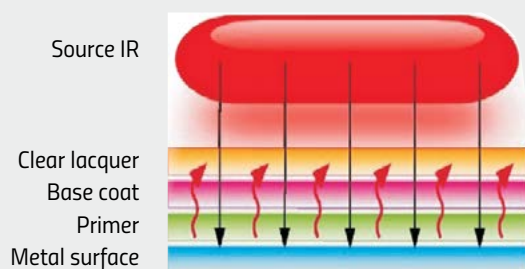


IN THE PRE-DRYING OF WOOD  
PRIOR TO VARNISHING  
IN HEAT STERILISATION



IN AUTODETAILING

FDS (Fast Dry System) infrared heaters, are equipped with high-quality reflectors, and quartz lamps that emit short infrared waves. Thanks to the short waves, the infrared radiation penetrates the material and immediately reaches the substrate without heating up the air around the lamp and the object being dried.



Once the radiation reaches the metal, heat is released causing the dried material to harden from the inside to the surface. In this way, the drying process starts from the deepest layers of the dried coating and proceeds evenly throughout the layer. This ensures even evaporation of the solvent, reducing the risk of it being encapsulated in the coating.

The radiant heaters allow primers, putties, tinted topcoats (acrylics and polyurethanes) and clearcoats to be cured quickly and economically. The table below gives examples of the times required for drying different types of substrates.

Material	Approximate drying times		
	IR short-wave radiator	Spray booth	Unforced drying*
Putties	6 - 7 min	10 - 20 min	approx. 30-60 min
Primers	5 - 10 min	15 - 25 min	approx. 25-30 min
Primers	10 - 15 min	30-45 min	approx. 240 min
Acrylic lacquers	15 - 20 min	30-45 min	approx. 240 min
Clear varnishes	15 - 20 min	30-45 min	approx. 240 min

\* Unforced drying means drying without additional equipment. The drying time depends on the air temperature.

# NTools FDS 1000

Radiant heater (1kW) with time control

## Comparison of NTools FDS radiators available from APP



APP No.	190279	190280P	190281	190283
Model	FDS 1000	FDS 2000 Plus	FDS 3300	FDS 6600
Power supply	Single phase 230 V, 50/60 Hz	Single phase 230 V, 50/60 Hz	Single phase 230 V, 50/60 Hz	Two phases 400 V, 50/60 Hz
Power consumed	1 x 1000W	2 x 1100W	3 x 1100W	6 x 1100W
Filament	41 cm (1000W)	53 cm (1100W)	53 cm (1100W)	53 cm (1100W)
Surface to be dried	800mm x 500mm	1000mm x 800mm	1200mm x 1000mm	1800mm x 1000mm
Working height	200 cm	175 cm	190 cm	190 cm
Temperature	30-80°C	35-80°C	35-80°C	35-80°C
Time settings	Manual from 1 to 60 min	Electronically from 1 to 99 min	Electronically from 1 to 99 min	Electronically from 1 to 99 min
Adjustment of light output	no	no	35 to 100 (%)	35 to 100 (%)

## ADVANTAGES

**HIGH QUALITY OF THE DRIED SURFACE**

**IMMEDIATE ACTION**  
full power within seconds of switching on

**PURITY**  
no by-products or pollutants emitted by the lamps

**SECURITY**  
the lamp is resistant to thermal shocks thanks to its quartz bulb

**COST -EFFECTIVENESS**  
more than 85% of the energy input is converted into infrared thermal radiation

**DRYING TIME CAN BE SET FROM 1 TO 60 MINUTES**

**HIGH FILAMENT LIFE**  
up to 2500 hours lamp life

**COMPACT SIZE**

APP No.	Product name	Quantity
190279	NTools FDS 1000 - Radiant heater (1kW) with time control	1 pc.
190293	NTools FDS 1000/2000L - IR lamp filament   41cm	1 pc.
190309	NTools PP 1 - NTools radiant tube cover   FDS 1000   49 x 21 x 28cm	1 pc.