

ZENA COLD ARC



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TECHNOLOGY

COLD PLASMA

COLD PLASMA IT IS :

The state of matter when a gas medium ionises at atmospheric pressure, creating a mixture of ions, free electrons, neutral atoms and molecules, and reactive species such as reactive oxygen and nitrogen species (ROS & RNS)

Bioactive components have an antimicrobial effect, stimulate tissue regeneration and repair, improve the delivery of substances to the cells, which expands the possibilities of their use in the treatment of various diseases and skin conditions.

[Scientific research](#)

THE BENEFITS OF COLD PLASMA:



Cold plasma is harmless and can be used in the most delicate areas. It does not cause swelling or scarring.



Unlike many hardware techniques, it can be used in the eye area to remove bags under the eyes and sagging eyelids without damaging the anatomical surface of the eyelid. so-called Non-Surgical Blepharoplasty.



Triggers natural rather than forced regeneration processes, which gives much longer lasting results.



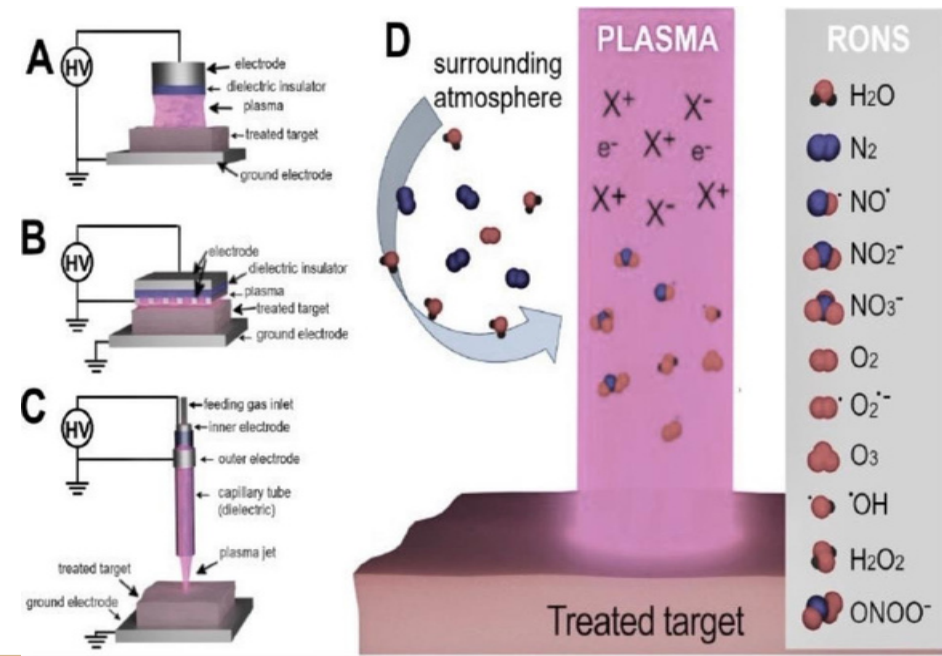
Unlike botulinum toxins, it preserves natural facial expressions and does not give the face an artificial appearance



The complexion becomes fresher and more vibrant by improving microcirculation in the dermis layers and accelerating blood and lymph flow.



Painlessly solves even complex problems such as stretch marks, replacing plastic surgery



Mechanism of operation in the skin



1 effect

As a result of heating of protein structures of the skin, a tension vector appears and diffuse tightening in a radius of 0.1 - 0.3 cm around the impact of the pulse.



2 effect

The collagen and elastin proteins are then denatured, resulting in a diffuse lifting effect. The body strives to restore the optimal amount of collagen structures and starts active synthesis of new collagen and elastin in the treatment area. The young molecules strengthen the already tightened framework, increasing the density of the skin. Within 4-12 weeks, collagen and elastin fibres mature fully and additional tightening takes place.



3 effect

A response to thermal exposure. Instead of damaged epidermocyte cells, the maturation of dormant undifferentiated cells into specialised cells producing collagen, elastin and other functions is triggered.

Mechanism of operation in the skin

Effects on the epidermis :



Disinfection and antimicrobial action cold plasma effectively destroys bacteria on the surface of the skin, which prevents infections and promotes wound healing

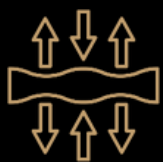


Stimulation of cell renewal plasma exposure can accelerate the regeneration process of epidermal cells, promoting skin renewal and reducing the appearance of fine lines and wrinkles.

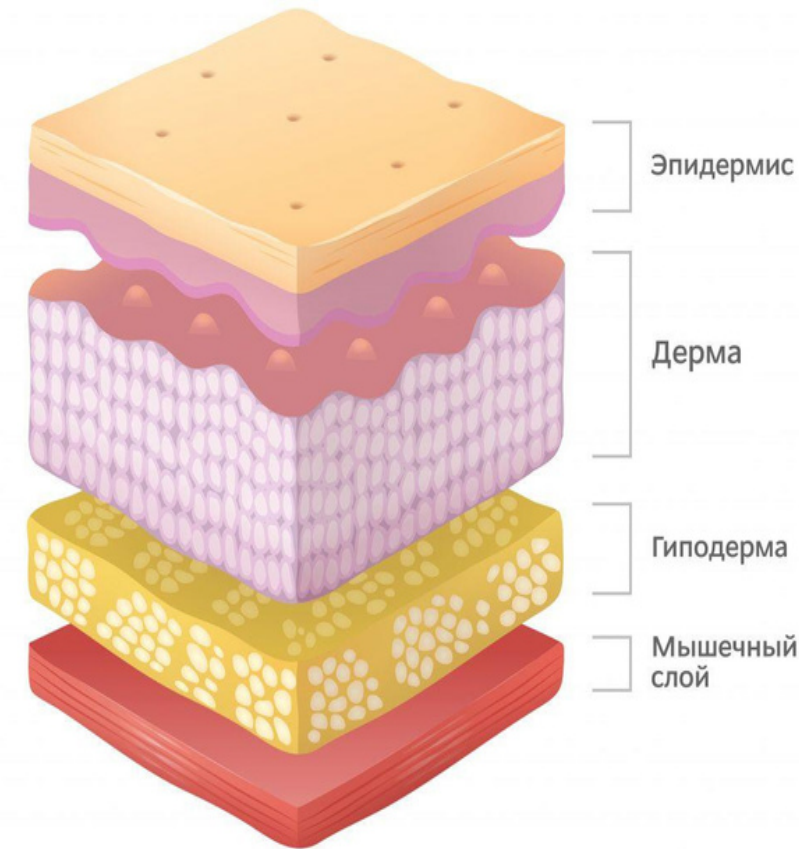
Effects on the dermis:



Stimulates collagen synthesis, which improves skin elasticity and firmness.



Improves microcirculation, significantly increases blood circulation in the dermis, providing better nutrition and oxygenation of skin cells.



Mechanism of operation in the skin

Effects on the hypodermis:



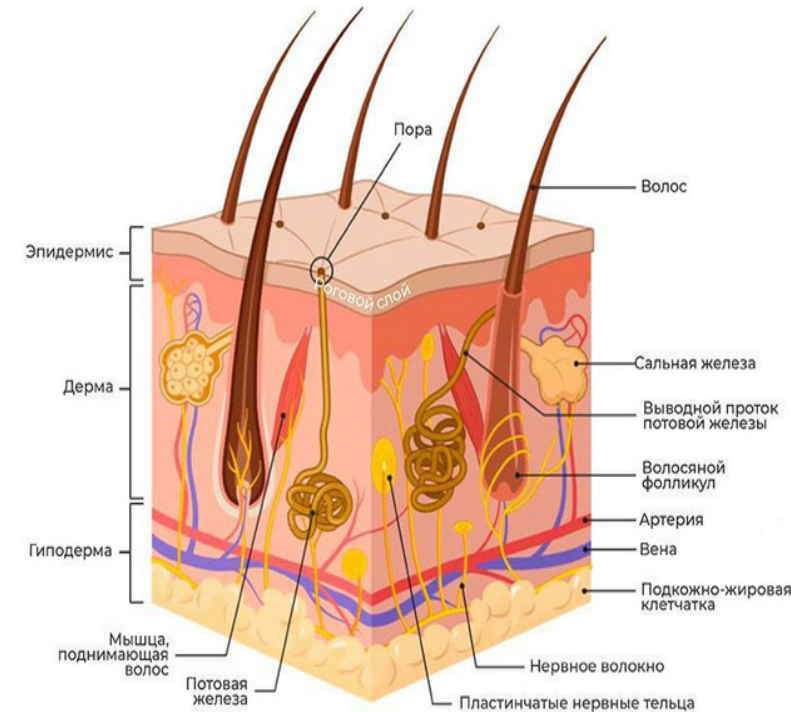
Although the direct effects of cold plasma on the hypodermis (subcutaneous fat layer) are less well understood, the indirect effects of improved circulation and stimulation of regenerative processes in the upper layers may contribute to the overall improvement of the hypodermis.

Effects on sebaceous and sweat glands:



Regulation of the sebaceous glands: normalises their functioning, reducing sebum production and preventing the development of acne and other inflammatory processes.

Effect on sweat glands optimises thermoregulation and skin detoxification processes



Mechanism of operation in the skin

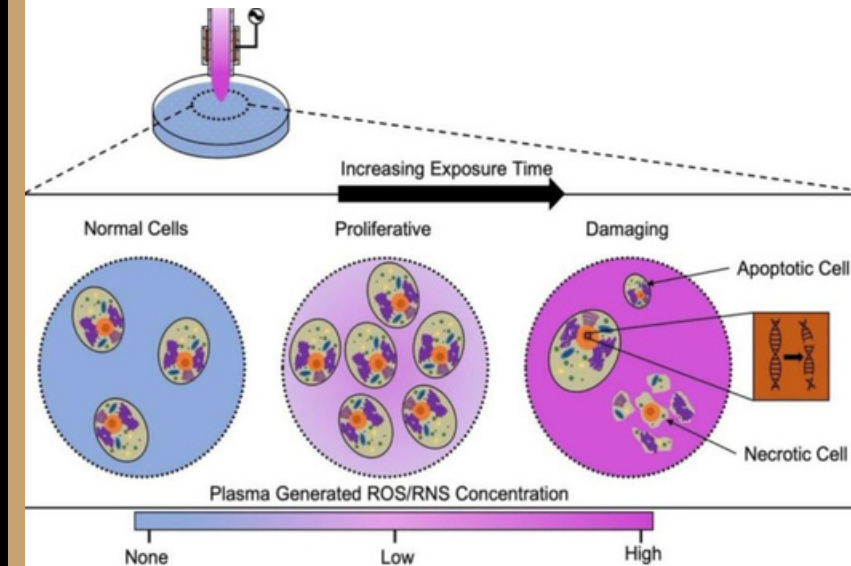


It should be taken into account that cold plasma can both stimulate and inhibit cellular processes.

Smaller doses of plasma have a stimulating effect on cells, while larger doses have a damaging effect. High doses are a power of 4 for sensitive skin or 5 for normal skin with treatment times of more than 4-5 minutes per area.

It is therefore very important to follow the treatment protocols and comply with all recommendations when using the ZENA COLD ARC.

The machine should be operated from smaller doses to larger doses.



Mechanism of operation in the skin

TRANSDERMAL DRUG DELIVERY SYSTEM

In their original biological state, cells are tightly bound Together with the action of plasma energy, gaps are formed between the cells.

Plasma treatment increases the permeability of ointments solutions serums that are applied to the skin immediately after cold plasma treatment All these drugs are delivered directly to the dermis

This effect is referred to as the microporation effect

Effects of microporation on the skin:



Improves the permeability of the epidermis, enhancing the effectiveness of therapeutic and care procedures.



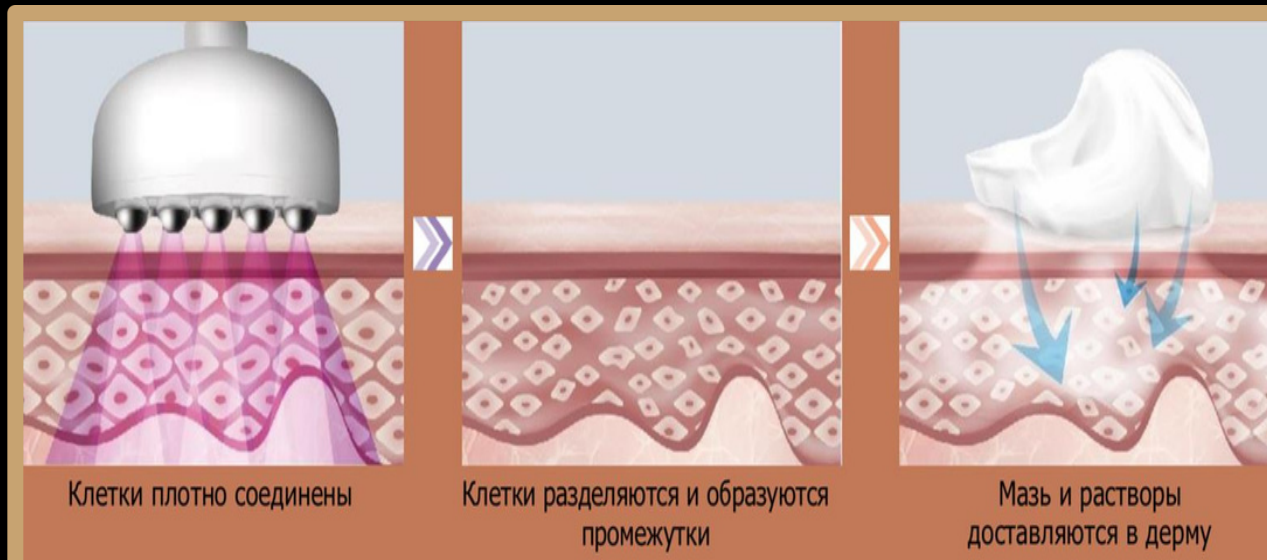
Stimulates cell renewal,



Creates microchannels in the epidermis, promotes natural processes of cell renewal.



Allows to deliver active ingredients directly to the deep layers of the skin, bypassing the natural barrier functions of the epidermis.



Application of technology in cosmetology

Exposure to cold plasma is completely painless for humans and allows the production of reactive molecules without damaging nearby cells.

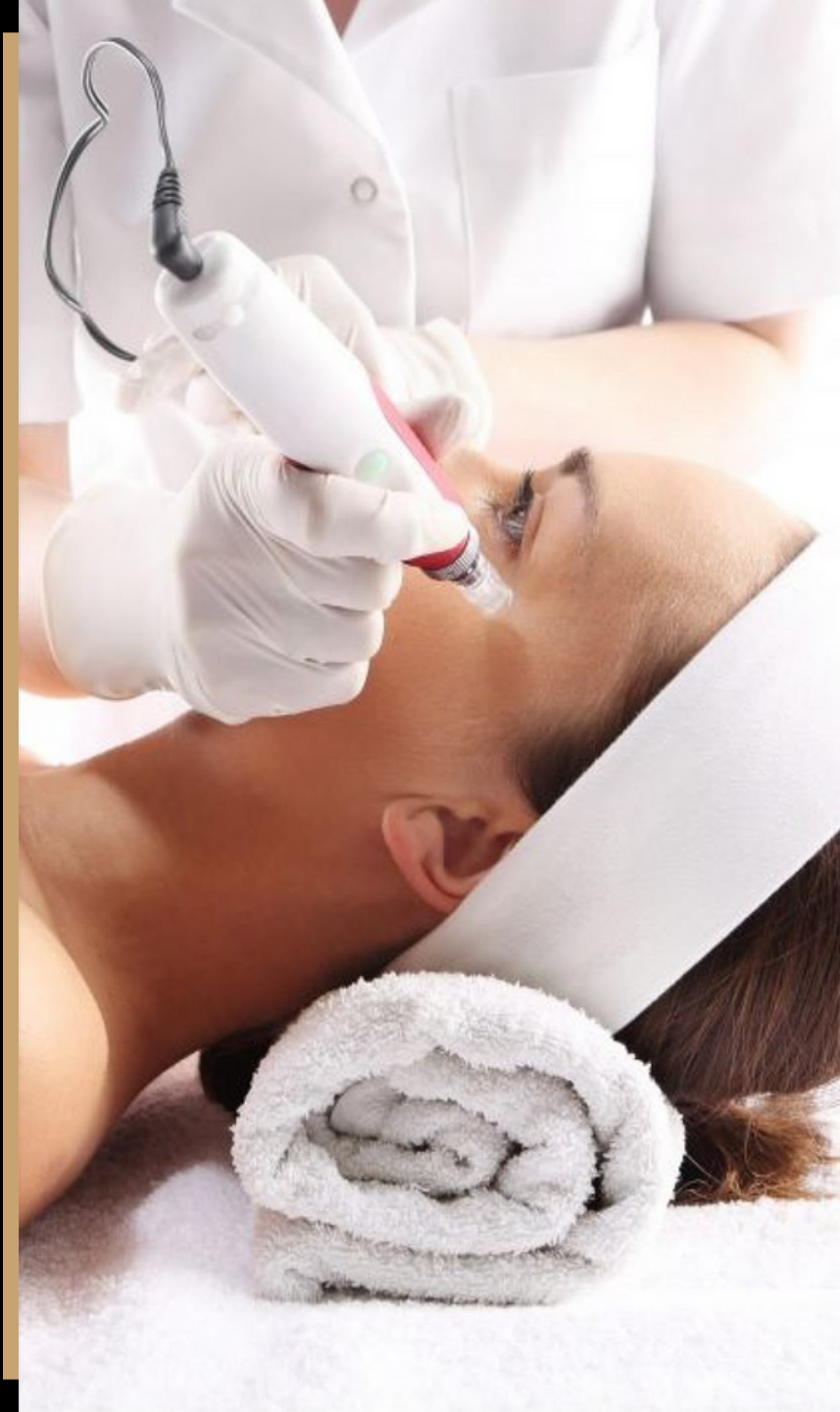
The temperature of the gas is only 30-40 degrees. By targeting selected areas, it heats the dermis to 40 degrees, stimulating the production of collagen and elastin.

The power of the radiation is enough to be beneficial, but it is too low to cause harm.

This makes the technique the gold standard in device rejuvenation.

It is effective in

- ✓ Ageing and photoageing
- ✓ Acne and post-acne
- ✓ Keratosis
- ✓ Overhanging eyelid
- ✓ Scars and scars
- ✓ Pigmentation
- ✓ Skin laxity, etc.



Application of the technology in medicine

The use of cold plasma in medicine has expanded significantly over the past two and a half decades

Cold plasma is used

- ✓ For the treatment of wounds, including those with infectious lesions
- ✓ To reduce scars and prevent scarring
- ✓ To inactivate bacteria resistant to antibiotics
- ✓ In dentistry
- ✓ In cancer treatment protocols

The results of scientific research on the application of cold plasma in medicine can be found at the following links

[Research 1](#)

[Research 2](#)



Application of the technology in medicine

CANCER AND COLD PLASMA

Numerous studies have highlighted the therapeutic potential of cold atmospheric plasma in the treatment of tumours, looking at direct and indirect methods. There is now a consensus that cold plasma therapy is likely to be a powerful tool for treating various cancers in combination with existing techniques. For example, a major problem with surgical removal of solid tumours is the high probability that residual cancer cells remain in the tumour bed, resulting in a high recurrence rate and consequent high mortality. Cold plasma can help to cope with this problem.



Research 1

Research 2

Research 3



Indications for use

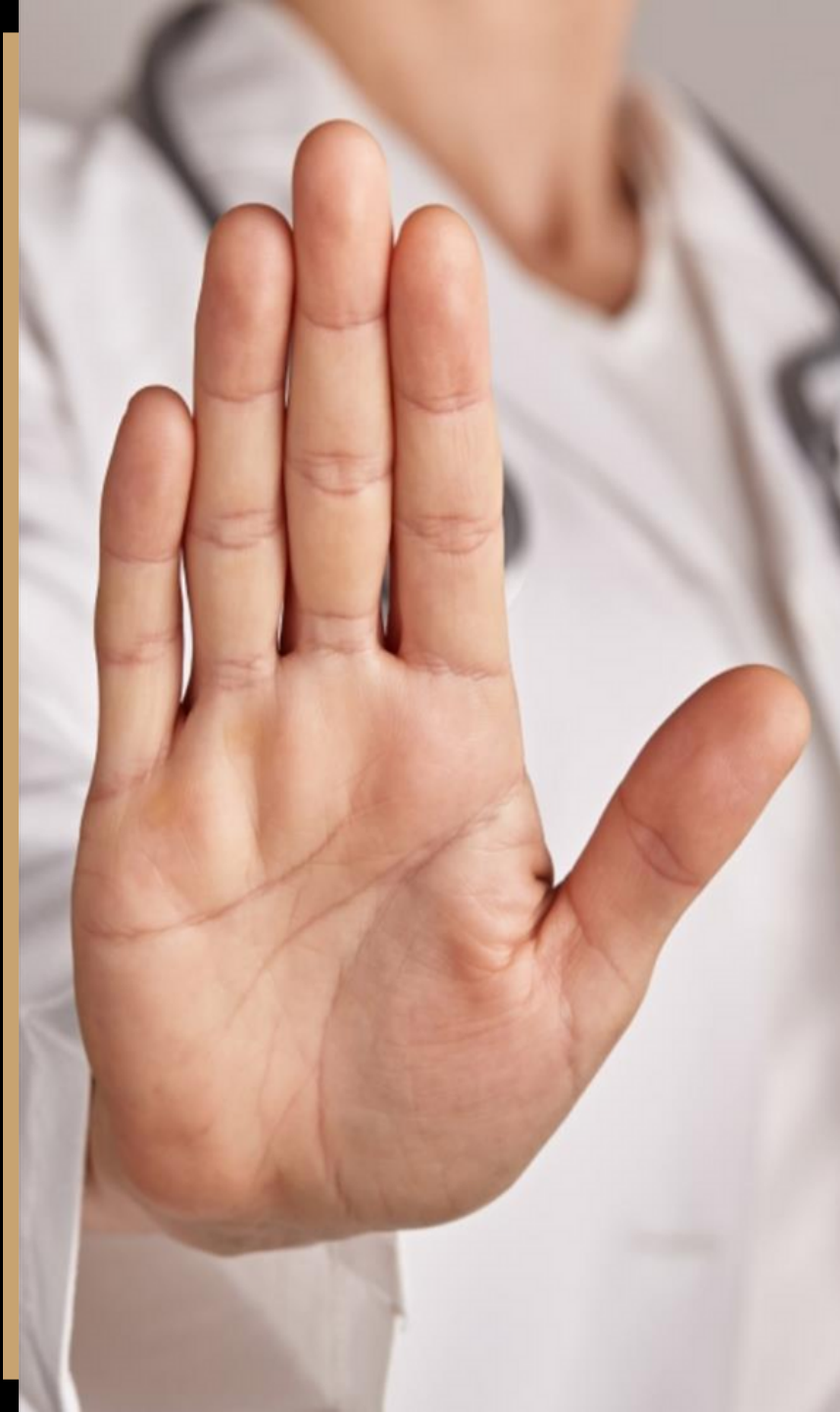
ZENA COLD ARC

- 01 Skin rejuvenation
- 02 Acne and post-acne
- 03 Drooping eyelid (non-injection blepharoplasty)
- 04 Atopic dermatitis (after consultation with a doctor).
- 05 Skin tightening and resurfacing
- 06 Pigmentation melasma vitiligo
- 07 Treatment of scars and scars
- 08 Hair loss alopecia



Contraindications to use ZENA COLD ARC

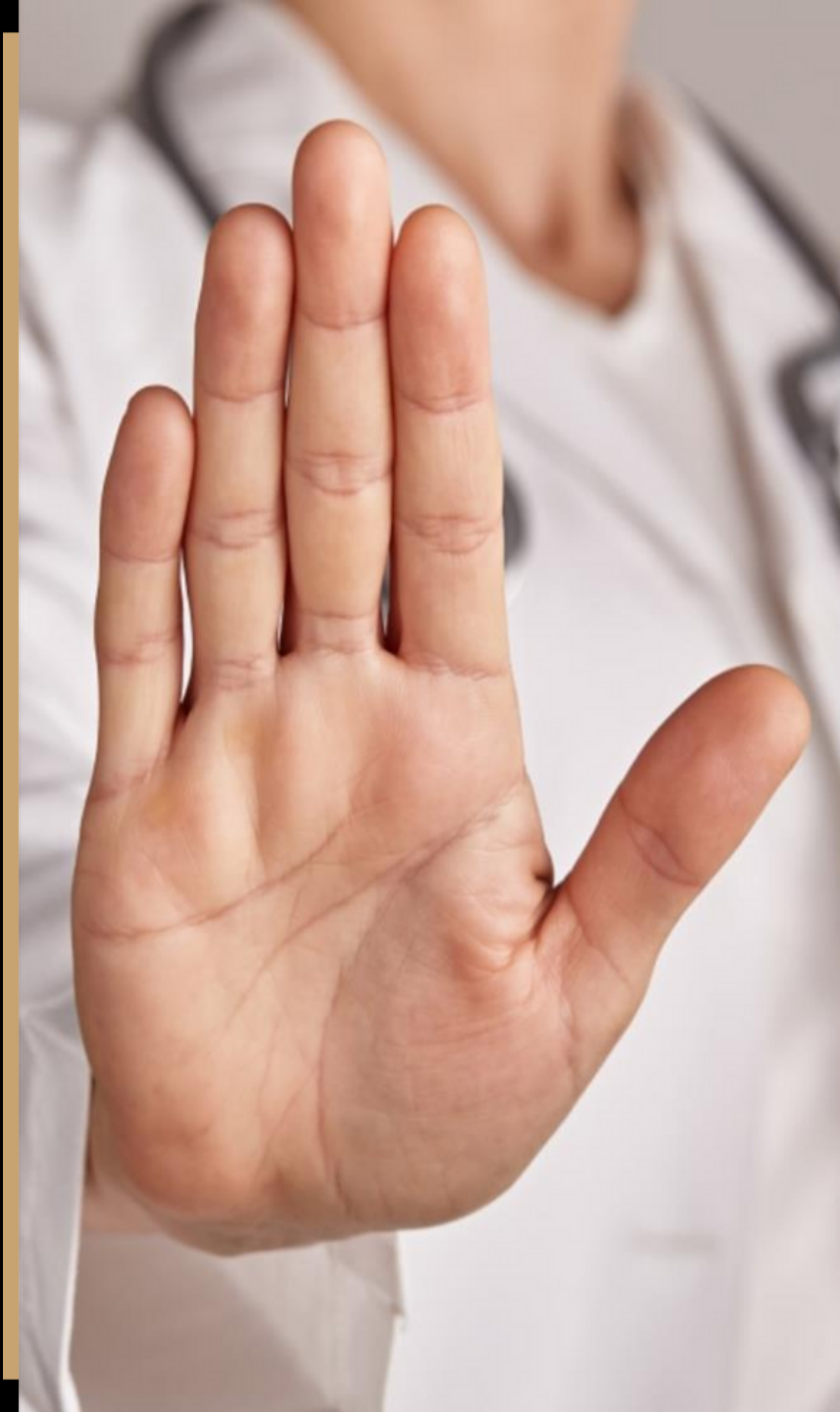
- O1 **Open wounds and acute skin infections** cold plasma should only be administered by a doctor
- O2 **Autoimmune disease** patients may experience side effects due to a weakened immune system
- O3 **The use of Roaccutane® (or similar medications used for acne)** should be discontinued 1.5 months prior to cold plasma treatment
- O4 **Tendency to form keloids or hypertrophic scars:** only the spray pen of the device should be used in a light mode.
- O5 **Photosensitivity:** after cold plasma treatment, the skin becomes more sensitive to UV radiation, so patients should avoid direct sunlight and use sunscreen with a high protection factor.



Contraindications to use

ZENA COLD ARC

- 06 Mental and psychological disorders: only with a doctor's approval
- 07 Presence of a pacemaker: only after consulting with a doctor
- 08 Lung diseases (bronchial asthma or chronic obstructive pulmonary disease): do not use
- 09 Blood clotting disorders or use of anticoagulants: do not use
- 10 Oncological diseases: do not use
- 11 Presence of implants or metal prostheses in the treatment area: pain sensations are observed in the treatment area
- 12 Pregnancy and breastfeeding: insufficient research
- 13 Atopic dermatitis: prior consultation with a doctor is required



MACHINE ADVANTAGES ZENA COLD ARC



Unique patented design



Convenient and easy to use



Reliable and quick to service



Has a wide range of applications



**Safe does not
traumatise the skin**



**No need to
use anaesthesia**



**Does not require post-
procedural rehabilitation**



**Easy to combine with
other cosmetic
procedures**

Technical characteristics of device **ZENA COLDARC**



Technical Specification

Name of Brand : ZENA Cold Arc

Model Number : PMG-Z300

Name of Product : Plasma Beauty Care Device

Maximum Output Power : Point : 6W / Spray : 5.5W

Power : 80Vac~240Vac / 15W

Power out : Trigger Switch on H/P

Display : 7 inch TFT LCD & Touch Screen

Handle Display : 1.3 inch TFT LCD Display

Dimension(mm) / Weight

• Main Unit : D330 * H160 * W270 / 4kg

• Handpiece (without tip) : D227 * H50 * W52 / 1kg

• Needle : 1.0Φ, 30mm(H)

• Cone Tip : 10.0Φ, 15mm(H)

• Round Tip : 1.0Φ, 15mm(H)

• Face Tip : 20Φ (21 pcs shot points)

• Hair Tip : 25Φ (10mm(H) X 4 pcs shot points)



Service maintenance



One-year warranty



Technical support and service This includes after-sales service and trainer support. Training course with certificate from



ZENA Company



Constant access to unique and new protocols developed by ZENA Cosmetics, which includes participation in closed groups discussing new treatment methods and protocols.



Complete set of device

ZENA COLD ARC

- O1 Two handles:** one for working in “POINT” mode, the other for “SPRAY” mode. The handles are multifunctional and interchangeable: both can be used in “Point” and “Spray” modes. The handles are equipped with liquid crystal displays so the specialist can check the work status during the procedure.
- O2 Five special tips:** three for working in “POINT” mode and two for working in “SPRAY” mode.

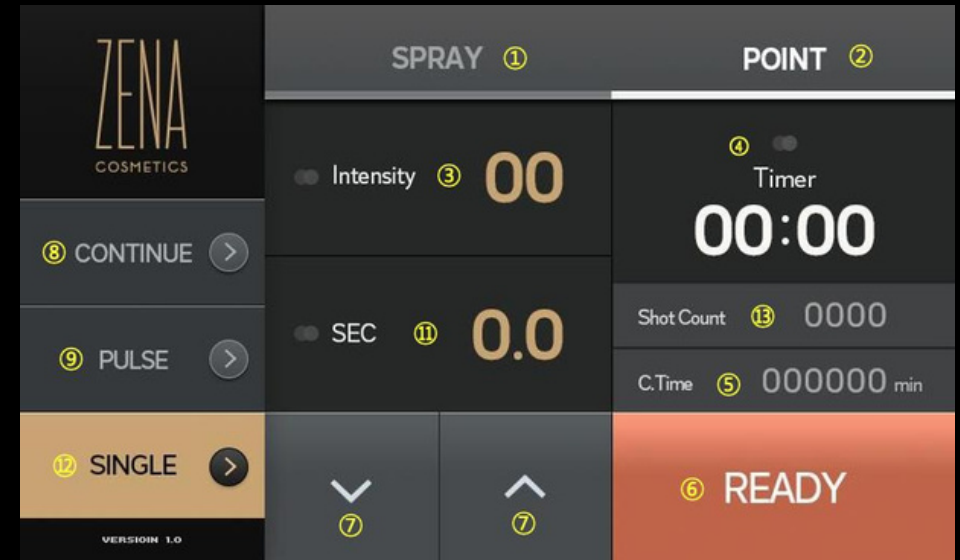


Complete set of device

ZENA COLD ARC

The machine is equipped with an LCD display for setting the operating modes.

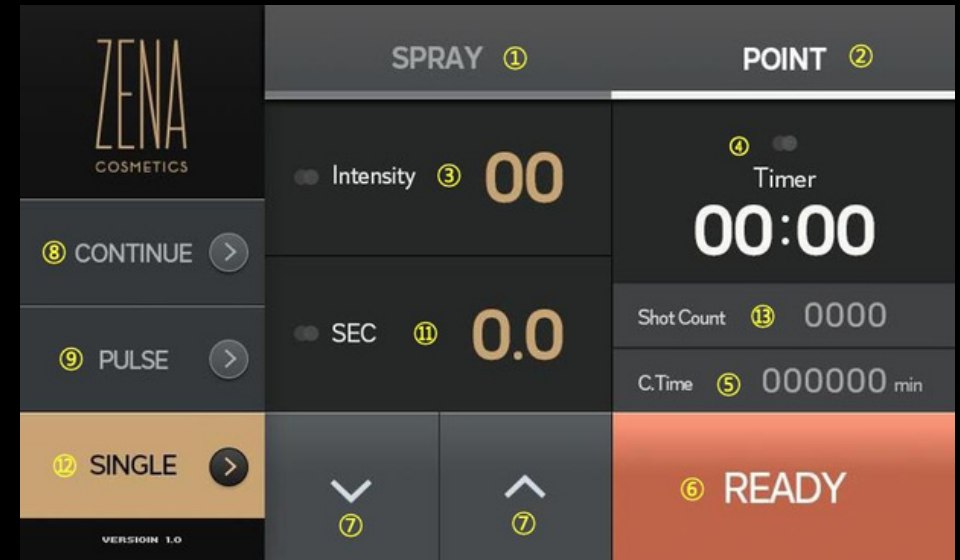
- O1** SPRAY mode selection button. When activated, the button color will change to white.
- O2** Point mode selection button. When activated, the button color will change to white.
- O3** Intensity selection and display window.
- O4** Device operation time display window.
- O5** Total (accumulated) operation time display window.
- O6** READY/STAND BY button — toggle between ready and standby modes (the device operates only in “Ready” mode).



Complete set of device

ZENA COLD ARC

- 07 Value control buttons. Increase (Λ) / decrease (V) the intensity, seconds, pulse values.
- 08 • Selection continuation button. Mode selection button for “Continuous energy emission.”
- 09 • Mode selection button for “Pulse-type energy emission.”
- 10 • Pulse selection and display window. Pulse (Hz) selection for changing the pulse and displaying the selected pulse. This menu is only available in the “SPRAY-PULSE” mode.
- 11 • Selection Section / Display Window. Time selection (sec.) for changing seconds and displaying the selected time. This menu is only available in the “POINT-PULSE, SINGLE” mode.
- 12 • Single button.
- 13 • Shot count display window. This window displays the shot number. The window is available only in the “POINT-SINGLE” mode.



Complete set of device

ZENA COLD ARC

Basic accessories tips

Tips for "POINT" mode:

needle tip – needle-like, 1 mm diameter, 10 mm length;

cone tip – cone-shaped with a pointed end, 10 mm diameter, 15 mm length;

round tip – cylinder-like with a rounded shape, 10 mm diameter, 15 mm length.

Tips for "SPRAY" mode:

face tip – used for the face (20 mm diameter);

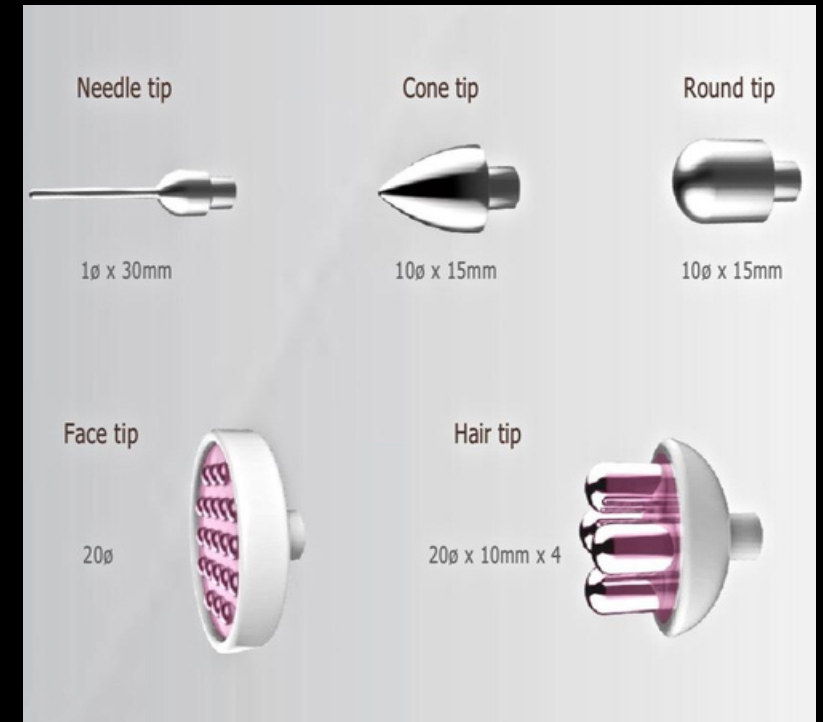
hair tip – used for the head and hair (20 mm diameter). Equipped with four nozzles, each 10 mm in length.

Attention!

It is necessary to maintain the sterility of the tips: regularly treat them with antiseptic. Always work in gloves!

Round spray tips are covered with a protective membrane, which comes with the tips. This increases their lifespan and makes the device more cost-efficient compared to other devices on the market.

DO NOT REMOVE THE YELLOW MEMBRANE!



Modes of operation

ZENA COLD ARC

MODE

SPRAY

Face Tip: Application Instructions

Select Treatment Value in the menu

Select SPRAY mode

Select Continue or Pulse mode

Select the procedure intensity value (level 2 overall, maximum level - 10)

Select Hz (1~100) value when using Pulse mode.

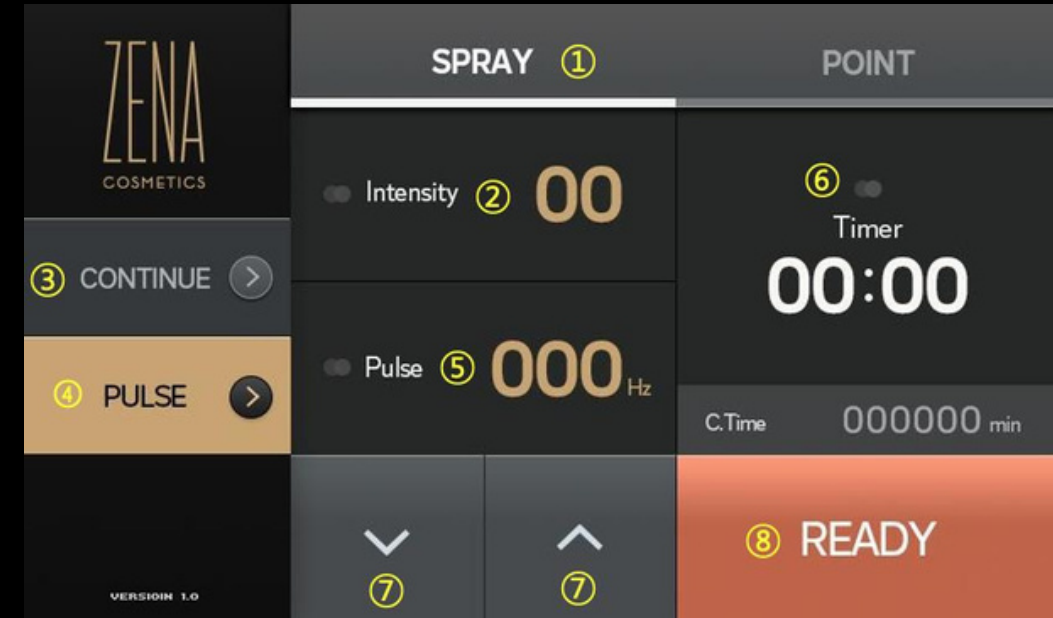
If the patient has thick skin or the skin is in good condition, increase Hz values and intensity during treatment.

If necessary, apply a meso-cocktail or serum to the skin after treatment.

The consumption rate of the product increases if treatment is performed with a round tip. Deep wrinkles can be treated with a Cone tip.

Since there is a possibility of dry skin immediately after the procedure, apply a moisturizing cream after treatment.

Recommended treatment course: 6-8 sessions with an interval of 3-7 days.



Modes of operation

ZENA COLD ARC

MODE SPRAY

Hair Tip: Application Instructions

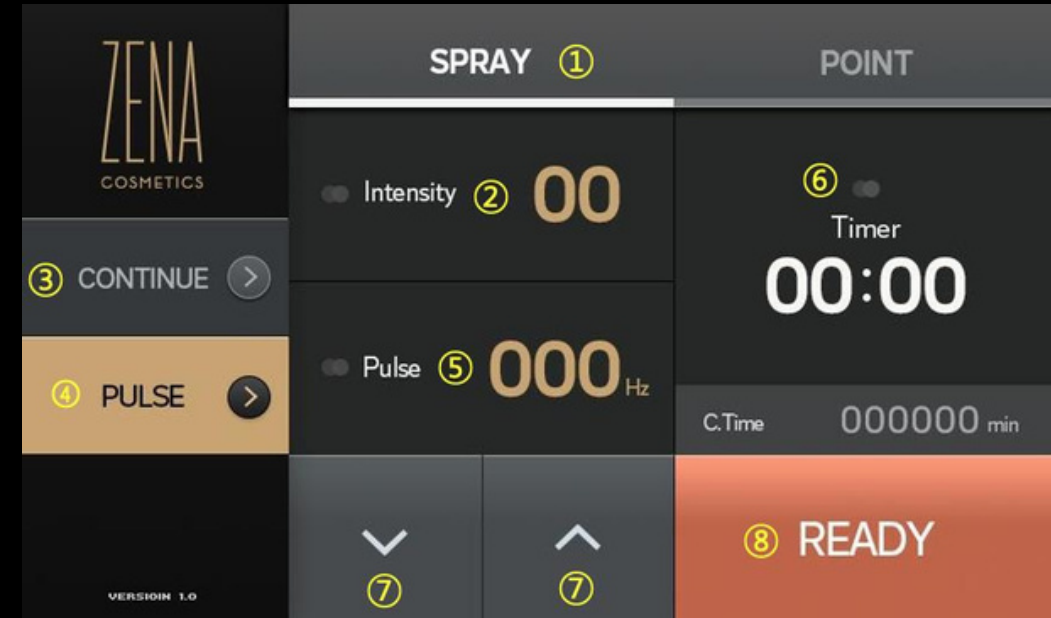
The procedure should be performed on freshly washed, well-dried hair and dry scalp.

- Select Treatment Value in the menu
- Select SPRAY mode
- Select Continue or Pulse mode
- Select the procedure intensity value (level 2 overall, maximum level - 10)
- Select Hz (1~100) value when using Pulse mode

Perform more concentrated treatment for 10 seconds on areas with significant hair loss.

Inform the patient that the crackling sound is a notification of the removal of dead cells, such as dandruff and dust.

- Apply solutions for hair loss and scalp after treatment.
- Treatment should be conducted at intervals of 3-7 days.



Modes of operation

ZENA COLD ARC

Режим работы POINT

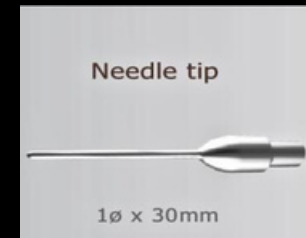
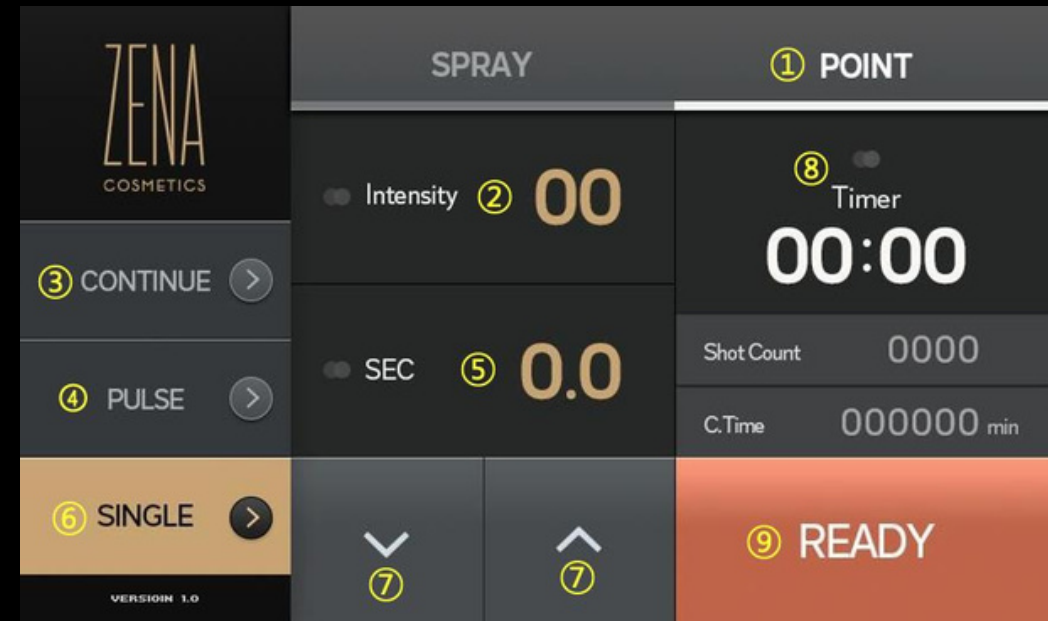
01 Tip Selection: Tips designed for precise treatment are used. The selection of a specific tip depends on the required precision and area of application.

02 Intensity and Duration: It is important to carefully control the intensity and duration of plasma exposure. Before application, it is recommended to set the device to a lower intensity and shorter intervals to avoid skin overheating and minimize discomfort.

03 Application Technique: The tip in "POINT" mode should be applied precisely and carefully to the target area. It is important to avoid prolonged exposure in one spot to prevent burns or skin damage.

04 Skin Dryness: It is necessary to follow the protocols! When working with certain tips, the skin must be dry before applying the tips. (Specific protocols can be found in the "Protocols" section.)

05 Monitoring Skin Reaction: During the procedure, it is important to monitor the skin's reaction. The effect is gentle and may cause redness but not darkening. If signs of excessive exposure appear (darkening, burning, discomfort), the procedure should be immediately stopped.



Calculation of profit

Item	Cost	Sessions-per 1 Patient	Cost for 2 Sessions per Day	Profit
COLD PLASMA	5700 euro (including education)	3-5	5 yrs – 2.2 euro 7 yrs – 1.5 euro	97 euro
Consumables MIN/all problems	350-1000 Euro	20-70 session	17.5-14 euro	104.5 euro
Treatment Cost	100-200 Euro		19-15.5 euro	4600-6200 euro/month

OUR EXPERTS

