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**CORRECTIVE  
MICRONEEDLING™:  
THE DENSITY DIFFERENCE**

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MICRODERMAL NEEDLING

# CORRECTIVE MICRONEEDLING™ — THE DENSITY DIFFERENCE



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## A NEW ERA IN COLLAGEN INDUCTION

Microneedling has evolved. Once known primarily for controlled dermal injury, the procedure now occupies a central role in regenerative aesthetics—activating biological systems of repair, not just mechanical stimulation.

Corrective Microneedling™ defines this evolution.

Through precision, density, and bioelectrical synergy, the MDPen Ultra device transforms collagen induction into a controlled energy exchange between microchannels and the skin's regenerative machinery. The result: a consistent, clinically measurable improvement in firmness, texture, and luminosity.

**"CORRECTIVE  
MICRONEEDLING™ IS NOT  
ABOUT SPEED—IT'S ABOUT  
DENSITY AND DIRECTION.  
EVERY PASS IS AN  
INTENTIONAL ACT OF  
REGENERATION."  
— MDPEN CLINICAL TEAM**

# CORRECTIVE MICRONEEDLING™ — THE DENSITY DIFFERENCE

## UNDERSTANDING THE DENSITY DIFFERENCE

Traditional microneedling systems produce approximately 108,000 microchannels per minute.

The MDPen Ultra, operating at 17,500 RPM, produces up to 324,000 microchannels per minute—a threefold increase in tissue interaction and fibroblast engagement.

This precision allows clinicians to:

- Achieve greater coverage per square inch
- Stimulate collagen synthesis more uniformly
- Improve patient outcomes while reducing procedural variability

In Corrective Microneedling™, density equals energy, and energy equals regeneration. A 1-inch-per-second tracing motion ensures microchannel creation matches the device's pulse speed, optimizing fibroblast signaling and minimizing drag or trauma.



## BIOELECTRICAL SIGNALING AND CELLULAR RESPONSE

Each micro-injury initiates a cascade of bio-electrical communication within the extracellular matrix.

The disruption of ionic gradients creates localized microcurrents, which reestablish polarity across cell membranes—particularly within keratinocytes, melanocytes, and fibroblasts.

This controlled depolarization and repolarization process enhances:

- Mitochondrial ATP synthesis
- Protein transcription for collagen and elastin
- Cellular migration essential for wound closure and remodeling

These events explain why Corrective Microneedling™ achieves visible improvement faster and sustains dermal renewal longer than traditional low-density systems.

## FIBROBLAST STIMULATION AND COLLAGEN ARCHITECTURE

Fibroblasts are the structural engineers of the skin.

When activated through Corrective Microneedling™, they respond to electrical and mechanical cues, increasing:

- Type I and Type III collagen synthesis
- Elastin fiber cross-linking
- Glycosaminoglycan (GAG) production
- Vascular endothelial growth factor (VEGF) release to stimulate angiogenesis

This orchestrated cellular activity restores dermal thickness, elasticity, and resilience—fundamentally improving the extracellular matrix.

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## CLINICAL VALIDATION — THE ESSEX LABS EVALUATION

Independent testing at Essex Testing Clinic Laboratories evaluated MDPen skincare formulations for cumulative irritation and sensitization in a 450-subject Repeat Insult Patch Test (RIPT).



Results confirmed:

- Non-irritating and hypoallergenic performance
- Zero cumulative sensitivity reactions
- Full biocompatibility when used in conjunction with Corrective Microneedling™ protocols

This validation supports the consistent use of MDPen UltraGlide products immediately post-procedure to optimize healing and outcomes.

## THE CORRECTIVE TECHNIQUE

Corrective Microneedling™ is defined by control, consistency, and coverage.

Technique Summary:

- Cleanse and prepare the skin, ensuring firm tautness.
- Begin in vertical tracing motions at 1 inch per second.
- Repeat horizontally and diagonally to ensure even coverage.
- Maintain steady contact—allowing the needle motion, not the hand speed, to determine penetration.
- Apply the MDPen UltraGlide pairings immediately post-procedure for enhanced results.

Speed and pressure do not define quality—density and control do.

## CLINICAL INDICATIONS

Corrective Microneedling™ is indicated for:  
Atrophic acne scars

- Fine lines and wrinkles
- Hyperpigmentation and melasma
- Crepey and photoaged skin
- Hair restoration and scalp angiogenesis

Its bioelectrical and bioenergetic mechanisms make it a powerful integrative therapy across all Fitzpatrick types.

# CORRECTIVE MICRONEEDLING™ — THE DENSITY DIFFERENCE

## INTEGRATION AND ROI FOR MEDI- CAL PRACTICES

Average cost per procedure: ~\$32

Average revenue per treatment: \$350–\$600

Typical profit margin: 85–90%

Incorporating Corrective Microneedling™ allows practitioners to deliver biologically active outcomes with predictable healing and rapid patient satisfaction.

All MDPen Ultra systems include:

- Lifetime warranty
- Training and certification
- Consent forms and clinical protocols
- Marketing and patient education materials

## EXPERIENCE THE DENSITY DIFFERENCE™

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MICRONEEDLING™ TRAINING AT  
[MDPEN.CO](http://MDPEN.CO)

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