

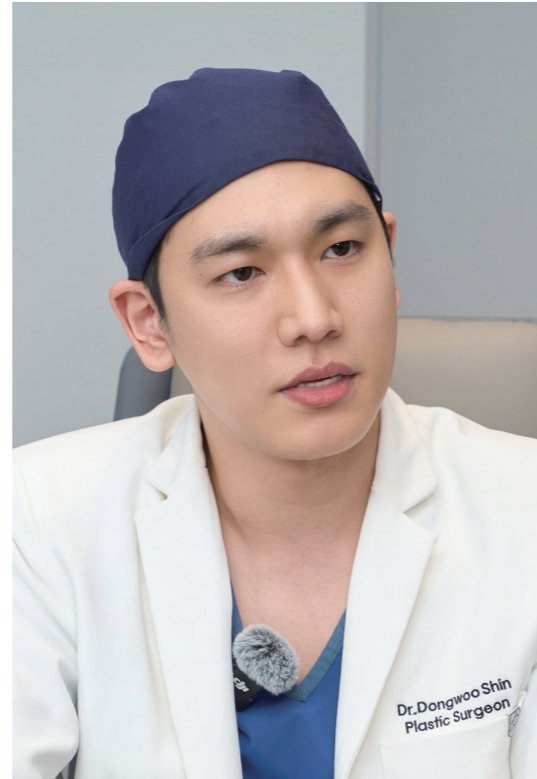
CLASSYS

## ULTRAFORMER MPT

Dr. Dongwoo Shin, Navi Plastic Surgery

### “Enhanced Efficacy and Convenience Through Diversified Cartridges and Modes”

The criteria for selecting a non-invasive device become increasingly clear when combining surgical and non-surgical procedures. Efficacy is paramount; however factors such as safety, potential side effects, patient response, practitioner fatigue, and overall efficiency must also be realistically considered. The SHURINK UNIVERSE(ULTRAFORMER MPT) naturally captured the attention of Dr. Dongwoo Shin of Navi Plastic Surgery. This was because he had already personally experienced its predecessor and was convinced by the results. It aligned well with the current patient preference for minimally invasive options, and its advantages from a user's perspective—such as the diverse cartridges, multiple modes, and intuitive interface—were also compelling. In this feature, we explore Dr. Shin's perspective on the SHURINK UNIVERSE(ULTRAFORMER MPT), his evaluation of the device, and the criteria and methods he uses in his clinical practice.



Dr. Dongwoo Shin of Navi Plastic Surgery describes the ULTRAFORMER MPT as "a HIFU device that satisfies on all fronts: efficacy, safety, efficiency, and reliability."

### Initial Impressions and Rationale for Adoption

Most clinicians are likely familiar with its predecessor, ULTRAFORMER III, given its popularity. Having personally undergone the procedure, I can attest to its clinical effects based on firsthand experience. The growing demand for minimally invasive procedures by patients sparked my interest in this technology.

I believe a great medical device must be built on a foundation of proven efficacy and safety, which the ULTRAFORMER III line has amply demonstrated over the years. I was particularly impressed by the upgrade; its variety of cartridges enables meticulous depth control, and including both linear and pen types enables customized lifting for specific anatomical zones. The reduced treatment time is another key advantage, as it lessens practitioner fatigue while minimizing patient discomfort. The modern, sleek design and the intuitive, simplified user interface, which enhances usability, were also important factors in my decision to adopt it.

### Did the device's high brand recognition also influence your decision to adopt it?

Absolutely. Its long-standing reputation was certainly a key factor. But ULTRAFORMER III is a name familiar not just to clinicians, but to patients as well. This drives more inquiries and a high conversion to treatment. I believe that high brand recognition fosters a sense of trust and security in the consumer in any field. During consultations, the name "ULTRAFORMER III" alone sets a positive expectation, streamlining communication considerably.

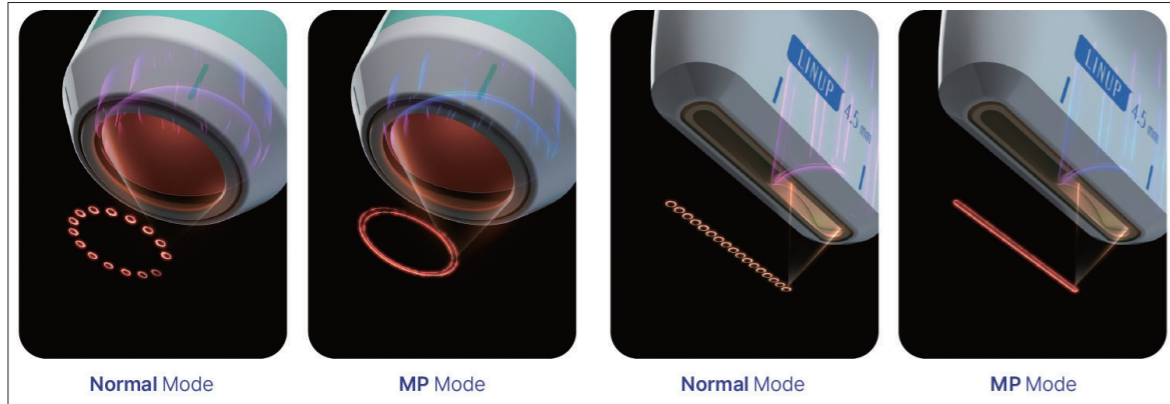
### Key Advantages Over Other Modalities

Energy-based devices (EBDs) are used for lifting by delivering thermal energy to the skin, inducing collagen contraction and regeneration to produce a lifting and tightening effect. Among these, HIFU devices like the ULTRAFORMER MPT have a distinct advantage: the ability to deliver energy to deeper skin layers than radio frequency (RF) or laser technologies. ULTRAFORMER MPT precisely targets the subcutaneous fat, SMAS layers, and the dermis to deliver high-intensity ultrasound energy for a powerful, reliable lifting and tightening effect. This enables non-surgical facial contouring to define the facial silhouette without incisions or recovery time. It is particularly effective for reducing fat volume, helping to sculpt a more dimensional facial line.

Primary candidates include younger patients in their 20s and 30s with mild skin laxity or those seeking non-surgical improvement of the jawline or submental fat. It is also a valuable option for middle-aged patients with more significant sagging who wish to avoid surgery, or for patients who have had a rhytidectomy and want to maintain or enhance the results. The ULTRAFORMER MPT's ability to provide tailored lifting and tightening solutions for a wide range of ages and skin conditions gives it high clinical utility, making it an attractive choice for both clinicians and patients.

### Cartridge Application Based on Skin Type and Treatment Goals

The pen-type cartridge is equipped with a circular tip that allows for more precise and consistent contact with the skin, even in curved or anatomically challenging areas of the face. This enables stable, uniform energy delivery and reduces the risk of common issues like energy skips or excessive energy delivery, which can lead to epidermal injury or burns. Proper apposition is critical for ensuring both safety and efficacy in any HIFU procedure. The linear-type cartridge, in contrast, is ideal for rapid and efficient application over large, flat areas, such as the lower face or the double chin. Significant results can be achieved by appropriately combining both cartridges based on the treatment area and objective. For instance, using the pen type on highly contoured areas like the forehead or around the zygoma and the linear type on broader, flatter areas like the jawline and submental region can enhance both the precision and efficiency of the treatment.



ULTRAFOMER MPT can operate in both MP mode and Normal mode with either the pen-type or linear-type cartridge

### MP and Normal Modes: Differences and Clinical Applications of ULTRAFOMER MPT

The ULTRAFOMER MPT enhances procedural convenience and efficiency by allowing the practitioner to switch freely between Normal and MP modes without changing the cartridge. Normal mode functions by creating 17 thermal coagulation points (TCPs), selectively concentrating heat at specific target layer. It is recognized as effective for lifting and tightening by inducing collagen remodeling and regeneration within the dermal layer. It is primarily applied to areas requiring elasticity restoration, such as the cheeks or the supra-zygomatic region, and enables a delicate, precise treatment. In contrast, MP mode operates on a 'bulk heating' principle, delivering heat continuously over a broader area, which is expected to be more effective for reducing the fat layer. MP mode is the primary choice for areas requiring fat reduction and contour refinement, such as the submental region and jawline. My general approach is to use Normal mode for areas requiring a lifting effect and MP mode for areas where fat reduction is the priority. Because MP mode delivers heat continuously, it enables rapid treatment of large surface areas. Since each mode has distinct characteristics, a combined approach tailored to the treatment area and objective can maximize efficacy and enhance patient satisfaction.

### Preferred Treatment Protocol

For the submental area and jawline, I use the 4.5 mm cartridge for 100 shots, and the 3 mm cartridge for 100–200 shots for the full face. Energy levels are adjusted based on skin thickness and the patient's pain sensitivity. Typically, I set the energy to 0.5–0.8 J for the 4.5 mm depth and 0.3–0.5 J for the 3 mm depth. The treatment interval is approximately three months. The protocol is flexibly adjusted according to the patient's skin condition and goals.

It is designed to maximize efficacy while minimizing pain and discomfort.

Thermal stimulation of dermal collagen induces an immediate sensation of skin tightness. Patients experience this as an immediate lifting effect. Gradual collagen regeneration and rearrangement lead to improved skin elasticity and further lifting over the subsequent weeks. While it can vary with energy levels, most patients can resume daily activities immediately post-procedure. Mild erythema may be present immediately after treatment, but it typically subsides within two days. Makeup can be applied the following day. While there may be slightly more downtime compared to that with RF, this is well compensated by its ability to deliver energy to deeper layers, offering the potential for a more pronounced lifting and tightening effect.

I use a customized protocol that I developed. I organize data gathered from a wide range of cases and customized protocol has proven extremely helpful in clinical practice. Having received the treatment at other clinics, I've noticed my protocols tend to be more intensive. As a plastic surgeon who also performs invasive surgery, I have a strong preference for treatments that deliver clear, measurable results. I tend to use higher energy settings because I believe in achieving a distinct, measurable difference between pre- and post-treatment outcomes. Indeed, many patients are seeking more than just routine maintenance. Today, many patients, beyond seeking simple maintenance, expect noticeable changes even from a single session. One of the most frequently shared responses is their satisfaction with the improved facial contour as the jawline becomes more defined, in addition to the lifting and tightening effects. The ability to experience this visible change without surgery creates a high degree of satisfaction for both the patient and the clinician.



The ULTRAFOMER MPT enhances procedural versatility with its diverse range of three pen-type cartridges and four linear-type cartridges.

### Particularly Effective Treatment Areas

The areas that respond best are the jawline, nasolabial folds, and the submental region. It also shows a degree of improvement for infraorbital fat prolapse and dark circles, common concerns among patients of East Asian descent. While surgery may be a more definitive solution, ULTRAFOMER MPT is less invasive than laser yet can yield satisfactory results, making it a suitable alternative for patients hesitant about surgery.

I use it in combination with RF to further enhance the lifting effect. Botulinum toxin or lipolytic injections can also be incorporated for fine-tuning the jawline contour. A combination with skin boosters containing PLLA, PN, or HA is also very effective for improving skin condition and elasticity. While occasionally applied to the body, the effects are somewhat limited compared to those on the face. I attribute this to the current output and energy penetration depths not being optimized for body treatments. While it can offer some improvement for cellulite, its application for comprehensive body contouring is still considered nascent.

## Clinical Considerations and Precautions

Burns are the primary concern. If mild, they are usually resolved by applying a topical steroid for a few days. In rare cases, cheek hollowing from deep tissue volume loss can occur, but it is rarely severe enough to require fat grafting or fillers. Generally, this can be adequately addressed using a skin booster that combines PLLA and HA. However, preventing the issue in the first place is paramount. Proper adjustment of energy intensity and meticulous verification of the tip's apposition to the skin are critical. Establishing a customized treatment plan based on the patient's condition is vital.

For clinicians new to the procedure, prioritizing safety is especially important. I recommend starting with low energy levels and applying an ample amount of gel to the tip. One must carefully ensure the tip maintains full apposition with the skin during the procedure. If the tip lifts or apposition is incomplete, efficacy is reduced and the risk of adverse effects increases. Furthermore, continuously monitoring the skin condition of the treatment area and the patient's pain sensitivity helps achieve better outcomes. The user-friendly interface and intuitive design of the ULTRAFOMER MPT allow practitioners to become proficient in its operation quickly. Gradually adjusting energy levels and shot counts as one gains experience is fundamental to performing safe and effective treatments.

## Live Demonstration

**Dr. Dongwoo Shin :** Prior to the procedure, I begin with the design. I always mark the treatment areas and zones requiring caution before starting the procedure. Since HIFU energy reaches the fat layer, complaints regarding volume loss and sunken cheek can arise. Caution is required when using the 4.5 mm cartridge for the patient with thin skin thickness, as the heat can penetrate into the fat layer and induce volume loss. This is particularly relevant for patients of East Asian patients with prominent zygomas; applying deep energy below this area can often lead to a perception of sunken cheek. The design phase is crucial to mitigate patient anxiety about side effects and enhance their satisfaction with the final outcome.

I'll start with the submental line, using MP mode at 4.5 mm. The rest of the face will be treated with the booster cartridges. A 300-shot treatment with the 3.0 mm and 4.5 mm linear cartridges typically takes about 10 minutes. I will be using the new booster cartridges in this session; I don't expect a significant difference in speed. For reference, higher energy settings produce a slower pulse speed, while lower settings delivers a fast pulse.

I personally find it more convenient to trigger the device by hand rather than using the foot pedal.

Some clinicians express concern about treating the jaw area at a 4.5 mm depth due to underlying structures like nerves and salivary glands, but I have not encountered any issues. In rare instances, an inflammatory reaction can occur in the salivary gland area, but it is typically self-resolving and transient. The thermal energy delivered at which the tissue is heated is insufficient to cause nerve damage. Even in the rare case of temporary neuropraxia, the risk of permanent injury is virtually nonexistent.



Dr. Dongwoo Shin emphasized, "Customized solutions for each patient are possible by applying different modes and cartridges according to the treatment area and goals."

**Q :** When performing a HIFU procedure, do you consider the vector direction during application?

**Dr. Dongwoo Shin :** The primary lifting and tightening mechanism in HIFU is thermal coagulation; therefore, I don't believe the physical application vector has a significant impact. However, one naturally tends to apply the device with an upward vector during the treatment.

The double chin and jawline treatment with MP mode at a 4.5 mm depth is now complete. The MP mode delivers bulk heating compared to Normal Mode, making it more effective for fat reduction.

Now, I will treat the rest of the face using the new booster cartridges from the ULTRAFOMER MPT. They are designed for superior apposition on curved and contoured areas compared to the conventional linear type, which improves procedural convenience and helps mitigate unintended adverse effects. For instance, it adheres well to the infra-zygomatic area, greatly facilitating treatment effect. Finally, the ULTRAFOMER MPT also has a dedicated ampoule. Applying it before and after the procedure can help improve skin tone and texture, which is a useful tip for practitioners.