

**Safebone mrt 135** | ultrasonic bone scalpel system

# SAFEBONE

wanna D1, D2, D3 bones cut  
what about arteries, soft tissues,  
membranes, vessels and nerves  
wanna try...Safebone



**INNOVATIVE TECHNOLOGY  
FOR THE SURGICAL TREATMENT**

## Features and benefits

Safebone is an ultrasonic surgical system equipped with hand pieces and the tips accessible to all surgical areas for cutting cortical bones D1, D2, D3 types. It can be used for osteotomy, osteoplasty, decorticating, drilling, shaping, and smoothing of bones in a variety of surgical procedures including orthopaedic, maxillofacial, oral, hand, foot, neurosurgical, spine, plastic, head & neck reconstructive and other surgeries causing minimal damage to the arteries, soft tissues, membranes, vessels and nerves.

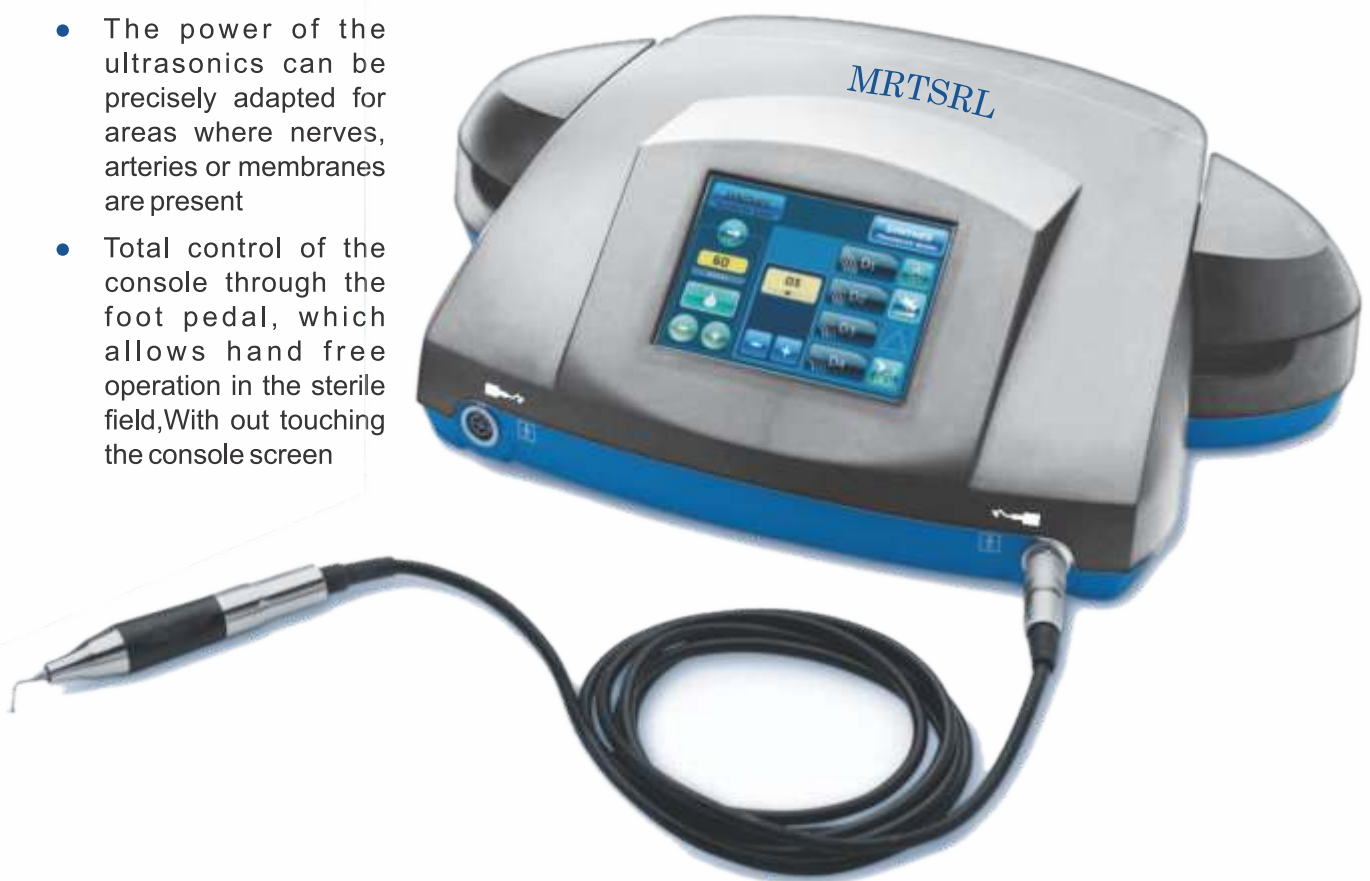


### Sterilizable LED hand piece

- 100 Lux Powerful LED enhances vision at the operative site for efficient osteotomies.
- No heat generation and vibration free
- Attached cable
- Complete autoclavable headpiece with internal irrigation and with attached cable.
- Straight Hand piece facilitates desired/ non-linear/ transverse oscillations.

### Multifunction Foot Pedal

- Activation/adjustment of irrigation and of ultrasonic power according to the anatomical constraints encountered.
- The power of the ultrasonics can be precisely adapted for areas where nerves, arteries or membranes are present
- Total control of the console through the foot pedal, which allows hand free operation in the sterile field, With out touching the console screen



## Control System

- No loss of power regardless of the mode/function and / or treatment performed
- Active only on mineralized tissue, with minimal risk to soft tissue
- Minimum pressure required, resulting in higher precision and less hand fatigue for the clinician
- Four power setting modes: 3 for bone cutting based on bone density and 1 for soft tissue detachment

## Cutting tips

- No heat generation, minimizes the risk of necrosis
- Entire range for highly precise bone surgery procedures
- Broad range of applications
- Reusable & Sterilizable (ask for detailed catalogue for tips)

## Console

- User-friendly touch-sensitive LCD screen for ease of operation
- Compact generator with digital display of power, irrigation, vibration and other settings
- Cable connectors for up to two hand pieces eliminating the need to change cutting tips during procedures (second optional)
- Two integrated peristaltic pump housings (second optional)
- Two brackets for irrigation solution

## Accessories

- Reusable Surgical Tips (Right & Left Tips, Angled Tips, Cutting Tips, Non Cutting Tips, Smoothing/Finishing Tips, Scaling Tips)
- Irrigation Sets (dis.)
- Directed Airing System mrt 440
- Autoclavable container for Tips
- Wrench
- Autoclavable container for accessories
- Irrigation Pole
- Real time B.M.D assessment with the help of Multi Vital Parameters Analyzer



# SAFE BONE

## TECHNICAL DATA

### Technical Characteristics

Manufacturer: MRTSRL Italy  
Distributor: regional  
Device name: Safebone mrt135

### Electrical power supply

Voltage: 100 VAC to 230 VAC  
Frequency: 50 Hz/60 Hz  
Rated power: 150 VA at 230 VAC

### Function Operation

Intermittent service: 10 min. ON/5 min. OFF

### Output characteristics

No-load voltage: 250 volts  
(nominal value without handpiece)  
Ultrasonic Frequency: 25 KHz to 35 KHz  
Irrigation flow rate: 10 to 120 ml/min. steps (nominal value)  
Adjustment in 10 ml/min. steps (nominal value)  
Flush flow rate: 120 ml/min. (nominal value)  
Tip Vibrations: 40 to 250 micron

### Protection

Electrical equipment class: Class 1  
Electrical safety class: BF

### Safety devices

Safety shut off if internal malfunction  
2 fuses (power receptacle):  
5 mm x 20 mm/2 AT for 100 VAC to 230 VAC  
1 internal fuse not accessible to the user  
Reference F1: 5 mm x 20 mm - 10 AT/250 VAC

### TIPS

Resuable & Sterilizable (ask for detailed catalogue for tips)

### Overall dimensions

#### Control unit

Width: 472.9 mm  
Height: 149.5 mm  
Height with bracket: 471.1 mm  
Depth: 339.9 mm  
Weight: 5 kg without accessories

#### Handpiece cable

2.9 meters

#### Temperatures

Operation: +10°C to +30°C  
Storage: -20°C to +70°C

#### Humidity

Operation: 30% to 75%  
Storage: 10% to 100% including condensation

#### Atmospheric pressure

Between 500 hPa and 1060 hPa

WITH RESPECT TO ELECTRICAL SHOCK,  
FIRE AND MECHANICAL HAZARDS ONLY  
IN ACCORDANCE WITH UL60601-1  
AND CAN / CSA C22.2 No. 601.1

## MRTSRL

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Certified company and approved by QRO System quality  
ISO Certificates 13485:2016 and 9001:2015

We prefer to communicate via email.