

**SWISS DOLORCLAST<sup>®</sup> VET**

SWISS DOLORCLAST® VET

DESIGN



SWISS DOLORCLAST® VET

PATENTED

# SWISS DOLORCLAST® VET

EXTRACORPOREAL SHOCKWAVE THERAPY  
FOR MUSCULOSKELETAL PAIN

- NON-INVASIVE TREATMENT
- NO ANESTHETIC, MEDICATION OR INVASIVE SURGICAL PROCEDURES REQUIRED
- PLUG AND TREAT
- FAST, GENTLE AND EFFECTIVE
- PORTABLE VERSION AVAILABLE

**FOR A SUCCESSFUL VETERINARY  
CLINIC**



# THE BENEFICIAL EFFECTS OF EXTRACORPOREAL SHOCKWAVE THERAPY ARE WIDELY KNOWN. SCIENTISTS HAVE PROVEN THAT SHOCKWAVES TRIGGER A VARIETY OF EFFECTIVE ACTIONS→

## ANALGESIC EFFECT - RELEASE OF SUBSTANCE P

- > Substance P plays a central role as a pain-mediator and growth factor.
- > Shockwaves lead to depletion of substance P out of its storing vesicles.
- > This molecular mechanism explains the long lasting analgesic effect of shockwaves.

Furthermore, substance P has been shown to dilate blood vessels, stimulate neovascularization and contribute to new bone formation.

## NEOVASCULARIZATION - ENOS, VEGF, PCNA

- > Shockwaves stimulate the early expression of angiogenesis related growth factors including eNOS (endothelial nitric oxide synthase), VEGF (vessel endothelial growth factor) and PCNA (proliferating cell nuclear antigen). This promotes neovascularisation that improves blood supply and increases cell proliferation and tissue regeneration to repair tendon or bone tissues.

## HYPERSTIMULATION OF NERVE FIBRES

- > Scientific studies also show that shockwaves act in another way. Over-stimulating the small nerve fibres blocks an increase in pain stimuli and therefore intensifies the analgesic effect (Melzak and Wall, Gate Control Theory).

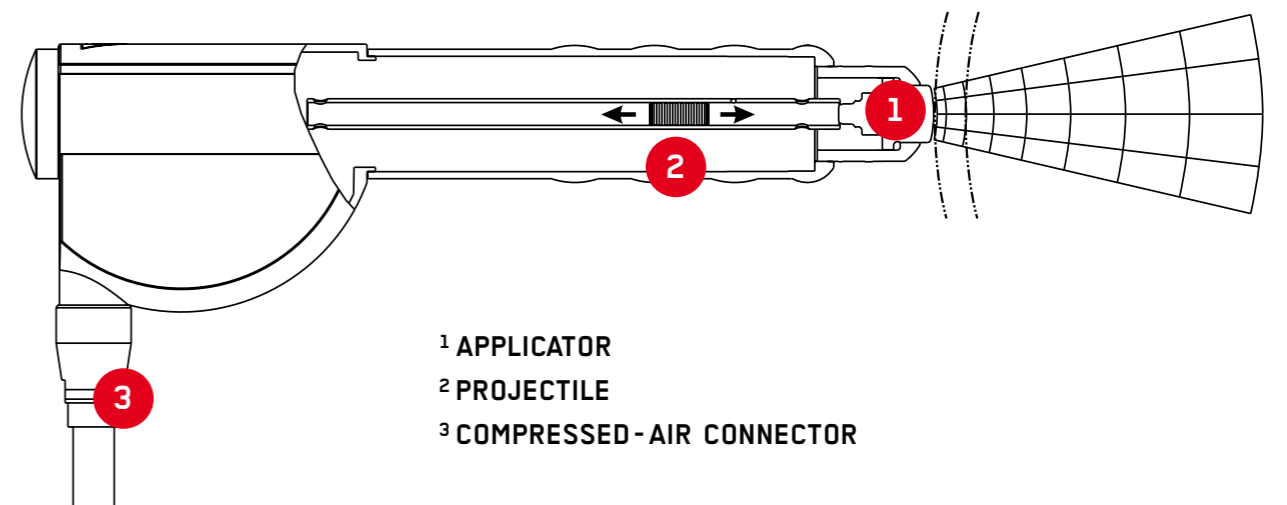
**IN SUMMARY, WHEN SHOCKWAVES ARE APPLIED TO A REGION, WHERE PAIN IS PRESENT, THERE ARE BROAD INSIGHTS INTO THE MOLECULAR ASPECTS OF ANALGESIC EFFECTS, IMPROVED CIRCULATION, AND TISSUE REPAIR.**

### Scientific Background

1. Hausdorf J, Schmitz C, Averbeck B, Maier M. - Molecular basis for pain mediating properties of extracorporeal shock waves. *Schmerz*. 2004 Dec;18(6):492-7. German.
2. Maier M, Averbeck B, Milz S, Refior HJ, Schmitz C. - Substance P and prostaglandin E2 release after shock wave application to the rabbit femur. *Clin Orthop Relat Res*. 2003 Jan;(406):237-45.
3. Wang CJ. - An overview of shock wave therapy in musculoskeletal disorders. *Chang Gung Med J*. 2003 Apr;26(4):220-32. Review.

# FOR FAST PAIN RELIEF→

## GENERATING PNEUMATIC ENERGY WITH SWISS PRECISION - FOR CONTROL AND RELIABILITY



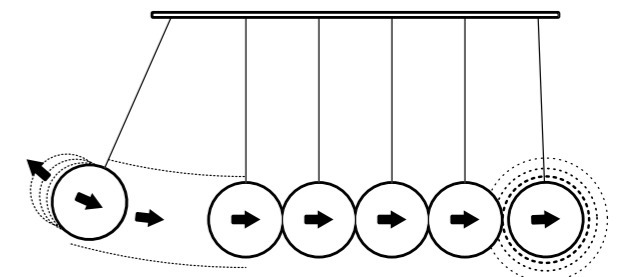
- 1 APPLICATOR
- 2 PROJECTILE
- 3 COMPRESSED-AIR CONNECTOR

- THE PRECISION COMPRESSED-AIR PULSE ACCELERATES THE PROJECTILE IN THE HANDPIECE
- THE IMPACT OF THE PROJECTILE ON THE APPLICATOR GENERATES THE SHOCKWAVE
- THE SHOCKWAVE IS TRANSFERRED TO THE TISSUE

- > The advantage of extracorporeal shockwaves is the production of an extensive analgesic area. By radiating out, shockwaves extend to the entire area where pain occurs.

## A TEXTBOOK LAW OF PHYSICS

- > Kinetic energy is converted into impact energy, as illustrated by Newton's Cradle.



# SWISS DOLORCLAST® METHOD, FOR FAST PAIN RELIEF→

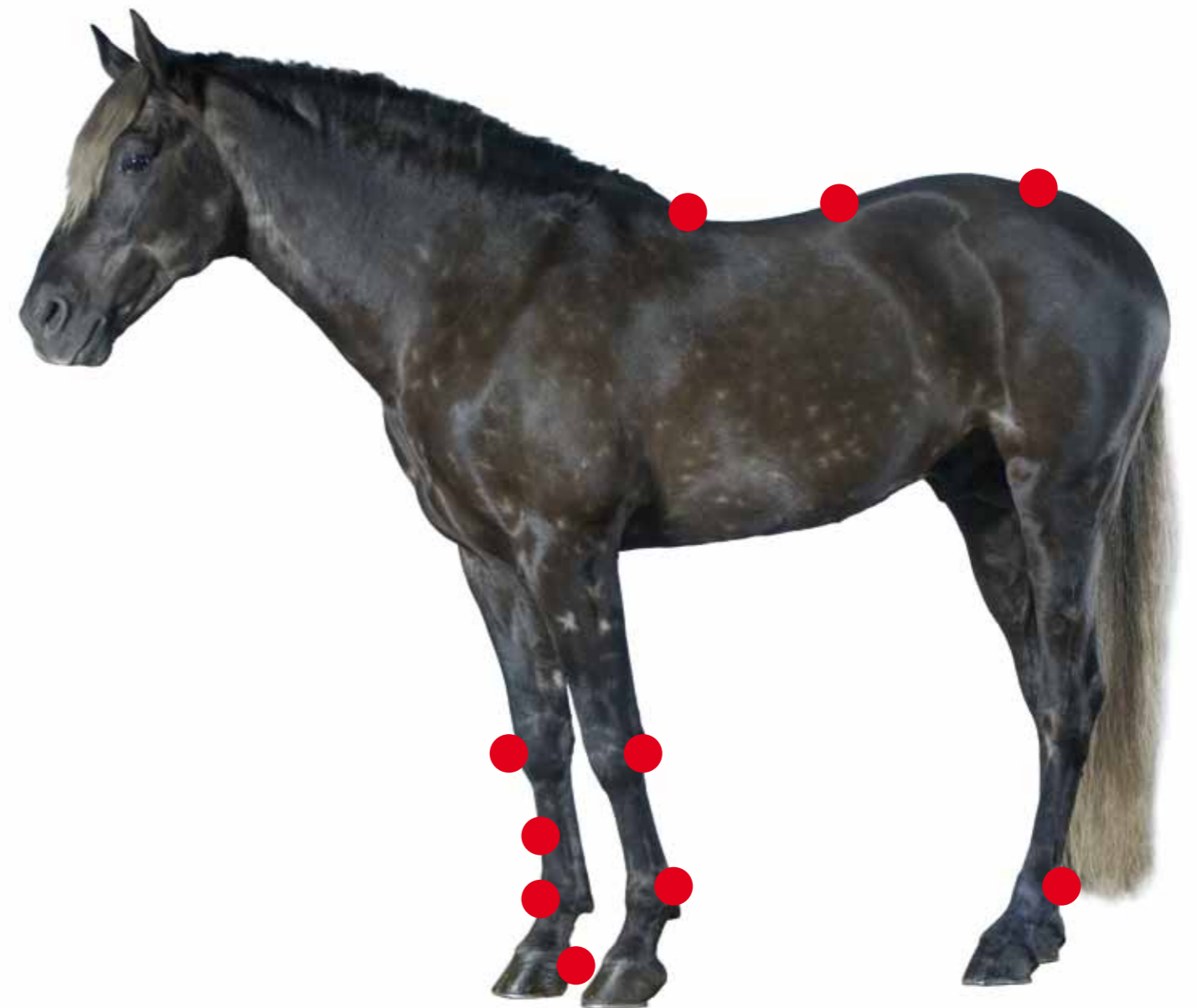
- > Extracorporeal Shockwave Therapy has been a proven form of human therapy in urology and orthopedics for many years.
- > Several international studies show that Extracorporeal Shockwave Therapy is also an excellent, non-invasive alternative for the treatment of common orthopedic conditions in horses\*.
- > Horses show significantly pain reduction and enhanced mobility – even already after the first treatment.
- > Horse owners have come to appreciate Extracorporeal Shockwave Therapy because of its obvious results: a non-invasive and affordable way to improve many orthopaedics disorders.

\* K.J. Boening, S. Löffeld, K. Weitkamp. Radial Extracorporeal Shock Wave Therapy for Chronic Insertion Desmopathy of the Proximal Suspensory Ligament. AAEP nov. 2001.  
P.A. Quirion, D.M. Davis. Variations in ther Efficacy of Radial Shock Wave Therapy as a treatment for Suspensory Desmopathy in the horse: a retrospective study. WEVA janv. 2006  
A.P. Bathe. Results of Radial Extracorporeal Shock Wave Therapy for the treatment of Superficial Digital Flexor Tendonitis. ESVOT sept. 2004  
R.K.W. Smith, O. Crowe, S.J. Dyson, L.M. Wright, M. Schramme. Results of Radial Extracorporeal Shock Wave Therapy for the treatment of Proximal Suspensory Desmitis. ESVOT sept. 2004  
D.S. Rowlands, A.P. Bathe, J.K. Boening. Treatment of Angular Limb Deformities in Foals using Radial Extracorporeal Shock Wave Therapy: a prospective Trial. BEVA sept 2005.

**FIGHTS CAUSES,  
NOT JUST SYMPTOMS**

## ONE THERAPY MANY INDICATIONS→

- INSERTION DESMOPATHY
- TENDINOPATHIES
- CALCIFICATIONS
- FRACTURES
- DEGENERATIVE JOINT DISEASE (DJD)
- DORSAL METACARPAL DISEASE
- EXOSTOSIS
- OSTEOPOROSIS (SOFT-BONE-DISEASE)
- HINDLIMB DESMITIS
- NAVICULAR DISEASE
- DORSAL SPINAL PROCESSES (DSP)
- BACK PAIN
- SACROILIAC PAIN
- ANGULAR LIMB DEFORMITIES



# THE SHOCKWAVE →

SHOCKWAVE GENERATED BY SWISS DOLORCLAST®  
DEMONSTRATED BY CAVITATION

THE CAVITATION BUBBLES →

SECONDARY SHOCKWAVES  
OF THE CAVITATION BUBBLES →

SWISS DOLORCLAST® VET  
APPLICATIONS AND BENEFITS

## EASY AND FAST APPLICATION →



Treatment of insertion desmopathy.



Treatment of dorsal spinal processes.



Treatment of sacroiliac pain.



Treatment of navicular disease.

### BENEFITS FOR THE HORSE →

- > Significant pain relief and return to normal function.
- > No clinically relevant side effects.
- > Successfully return to previous level of athletic function.

### BENEFITS FOR THE HORSE OWNER →

- > Fast and affordable.
- > Remarkable, immediate results.
- > Easy return to work.

**SWISS DOLORCLAST® VET  
FOR FAST PAIN RELIEF**

# A SUCCESSFUL TREATMENT, A SUCCESSFUL PRACTICE→

## **BENEFITS FOR THE HORSE OWNER**

- IN OFFICE OR ON SPOT PROCEDURE
- NO ANESTHESIA
- NON-INVASIVE
- FAST PAIN RELIEF
- NO ADDITIONAL MEDICATION
- HIGH SUCCESS RATES

## **BENEFITS FOR THE PRACTITIONER**

- SHORT APPLICATION TIME
- HIGH OWNER SATISFACTION
- SWISS QUALITY
- LOW MAINTENANCE
- FAST RETURN ON INVESTMENT
- LOW OPERATING COSTS

**WIN-WIN SITUATION**

# A NEW METHOD FOR A MODERN PRACTICE→

## **A METHOD FOR SUCCESS**

- ATTRACTIVE POSTERS FOR YOUR PRACTICE
- LITERATURE AND INFORMATION
- NEWSLETTER ABOUT PRODUCTS AND TREATMENT
- VIDEOS AND ANIMATIONS (CD-ROM/DVD)
- INFORMATION AND IN-SERVICE TRAINING
- CUSTOMER SERVICE AND ASSISTANCE FROM  
EMS REPRESENTATIVES AND PARTNERS

## **WINS NEW CLIENTS**

**FOR A SUCCESSFUL VETERINARY CLINIC**

# IT PAYS →



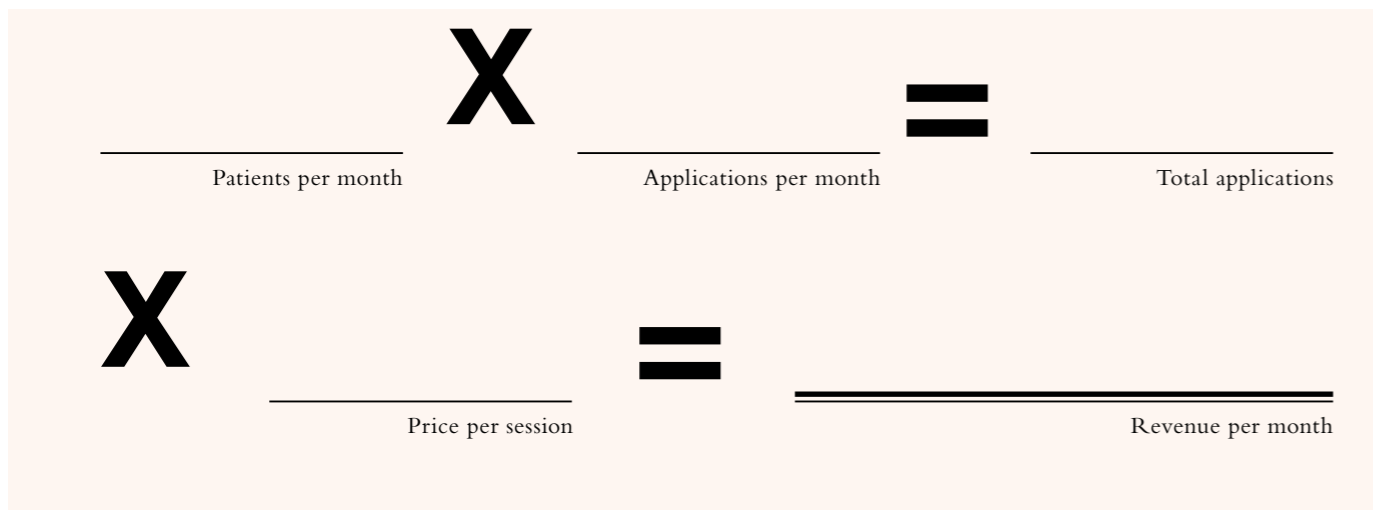
## \*RETURN ON INVESTMENT

### → A STRAIGHTFORWARD CALCULATION

JUST A FEW TREATMENTS EACH MONTH, AND SWISS DOLORCLAST®VET  
ALREADY PAYS OFF FOR YOUR PRACTICE

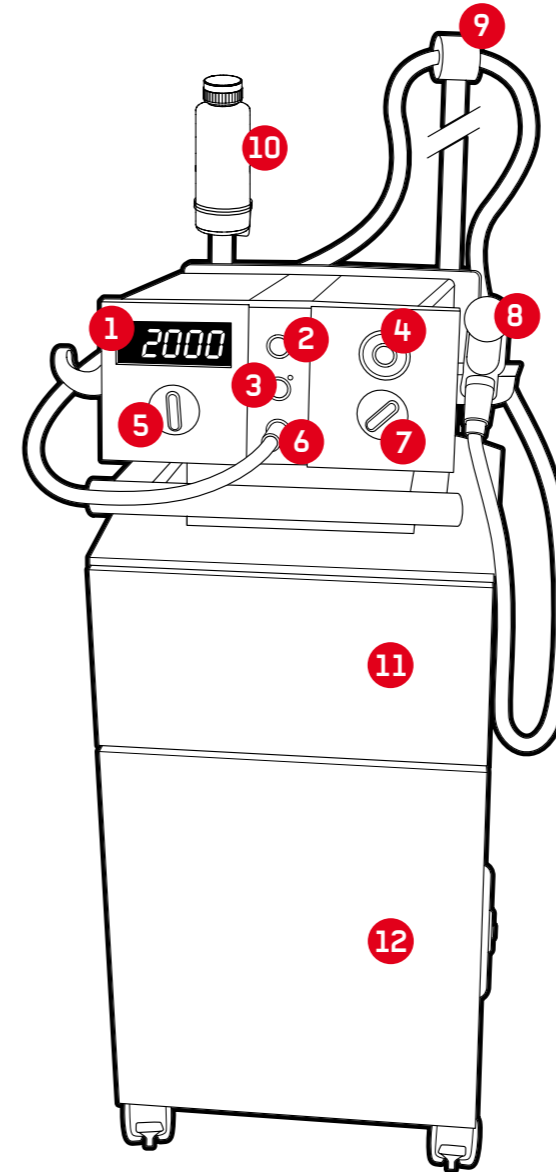
- > EMS will help you calculate your return on investment for your practice.
- > Find out from your EMS representative about market potential, suggested charge per session, tailored financing or leasing plan, and the number of new clients you could recruit by offering Swiss DolorClast®Vet treatments.
- > As a Swiss DolorClast®Vet customer, you will receive quality customer service and assistance, customer hotline, complete documentation, quick response to requests for repair, and personalized customer support.
- > Short-term amortization will impress you. So will the success of the treatment.

## YOUR POTENTIAL REVENUE →



## SWISS DOLORCLAST®VET

- INDICATIONS: ALL
- FREQUENCY: UP TO 10 HZ
- PRESSURE: ADJUSTABLE UP TO 4 BARS
- DISPLAY: LED
- APPLICATOR: 6 MM AND 15 MM
- CART: WITH CABLE HOLDER
- HANDPIECE: WITH TRIGGER AND IMPULSE COUNTER
- WARRANTY: 1 YEAR



- 1 Display for preset and applied pulse count
- 2 “Reset” changes the pulse count
- 3 “Start” activates the pulse count set
- 4 Manometer for the working pressure
- 5 Regulator for the working frequency
- 6 Handpiece connection
- 7 Working pressure regulator
- 8 Handpiece
- 9 Cable holder
- 10 Gel bottle holder
- 11 Drawer
- 12 Compressor compartment

SWISS DOLORCLAST®VET	
Dimensions, total (w/d/h)	470x385x852mm
Surface area, cart	390x35mm
Height, operating components	845mm
Weight, total	62kg
Controls	push-button

PORTABLE VERSION AVAILABLE UPON REQUEST

**PLUG AND TREAT**

**SWISS DOLORCLAST® VET**

EMS - HIGH TECH SINCE 1981

# THE GOLD STANDARD FROM EMS →

- > EMS – Electro Medical Systems – has been setting standards in the development and production of medical devices since 1981. Each product is individually produced and tested in Switzerland – with Swiss precision.
- > EMS is one of the world's leading manufacturers of prophylactic dental devices.
- > With over 8,000 Swiss LithoClas<sup>®</sup>t devices in daily use, EMS is the world's largest supplier of intracorporeal shockwave lithotriptors for the treatment of kidney, ureteral and bladder stones.
- > With its patented Swiss DolorClas<sup>®</sup>t, EMS offers products that benefit from the expertise and experience with pneumatically generated shockwaves. Since its market introduction in 1999, Swiss DolorClas<sup>®</sup>t has been the reference for successful pain therapy and has made EMS the number one in EXTRACORPOREAL Shockwave Therapy.
- > Product certification received by EMS: ISO 9001, EN 46001 (Medical Devices), GMP (Good Manufacturing Practice) and CE guidelines.
- > Like all EMS products, Swiss DolorClas<sup>®</sup>t Vet meets the highest European and international quality standards.



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