SOT
Medical Systems

Advanced
Vascular Diagnostics

Arterial and Venous
Diagnostic Solutions

ISO 13485 M-166

Made in **Austria**

www.sot-medical.com

SOT Medical Systems

SOT Medical Systems is engaged in medical business since more than **37 years** within Austria as well as internationally. In 1991 the family-owned company started operating in the fields of angiology, phlebology and cardiology.

Since 1999, a system for the fast and reliable diagnosis of PAD patients has been developed:
The **AngE – AngioExperience**™ System.

Due to its modularity, it constitutes the ideal expert-solution for angiologists, phlebologists, vascular surgeons and for the diagnosis of diabetic patients.

"We Support General and Specialist Practitioners to Early Detect Blood Flow Disorders and to **Prevent Amputations**."

Karl Glantschnig
CEO

ISO 13485 M-166

Made in Austria

Our AngE products have been developed, produced and assembled at our headquarters in Carinthia, Austria since the beginning. While doing so, we pay close attention to observe the highest quality standards (in compliance with ISO13485:2016) and invest steadily in the research and development of our leading vascular diagnostic systems.

As **Austrian family business**, we put our focus on providing sustainable solutions and the highest service quality to hospitals, clinics and doctors as well as on creating long-term and fulfilling jobs within our home region.

Modular and Upgradeable

The AngE-System is conceived as **modular solution** for vascular and cardiovascular diagnostics.

This enables us to provide **custom-made configurations** that can be adapted to individual diagnostic requirements at any time.

	AngE™ Phlebo	AngE™ ABI+	AngE™ COMPLETE
	2-Channel Arterial and Venous PPG Page 3	1-Minute Vascular Screening Page 5	Fully equipped Vascular Diagnostics Lab Page 9
Patient Management	●	●	●
Venous & Arterial PPG	●	optional	●
Temperature Recording	●	optional	●
TBI and Toe Pressure	optional	optional	●
ABI, PWV and PWI™	optional	●	●
4-Channel Oscillography		●	●
Heart Rate Variability		optional	●
4-Channel Segmental Oscillography		●	●
8-Channel Segmental Oscillography			●
Venous Occlusion Plethysmography			●
Bidirectional Doppler			●
Phlebodynamometry			●

Your **Advantages** when choosing SOT

Flexibility

A modular system guarantees a well-fitting and future-proof investment.

Excellent Support

Our product experts will help you with remote support without any waiting time or ticket system.

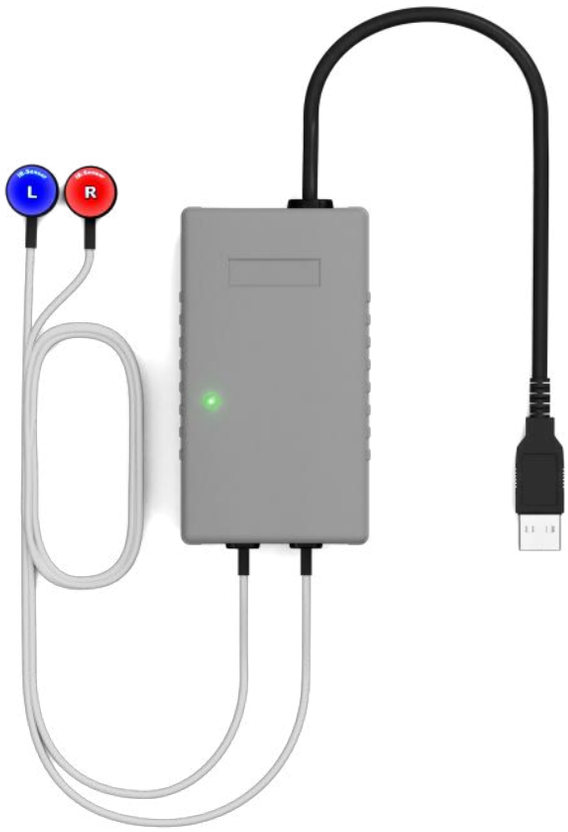
37 Years of Experience

We are experienced vascular experts and will assist you before and well after buying.

SOT Medical Systems

AngE™ Phlebo

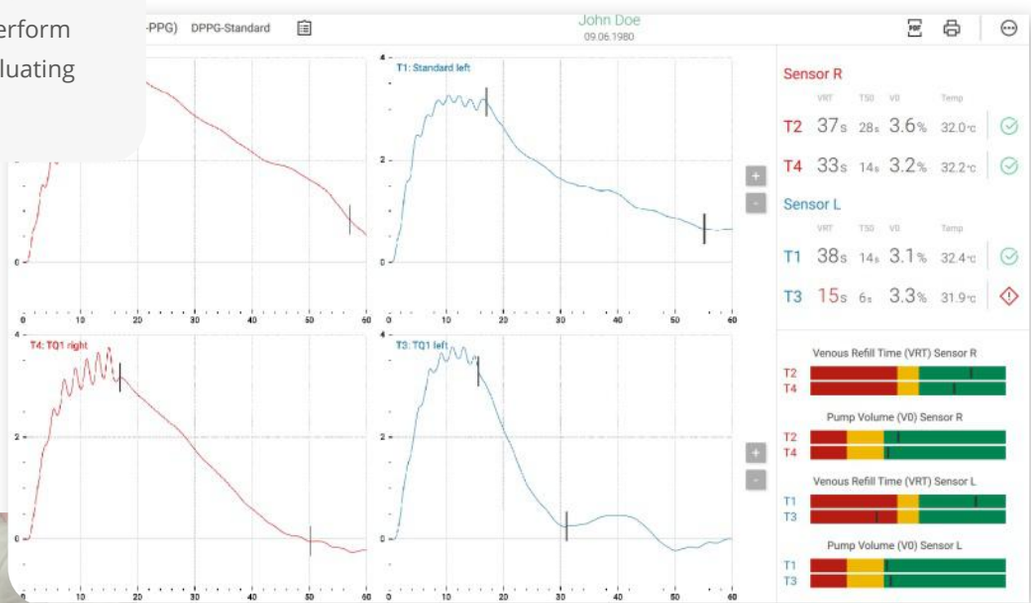
Venous Measurements in Pocket Size

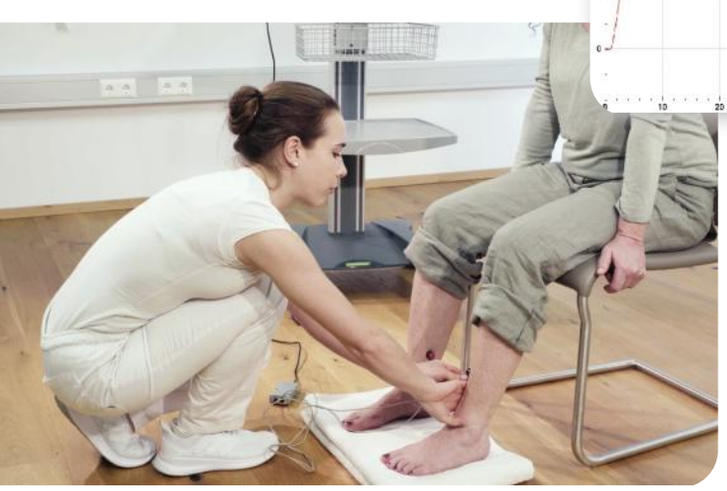


- Assessment of
  Chronic Venous Insufficiency - CVI
- 2 Optical USB-Powered PPG Sensors
- Temperature Probes

Venous Function Tests

The AngE Phlebo is a 2-channel D-PPG/LRR device that uses two IR-sensors to perform venous function measurements, evaluating **Muscle Pump** and **Venous Valves**.





Two times 2-channel Venous Function Test (without and with Tourniquet) with determination of Pump Volume (V_0), Fill Time (T_0), Half-Life Time (T_{50}) and Temperature.

See how it's applied

Access Videos, Report Samples and More

Pump Volume and Vein Fill Time

Automatic calculation of the pump volume (V_0), the venous fill time (T_0), as well as the venous half-fill time (T_{50}).

The simple traffic light display allows for a fast assessment of **Chronic Venous Insufficiency – CVI**.

Deep and Superficial Veins

With the included set of Tourniquet cuffs and manual manometer pump, the system can differentiate between **superficial and deep** venous problems.

*"The **AngE Phlebo** is the state-of-art, haemodynamically significant D-PPG system for venous diagnostics. This non-invasive functional investigation has always helped me accurately examine venous disorders, even with complex cases."*

Dr. Alfred Obermayer

Head of Institute of Functional Phlebologic Surgery, Karl Landsteiner Society

AngE™ Basic ABI

Arterial Microcirculation Add-On

Micro- and Macrocirculation

Acral oscillography allows to measure the micro- and macrocirculation in fingers and toes to determine **ABI**, **TBI** and **Wound Healing Success**.

Raynaud's Syndrome

The simple and fast measurement before and after suitable provocation maneuvers facilitates the differentiation between vasospastic effects and manifest blood flow disorders.

Thoracic Outlet Syndrome (TOS)

By applying different postural positions, the TOS diagnosis allows determining motion-dependent blood flow restrictions within the arms efficiently.

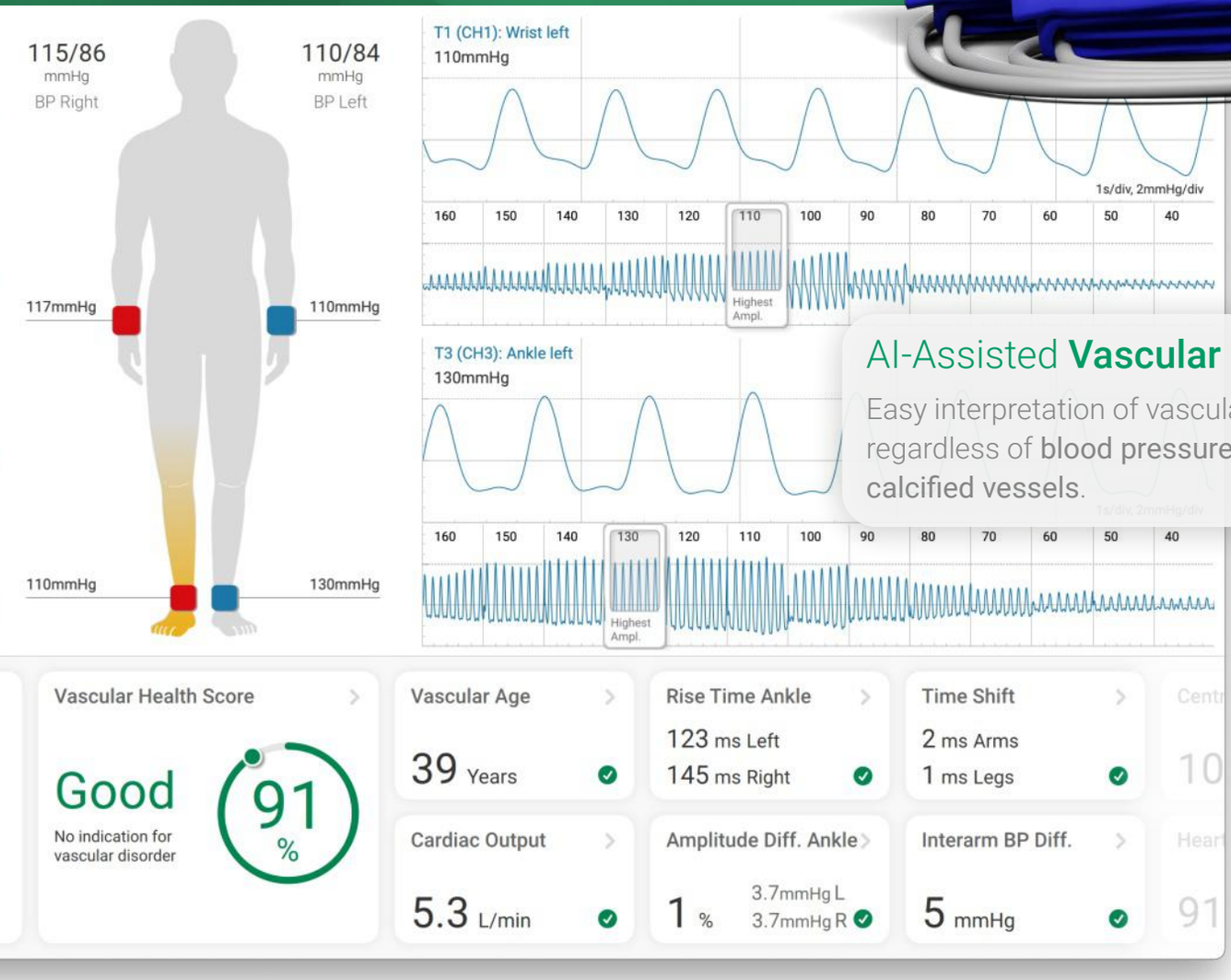
See how it's applied

Access Videos, Report Samples and More

SOT Medical Systems

AngE™ ABI+

- Easy to Use and Evaluate
- Peripheral **Arterial** and **Venous Tests**
- **macOS** and **Windows** compatible – store directly to EHR/PACS



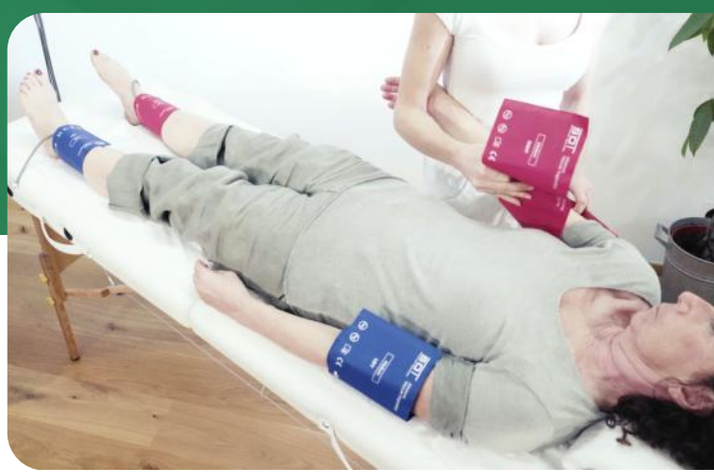
AI-Assisted **Vascular Score**

Easy interpretation of vascular health, regardless of **blood pressure** or **calcified vessels**.

4-Channel simultaneous Pulse Wave Recording on Arms and Ankles.

Vascular Health Screening

in just **1 Minute**



Included Parameters

ABI – Ankle Brachial Index

PWV – Pulse Wave Velocity

PWI™ – Pulse Wave Index

Segmental Pressures

Finger & Toe Circulation

Optional: **TBI** & Systolic **Toe Pressure** with Skin Temperature

Optional: **HRV** – Heart Rate Variability & ECG

Related Conditions

PAD – Peripheral Arterial Disease

Atherosclerosis & Arterial Stiffnes

Limb **Ischemia**

Interarm Blood Pressure (IAD)

Diabetic Foot Ulcera

Arhythmic Heartbeat

TOS – Thoracic Outlet Syndrome

Raynaud's Syndrome

Mobile trolley and tablet computer optional.

See how it's applied

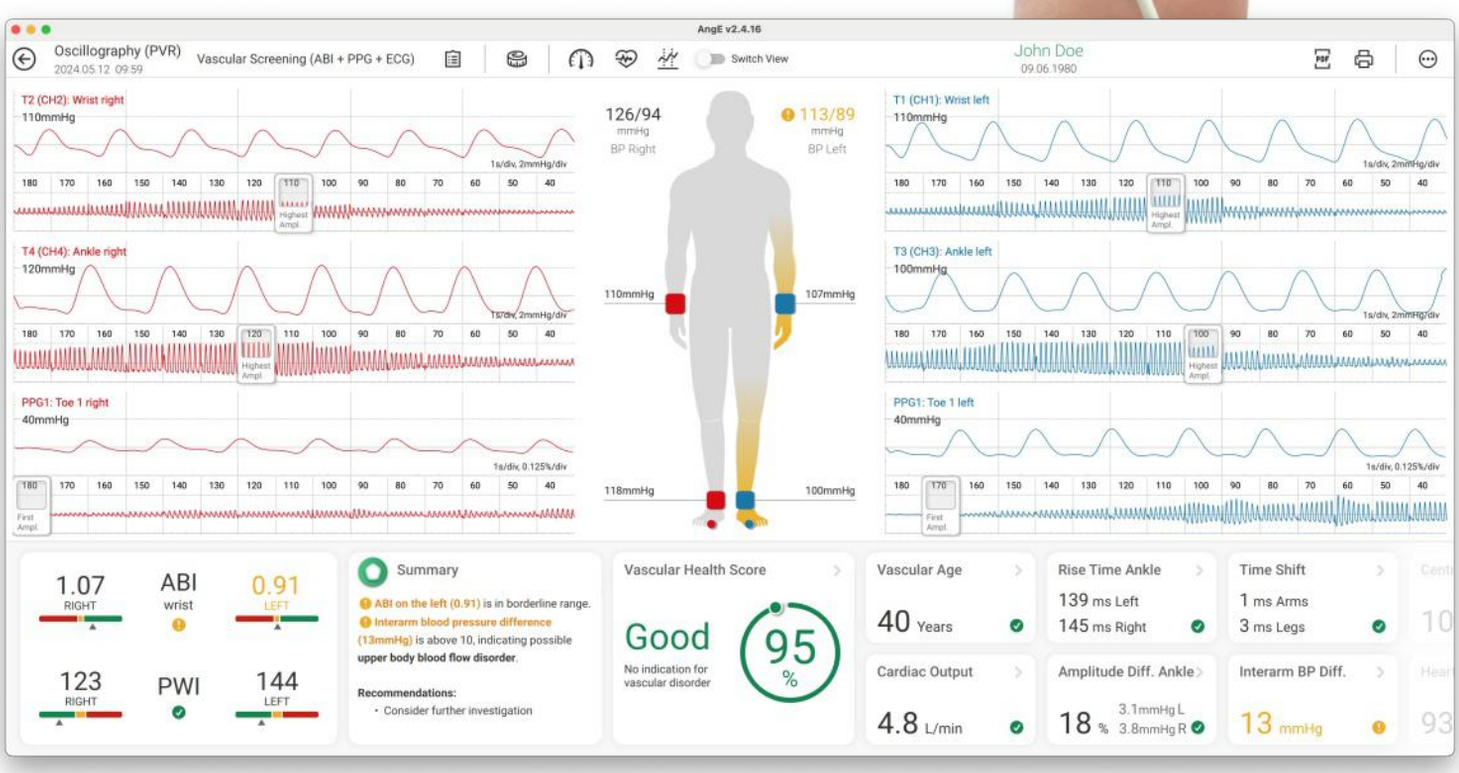
Access Videos, Report Samples and More

SOT Medical Systems

AngE™ ABI+

Comprehensive Vascular Screening

- Early **Diabetic Foot detection** in under 3 Minutes
- Determine **ABI**, **TBI**, **Toe Pressure**, Pulse Wave Velocity, Heart Rate Variability and more
- **Blood Pressure independent** PWI™ – Pulse Wave Index
- **Micro- and Macrocirculation** to estimate Wound Healing success.



6-Channel Simultaneous Pulse Wave Recording on Wrists, Ankles and Toes using the TOPP-Method (Tissue Optical Perfusion Pressure).

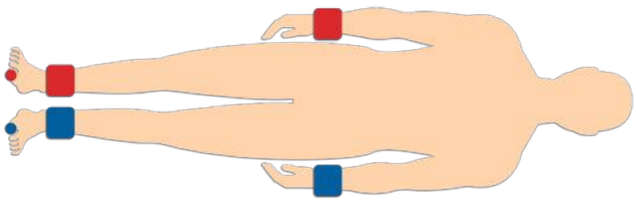
Comprehensive Screening

AngE ABI+ combines four measuring cuffs and two optical sensors to enable the measurement on **six measuring spots** simultaneously.

This creates diverse possibilities to detect blood flow disorders within the terminal vessels as well as to assess the wound healing success, especially in diabetic patients.

Simple 3-Minute Measurement

The measurement can be conducted easily by following only a few steps and without significant stress for the patient.



2 PPG Probes, 4 Cuffs & ECG

"The high sensitivity of the optical sensors allow for a good documentation of the pulse waves, even with marginal blood flow. Given the virtually unfiltered display of pulse curves, dicrotic waves can be clearly identified for healthy and elastic arteries."

Dr. Alfred Obermayer

Head of Institute of Functional Phlebologic Surgery, Karl Landsteiner Society

See how it's applied

Access Videos, Report Samples and More

AngE™ COMPLETE

The All-in-One Vascular Diagnostic System

Cardiovascular Testing

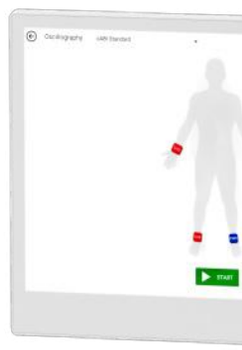
By recording the R-wave it allows the calculation of **Heart Rate Variability** and **Pulse Wave Velocity**.

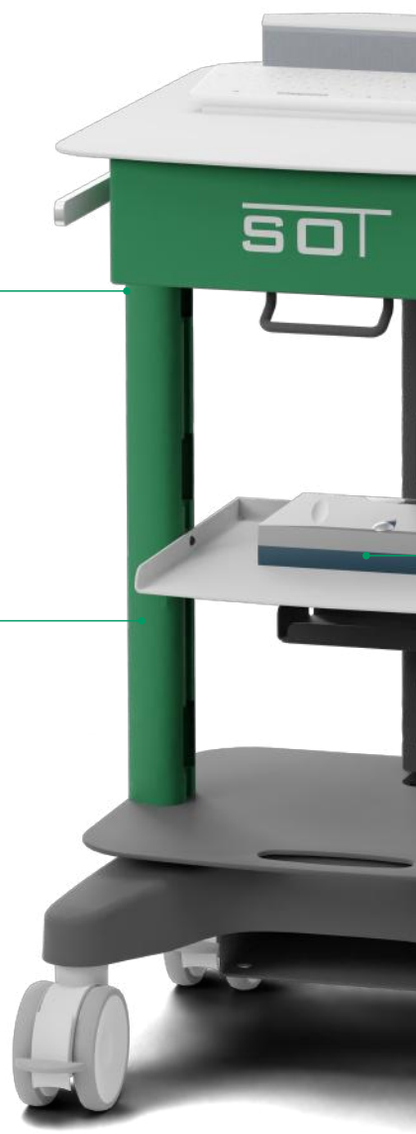
PPG-Sensors

Optical sensors for venous and arterial measurements of the **microcirculation**.

Phlebodynamometry

Invasive venous- and compartment pressure measurements with one or two channels.





8-Channel Segmental Oscillography

Each measuring track can be recorded and evaluated separately.

This allows for the **localization of occlusions** as well as fully automated calculation of pulse wave parameters within 45 seconds.

Venous Air Plethysmography

Conduct plethysmographic measurements and perform **Reactive Hyperemia Tests** by using cuffs only.

The often used mercury-filled strain gauges become unnecessary.

Multiple Cuff Sizes

AngE COMPLETE comes with a variety of cuff sizes, suitable for every patient type and medical condition, such as **lymphatic legs**.

8-Channel Oscillography

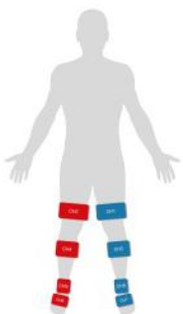
The **AngE Pro 8** allows recording pulsations simultaneously or segmentally with up to eight cuffs at the same time.

4 and 8 MHz Doppler

Conduct Biderectional Doppler pressure measurements on up to **16 individual arteries**.

DICOM and HL7 compatible

The AngE Software provides out-of-the box compatibility with **DICOM and HL7** interfaces for easy connection to the Hospital Information HIS/EHR system.



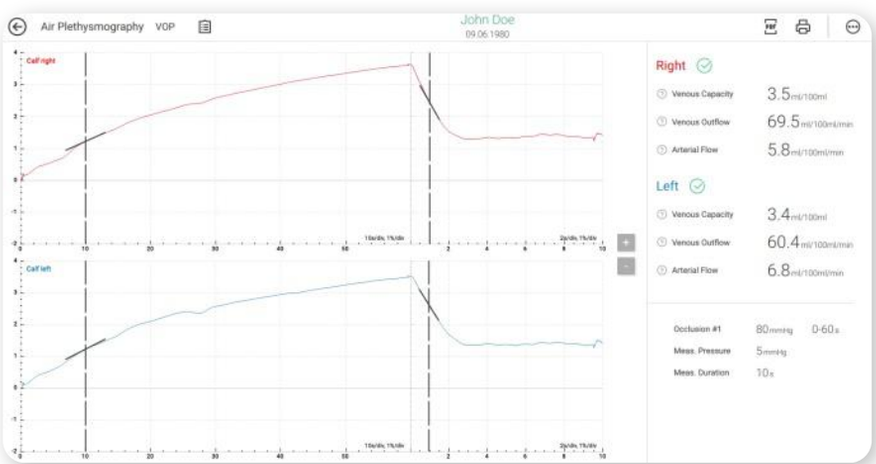
Multi-Channel Stress Tests

Through the simultaneous or segmental measurement on up to 8 cuffs, **active and passive stress tests** can be performed in a minimum of time.

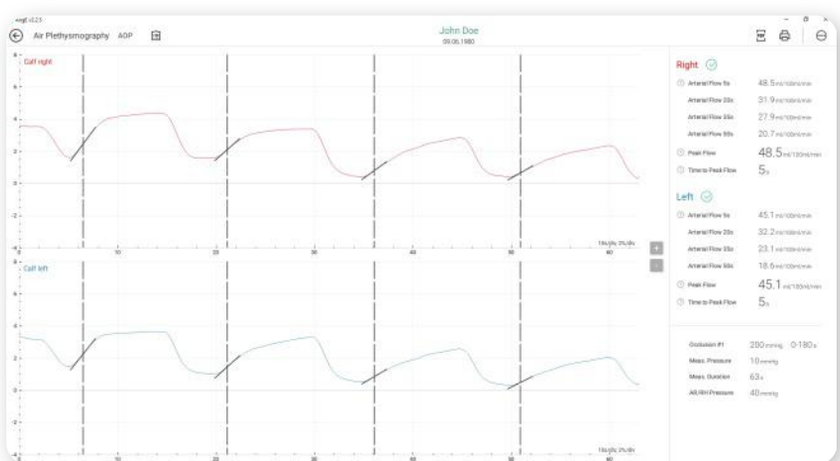
AngE™ VOP

Venous Occlusion Plethysmography

- **Deep Vein Thrombosis (DVT)** using pressure cuffs only
- **Cost saving**: No mercury-filled strain gauges needed
- Measure **Venous Capacity** and **Arterial Inflow**, even above bandages



VOP – Venuos Occlusion Plethysmography



AOP – Arterial Occlusion Plethysmography (Reactive Hyperaemia)

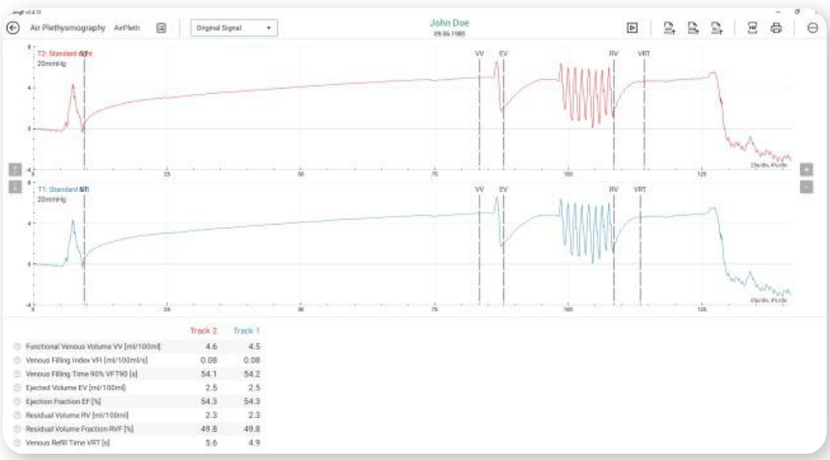
VOP – Venous Occlusion Plethysmography

The AngE VOP evaluates the current status of the **venous capacity** and the **venous drainage**, therefore assessing the probability of a **Deep Vein Thrombosis (DVT)**.

Reactive Hyperaemia Test

The Reactive Hyperaemia Test is used as a passive stress test to clarify patients more precisely, by determining the **peak-flow** and the **arterial inflow** from the measured values.

While performing a VOP test, cuffs are applied on thighs and calves. The legs of the patient are positioned over heart height. The thigh cuffs inflate up to 80mmHg in order to prevent the venous blood flow and not to affect the arterial blood inflow. At the same time, the calf cuffs act as highly sensitive sensors.



Dynamic Air-Plethysmography

The venous Air-Plethysmography is a dynamic venous measurement that determines the maximum **venous capacity** as well as the **venous back flow**.

See how it's applied

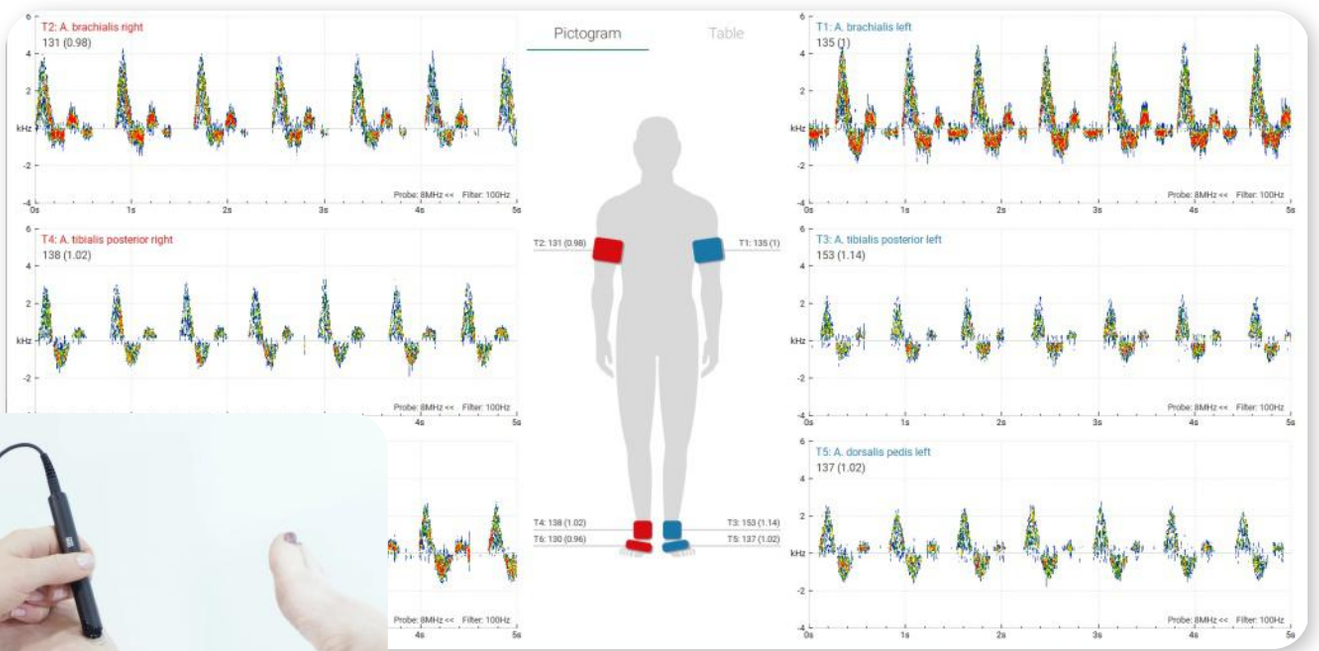
Access Videos, Report Samples and More

SOT Medical Systems

AngE™ Doppler

Bidirectional Doppler Pressure Measurements

- Record Doppler Indices on up to **16 tracks**
- Bidirectional **4 and 8 MHz Probes**
- Automatic application of the dynamic pressure via oscillographic cuffs



Comprehensive Report

The AngE combines ultrasonic probes with pneumatic cuffs to allow Doppler pressure measurements with up to 16 tracks. The Doppler indices can be displayed at a glance on a dedicated overview report.

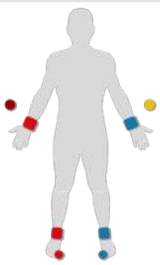
See how it's applied

Access Videos, Report Samples and More

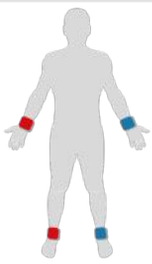
Test Protocols

Included and Extendable Measurement Methods

The AngE vascular diagnostic come with several predefined test protocols that can be adapted easily to your needs. The comprehensive software allows to combine , customize and create unlimited measurement protocols and reports.

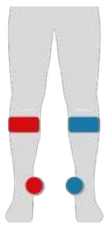


Vascular Screening
ABI, TBI PWI™ and Score

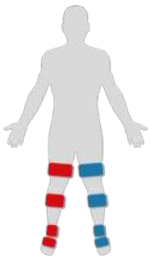


ABI
Ankle Brachial Index

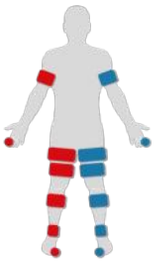
TBI
Toe Brachial Index



CVI
Chronic Venous Insufficiency

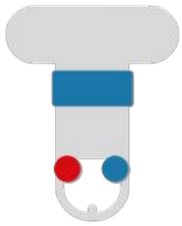


8-Channel Seg.
"Swiss Method"

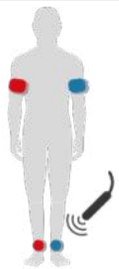


SBP
Segment Blood Pressures

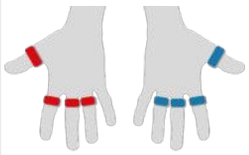
VOP
Venous Occlusion Plethys.



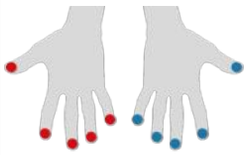
Erectile Dysfunction
PBI – Penile Brachial Index



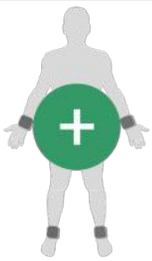
Doppler
Bidirection 4 and 8 MHz



Raynaud's Syndrome
Morbus Raynaud Test



Microcirculation
Toe and Finger Flow



Customize
Protocols and Reports

AngE Software

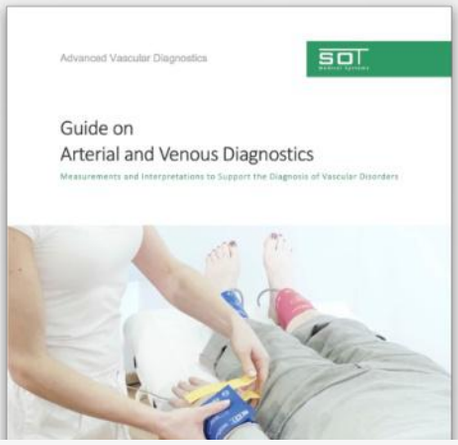
The AngE Software allows for a seamless interaction of all AngE modules while offering a central patient database. Independent of the measuring method, each measurement is assigned to the corresponding patient.

- DICOM, HL7, GDT - Interfaces
- Direct PDF export
- Comprehensive Single-Page Report
- macOS and Windows compatible

SOT Medical Systems

Advanced Vascular Diagnostics

Download your free copy of the Guide!



Vascular Academy

www.vascular-academy.com

- Workshops
- E-Learning
- Papers
- Videos

www.sot-medical.com

ISO 13485 M-166

Sonotechnik Austria Angio Experience GmbH
Alte Hollenburger Strasse 4, A-9161 Maria Rain
AUSTRIA

International: +43 4227 84 991
Germany: +49 8857 69 659

Fax: +43 4227 84 992
Email: office@sot-medical.com

Your Partner: