SVK ELECTRONICS
PRODUCT PPT

SVK Electronics
NDT Systems & Solutions

ABOUT US

We are a leading Manufacturer of NDT Products. We have a National and International Presence, and Quality is our **USP**. Established in 2006, we aim to deliver **quality, reliable, and consistent** NDT products and services to clients.

Over the **years,** we have pursued our goal of becoming a complete NDT Solution provider.

Offering Solutions For:

- Pre/Post Weld Heat Treatment
- Radiography Testing
- Digital Radiography Testing
- Ultrasonic Accessories and Testing (UT)
- Advance Ultrasonic Testing (PAUT)

Leadscreen

Our lead screens come with a protective peel-off plastic film, ensuring they reach you in perfect condition. Crafted on a strong, defectfree photographic base card, they're flexible and resistant to cracking, even when bent repeatedly.

Thickness	0.1MM and 0.125MM
Size	12x25 inches (30x40 cm)

Lead Marker

Need to label your X-ray films clearly and accurately? These markers are designed for easy identification during exposure, helping you keep track of job numbers, segments, company names, and directions.

Available options include :

Lead letters	A to Z
Lead Numbers	0 to 9
Lead Arrows	4 Types
Backscatter	B for Backscatter
Sets	Date, Month and Year

Lead Marker Tape

This versatile tape is perfect for situations where applying lead characters directly onto objects is challenging. It is easy to apply and ensures clear identification of pipes and vessels.

Available In	In Various Metric Systems, including Meter and Foot Mesurement.
Spacing Options	1” , 2” , 1 cm, 2 cm, 5 cm, and 10 cm

Image Quality Indicators (IQIs)

Other Name	Penetrameter
Purpose	Visually assess the contrast sensitivity and definition of a radiograph
Function	Radiographs maintain high definition, preventing density changes from being obscured by unsharpness
Importance	Provide a reference point to maintain consistency and quality, ensuring defects do not go undetected.

Wiretype

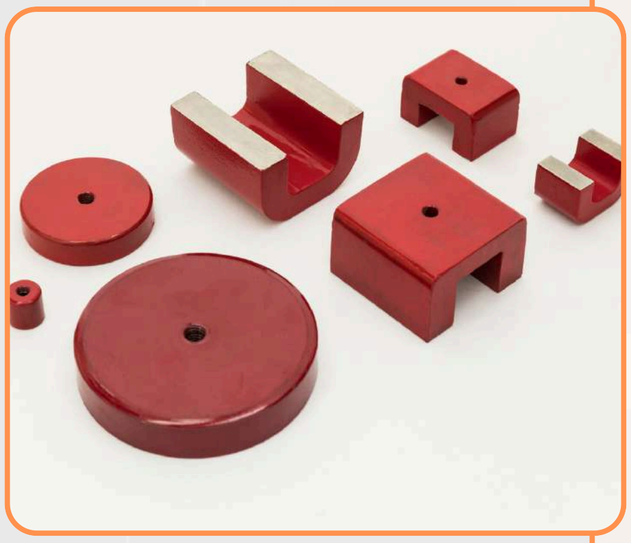
Standard	Conform to ASTM, DIN, EN, and ISO standards
Materials	Available in steel, aluminum, copper, titanium, and more
Manufacturer and Supply	Highquality production and reliable supply

Hole Type

Standard	Conform to ASTM and EN standards
Materials	Available in steel, Inconel, aluminum, copper, and more
Manufacturer and Supply	Highquality production and reliable supply

Hangers

Purpose	Hold films during developing and drying processes
Materials	SS 304 and SS 316
Size	Available in various sizes
Designs	Channel type and clip type configurations



Magnet & Magnet Stand

Purpose	Hold film and guide tubes during radiography.
Types	Available as both assembled and full magnets
Shapes	U-shape and round shape
Size	Available in various sizes

PVC Cassette

Material	PVC (Polyvinyl Chloride)
Function	Used to hold film during exposure
Variety	Manufactured in various sizes to meet customer needs
Types	Available in Velcro and innerouter configurations
Protection	Safeguards film from damage and light exposure

CEE VEE Tong

Purpose	Used for handling isotopes and pigtails during radiography
Safety	Ensures personnel safety by safely picking up radiation sources or pigtails from a distance in case of accidents
Length Available	1 meter, 1.5 meters, and 2 meters
Manufacture and Supply	Reliable production and supply of Cee Vee Tongs

Collimators

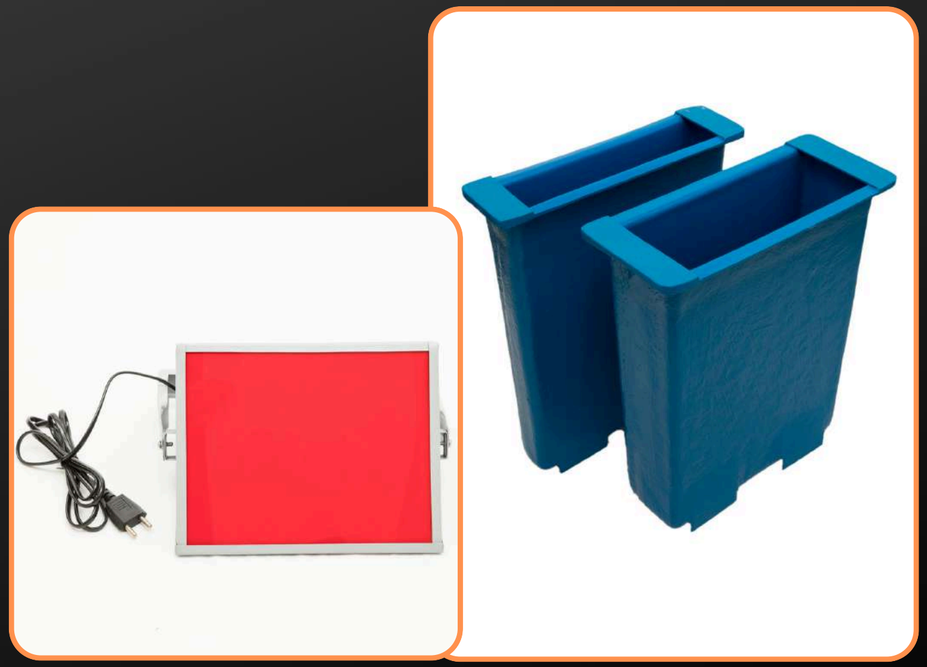
Function	Used to narrow a beam of particles by aligning their directions of motion or reducing spatial cross-section (collimated or parallel)
Types	Specialize in manufacturing both Panoramic and Directional types
Materials	Available in Lead or Tungsten
Applocations	Designed for various types of projectors

Film Viewer

Function	Essential for viewing, interpreting, and analyzing high density films
Light Sources	Available with CFL (Compact Fluorescent Lamp) and LED (Light Emitting Diode) options
Variety	Manufactured in various sizes to accommodate different needs
Importance	Provides adequate illumination for detailed inspection of radiographic films

Radiation Warning Sign Board

Purpose	Alert personnel of radiography work in progress and ensure safe distances are maintained
Formats	Available in flag type, stickers, and barrier tape
Languages	Offered in multiple languages including English and Arabic
Safety	Essential for maintaining safety protocols during radiographic activities



Developing Accessories

Safe Light	**Purpose**: Used in darkrooms to view films safely without exposure risk.
Developing Tanks	1. **Function:** Essential for holding chemicals and water during film development. 2. **Materials:** Available in stainless steel and fiber. 3. **Sizes:** Range from 2 to 10 gallons, catering to various processing needs. 4.

FLAT PANEL DETECTOR

Flat Panel Detectors, also known as digital detector arrays (DDAs) provide high-quality digital images compared to other imaging devices.

They can have a better signal-to-noise ratio and improved dynamic range, which, in turn, provide high sensitivity for radiographic applications.

Features :

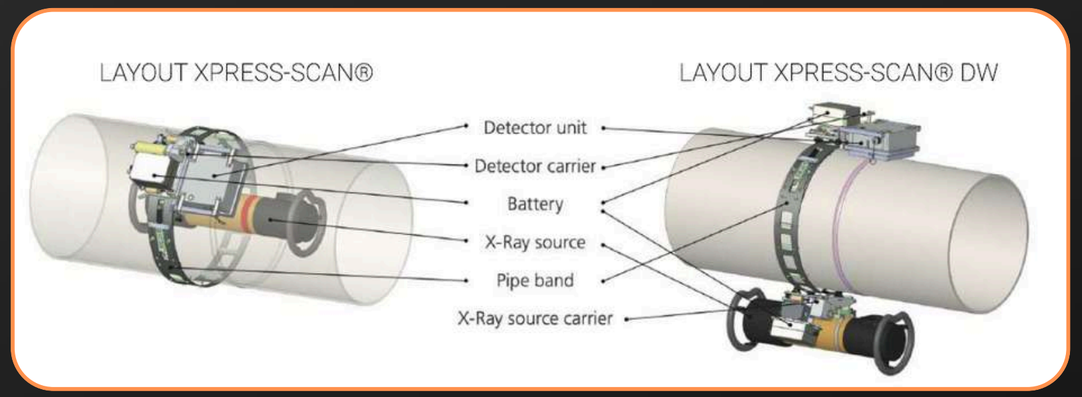
- Better Resolution up to 75 Microns
- Higher Contrast for Better Detection
- Static & Dynamic Imaging
- All the Benefits of Digital Data Processing, Storage, and Transfer.
- Battery Operated for Field Inspection
- Rugged Case for all Weather Operations
- Lower Radiation Dose.
- Available with all necessary accessories
- Available in Multiple Sizes

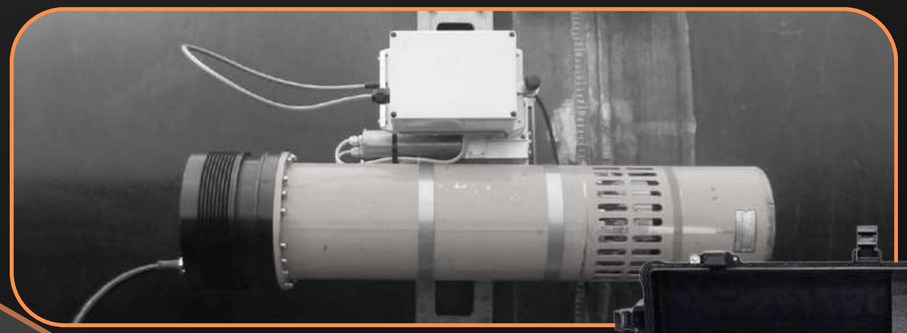
FLEXIBLE DETECTOR

The Flexible Detector is a system designed to eliminate image distortion of curved control objects, which is believed to be the biggest limitation of ordinary digital flat panel detectors. It will meet the maximum needs of the NDT market professionals.

Features :

- The Flexible Detector is used to cover Small DIA Tubes & Pipes.
- Designed to Eliminate Image Distortion of Curved Control Objects
- Available in 99 microns with 7 hours of Battery operations
- Supports both Wire/wireless Operation Lightweight, IP67, Internal Memory, and Highest Durability





AUTOMATED DR SCANNER

The Automated Dr Scanner is a Digital Radiography Testing Machine designed for SWSI & DWSI and various diameters. It is an advanced mobile digital radiography system used for single- or double-wall inspection of annular pipe welds from 273 mm (10 inches) and more in pipeline construction, maintenance, or repair.

Features :

- Higher throughput with One Click operations
- Compatible with all major X-ray sources &
- crawler
- IP67
- Battery Operated
- Wireless Data Transfer
- External Storage under the DICONDE Protocol

LV75

LOW VOLTAGE HEAT TREATMENT
UNIT WITH PID CONTROL

The 75 kVA heat treatment unit has been robustly constructed to provide power to electrical resistance heaters at 60 volts, suitable for site and shop working. It is specifically designed for localized Pre and Post Weld Heat Treatment using Electrical Resistance.

The output from the unit is split into six individual heating circuits for temperature control. Each output circuit has 10.8 kW of power, which is sufficient capacity for 4 standard ceramic pads rated at 2.7 kW, total 24 standard ceramic heating pads can be connected to one unit.

Each of the six circuits may be controlled individually using either energy regulators in manual mode or using PID controllers in automatic mode to gain control over rates of heating and cooling as well as soak conditions.

LV75

Protection	Overload–3-phase MCCB.
Output Connector	12x300Amp Panel Mounted Camlock 3 sockets x 230V or 110V AC with fuses. Optional Bulgin 7pin Auto Programmer
Modes	Manual / Automatic
Program Controller	Standard 6 PIDs, Optional: Master Slave, Auto Programmer
Weight	350 K.G.
Electrical rating:	75 KVA
Capacity	24x2.7kW 60V Ceramic heaters
Transformer	Air Cooled, Class H insulation
Primary Supply	380V / 415V /440V, 3Phase, 50 Hz

LV75

Input Current	Max Approximate 96A
Input Cable	4 core 25sqmm, 5mtr long cable
Switching	Albright Contactors
Output	65 Volts

Dimention	LENGTH	WIDTH	HEIGHT
	970 MM	580 MM	945 MM

PWHT HIGHT VOLTAGE CONTROL PANELS

PWHT control panels are designed and constructed for reliability, safety and longer operation on site & in workshop in rugged conditions. The unit can be designed in 3,6 or 9 channels and each can be controlled individually or in combination.

Each of the three channels may be controlled individually using either energy regulators in manual mode or using PID controllers in automatic mode to gain control over rates of heating and cooling as well as soak conditions.

HVP33

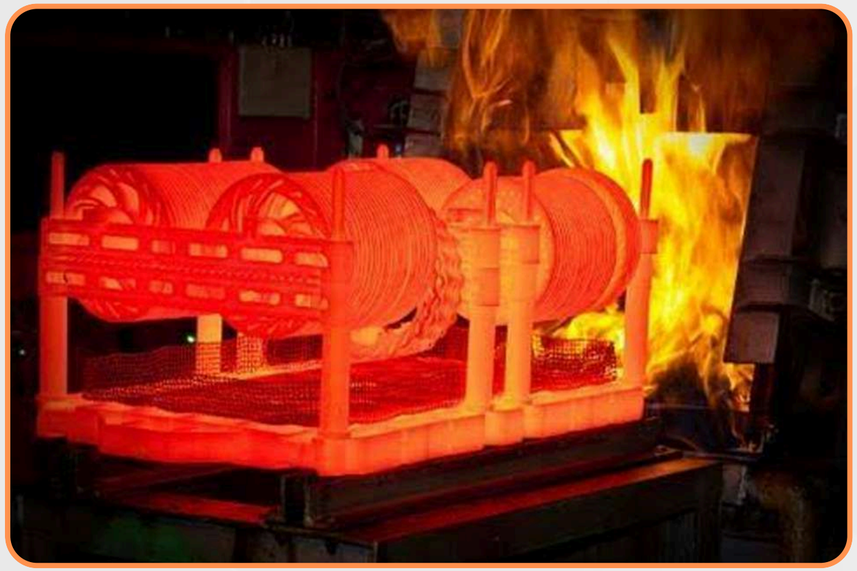
Capacity	14 kW each channel
Primary Supply	380V / 415V /440V, 3Phase, 50 Hz
Input Current	Max Approximate 50A
Switching	100 Amps Contactors
Output	230 Volts
Protection	Overload–3-phase RCCB
Output Connectector	3 x 70 Amp Panel Mounted & 1 sockets x 230V
Modes	Manual / Automatic
Program Controller	Standard 3 PIDs, Optional: Master Slave
Weight	19 K.G
Dimension	**Length:** 420mm **Width:** 400mm **Height:** 400mm

HVP36

Capacity	28 kW each channel
Primary Supply	380V / 415V /440V, 3Phase, 50 Hz
Input Current	Max Approximate 130A
Switching	MNX 80 Contractors
Output	230 Volts
Protection	Overload–3-phase RCCB
Output Connectector	6 Panel Mounted/Nut bolt connector & 1 Socket x 230V
Modes	Manual / Automatic
Program Controller	Standard 3 PIDs
Weight	22 K.G
Dimension	**Length:** 420mm **Width:** 400mm **Height:** 400mm

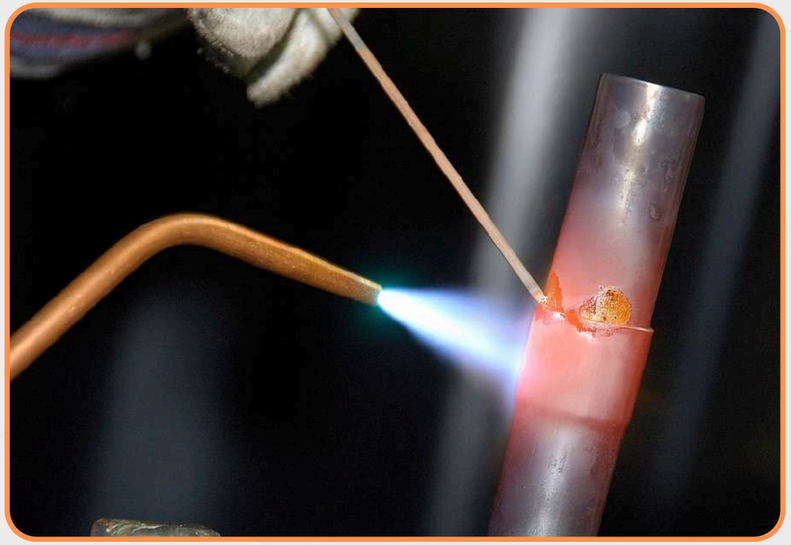
HVP66

Capacity	14 kW each channel
Primary Supply	380V / 415V /440V, 3Phase, 50 Hz
Input Current	Max Approximate 96A
Switching	100 Max Contractors
Output	230 Volts
Protection	Overload–3-phase RCCB
Output Connectector	6 nos lug Connector & 1 sockets x 230V
Modes	Manual / Automatic
Program Controller	Standard 6 PIDs
Weight	32 K.G
Dimension	**Length:** 838mm **Width**: 432mm **Height:** 432mm



Methods of SR.

- Localized Heating
- Complete Heating



Uses of Heat Treatment

- Hardening
- Annealing
- Normalizing
- Stress Relieving

Types of Localized Heating

- Resistance Heating
- Induction Heating
- Gas / Diesel Firing

INDUCTION METHOD

Features :

- Our Induction Heating Equipment is safer, faster, and more efficient.
- Materials are heated very quickly. For example, 24” x 1” thick carbon steel pipe can be preheated to 175°C in approximately 4.5 minutes.
- Simple and user-friendly. Uniform heating.
- The Rapid Heat System can also be used for shrink fit of shafts and bearings up to 3 meters in diameter.
- Lower consumable costs, lower power consumption, more than 90% efficiency, and more energy transfer into the material.

- 6 Channels – 75KVA Transformer takes 65KW of load
- 65KW 6 Channels at Full Duty Cycle
- 24 pads of 2.7KW each can be used
- 18 pads of 3.6KW each can be used
- We can also manufacture 50kW, 100kW & 130kW Equipment

Compensating Cable 3/24 (3 wires, 24 gauges)

Power Cable

- – 7/16 (Output) & 7/18 (Input)
- - 90 Mtrs rol

Triple Cable Set :

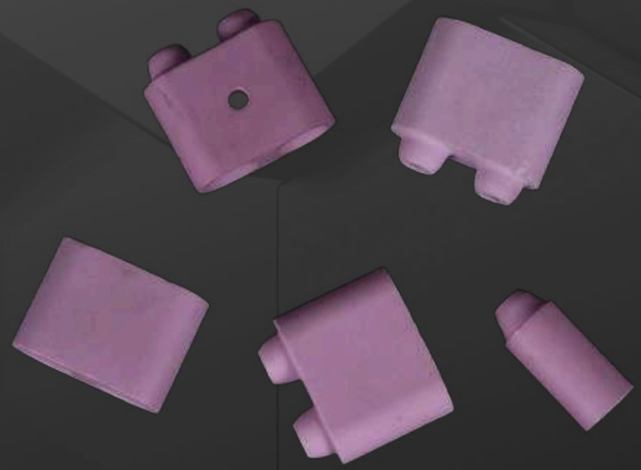
- Compensation Cable, Output Cable & Neutral Cable Output & Neutral Cable
- 25sqmm, 180amps, 25/30mtrs roll,
- HOFR material (Heat, Oil, Fire Resistance)

Compensating Cable 14/36 (14 wires, 36 gauges)

Splitter Cable

- – 3 way & 4 way, 16sqmm 45 amps HOFR material
- 3 Way Splitter Cable – 18 pads of 3.6KW each
- 4 Way Splitter Cable – 24 pads of 2.7KW each

- **Camlocks** – Brass Material, 300amps (Male & Female), 60amps (Male & Female) & 300amps Female Panel Mounted
- **Camlock Sleeves** – High temperature Epoxy Fiber Glass material (for 300amps & 60amps)
- **Camlock Pins** – for 300amps & 60 amps



Beads

1. Main Body Beads
2. Male End Beads
3. Female End Beads
4. Main Body Beads with Hole
5. Tail Beads

- NiCr (Nickel Chromium) Heating Wire – 80:20, 19 Strands
- Nickel 212 Cold Tail Wire – 7 Strands & 19 Strands
- GI Wire – Winding over Wool

Thermocouple Attachment Unit
230V/110V (DC & AC/DC)

Thermocouple Wire 800ºC K type
(Fiber Glass Sleeve)

Thermocouple
Plugs, Sockets &
Panel Mounted Sockets

Power Cable	7/16 (Output) & 7/18 (Input) - 90 Mtrs roll
Thermocouple Attachment Unit	230V/110V (DC & AC/DC)
Thermocouple Wire	800ºC K type (Fiber Glass Sleeve)
Thermocouple	Plugs, Sockets & Panel Mounted Sockets
Compensating Cable	3/24 (3wires, 24gauges), 14/36 (14wires, 36gauges)

COMMON PWHT ACCESSORIES

Nickel Chromium (NiCr)	Single Core Wire 80:20 (8, 10, 12, 14, 16 gauges)
Beads	no. 4, 5, 6, 7 & 8
Ceramic Wool	64, 96 & 128 Density (L7200mm x W610mm x T25mm)
Recorder	We can supply Chino make Analogue, Digital & Hybrid with outer casing and connections.
	Recorder Chart Z Fold Paper/Roll
	PID

KappaWave

- Dynamic 14 point DAC & TCG, DGS
- AWS D1.1 Weld evaluation
- Curvature Correction
- Two point Auto calibration
- Rapid save, reporting, video recording and playback.
- Create 2 page pdf report during mp4 conversion
- Oil & grease friendly 7 and 9 inch touchscreen display
- 18-27 hours+ Li-ion phosphate (LiFePO4) battery.
- Full PC & VGA connectivity , convert files to mp4

ULTRASONIC THICKNESS GAUGE

UDT 20

- Measurement range 0.3 - 500 mm.
- Discreteness 0.001 - 0.01 - 0.1.
- Visualization A-scan, B-scan, digital values.
- Through coat and Oxide Scaling Measurement.
- Custom probe set up.
- Data Logger.
- Data transferring software for digital values, A-scan & B-scan.
- USB Type-C.

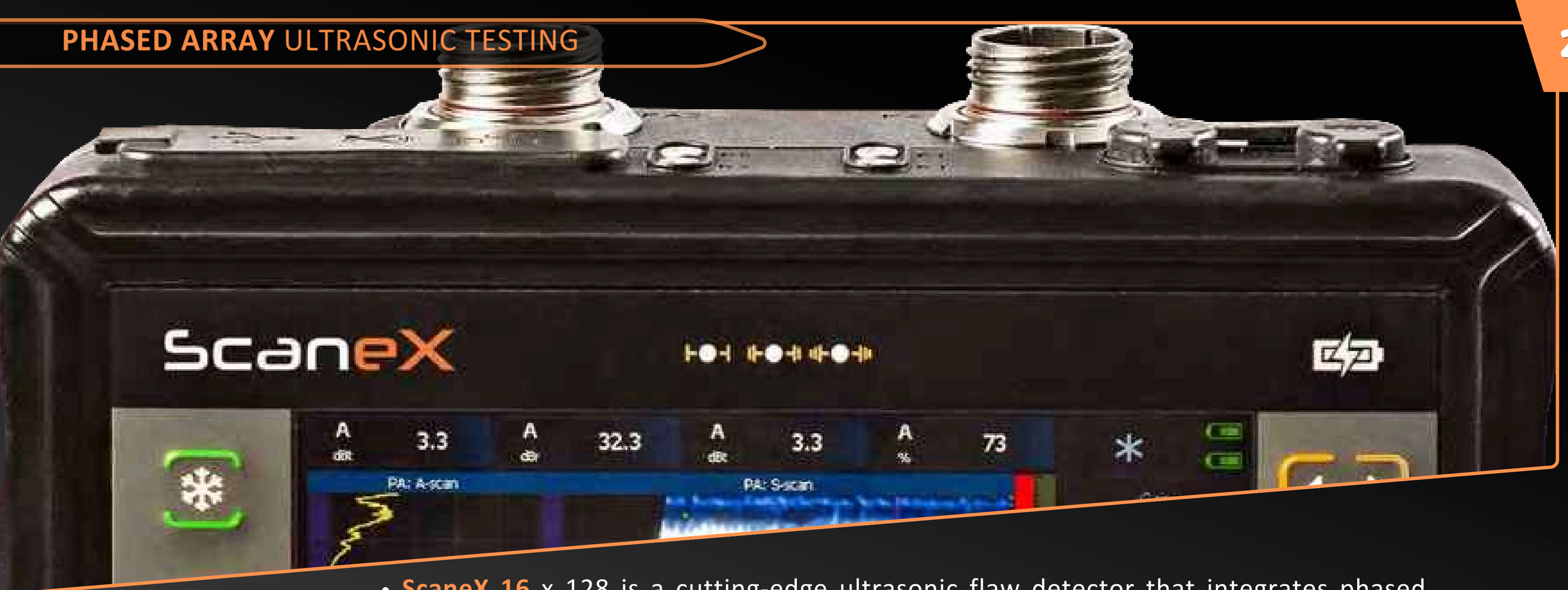
HIGH TEMPERATURE PROBE

Ionix HS582i

- **Dual element thickness gauging transducer** for use across the widest temperature range -55 to +550 °C [-67 to 1,022 °F] for in-service assets
- **Reduce inspection time** with no duty cycling or cooling up to 350 C [662 F] maximizing productivity and minimizing downtime or outages with in-service inspection.
- **Measure remaining wall thickness** from 1 to 500 mm with compatible thickness thickness gauges (2 to 50 mm echo-to-echo) on hot components, in-service without shutdown or isolation

PhaseX (PAUT + TOFD)

- Lightweight (only 1.6 kg) with 16-element phased arrays provides the highest resolution capability and image quality comparable to 32- and 64-element probes.
- TFM (Total Focusing Method).
- Sectorial (S-Scan) and linear (L-Scan) scan.
- Scanners connect ability.
- Single-channel TOFD.
- Only the Convectional Flaw Detector option is also available (Includes TOFD)



ScaneX (PAUT + TOFD)

- **ScaneX 16** x 128 is a cutting-edge ultrasonic flaw detector that integrates phased array (PA) technology with Time-of-Flight Diffraction (TOFD).
- **Different operation modes for various applications:** PA mode, Inspection mode (2 PAs), and i-Scan mode for corrosion and composites. Conventional UT mode is also available.
- **Multi Groups:** Up to 10 groups (up to 4 on each PA channel + 2 TOFD channels)
- Powerful yet lightweight (3 kg) for optimal performance.

- **Weld Wizard for easy and convenient analysis of inspection results:** The function allows the setup of weld configuration with real geometry in the system
- **Easy Scanner Configuration:** A simple and visual scanner configurator is used to set up the inspection scheme. The operator can configure simultaneous operation with up to 2 x phased array probes and 2 x pairs of TOFD.
- **Recording and Analysis Features:** The flaw detector allows scanning recording by encoder or by movement speed while building the full and detailed scan protocol.
- **Scan Plan Wizard**
- **Connectivity with automated and mechanical scanners***

ScaneX

MANUAL WELD SCANNER

Features :

- This is a single Probe Scanner that can be used for Various Applications.
- This can be used with a 2-dimensional encoder

AUTOPASCAN – SEMI AUTO WELD SCANNER

Features :

- The scanner’s unique configuration allows one-side inspection and position probes on both sides of the welds. Position of the electronics on one side of the weld guarantees stable movement independent of the weld construction ensuring smooth movement on any surface, easy crossing of longitudinal welds, and comfortable manual correction during motion.
- All movement manipulations are managed with the buttons on the scanner.
- We provide manual/semi-automatic scanners for various applications. We can also customize Scanners as per requirements

AUTOWELDSCAN – FULLY AUTO WELD SCANNER

Features :

- Girth Weld Inspection Lightweight (3.5 kg) 2-Motor Scanner with floating semi-independent suspension allows reliable data acquisition in most difficult conditions without bondage. It compensates for the irregularity of the surface and different thicknesses of weld edges.
- Allows configuration up to 2 x PAs +2 x 2 TOFD. Easy manipulation from the remote control in 4 directions.
- The fully automated version contains intellectual system for positioning the scanner on the center of weld and movement control.

ROLLSCAN – FOR COMPOSITES INSPECTION

Features :

- Phased array rolling probe for inspection of composites and other materials with straight plane surface for the detection of lamination, porosity, and thickness of the composite panels.
- Lasermark helps to keep the straight movement. The elastic material of the wheel Aqualen gives high-quality ultrasonic inspection with high resolution and good SNR.

THANKYOU FOR YOUR TIME

ANY QUESTIONS?

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info@svkelectronics.com www.svkelectronics.com