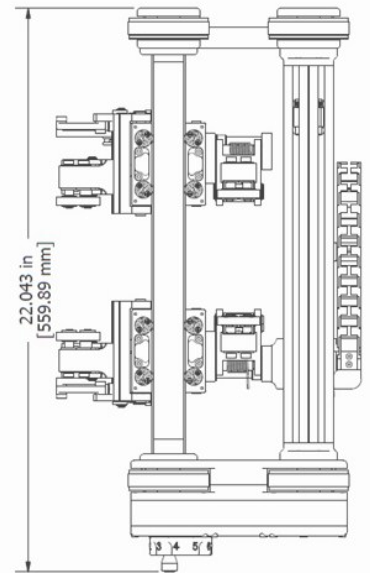
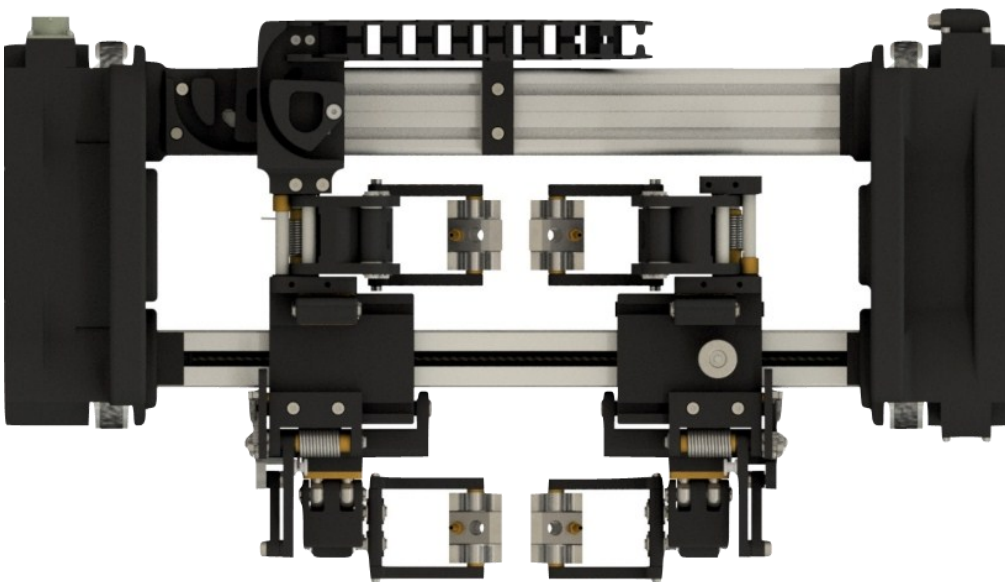




XS “Switchgear”

Configurable Corrosion Mapping System



The XS “Switchgear” System is ScanTech’s answer to the ever-growing number of applications for ultrasonic scanning. The entire system was meticulously engineered with a single purpose in mind: to design a collection of modules that could be combined into a variety of unique scanners. The XS system allows you to adapt and upgrade the scanner as your needs evolve. This reduces startup, upgrade, and maintenance costs.

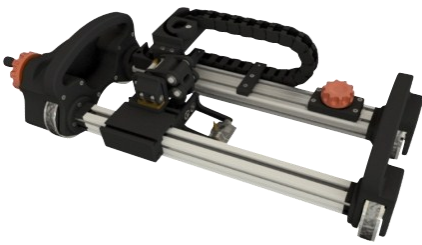
The XS scanner received its “Switchgear” nickname from the very nature of the design. There are several gear pack modules that can be interchanged to meet the needs of a variety of jobs. Different configurations allow for different length scans, manual or automatic drive, and different varieties of transducers to be combined to create your individual scanner. With dozens of combinations of modules available, we are certain that there is an XS Scanner that can fulfill your NDT needs.

System Features:

- > Custom engineered gear packs with direct coupled drive
- > Custom stroke lengths
- > Solutions for single, dual, TOFD, and phased array transducers
- > Configurable to work on vessels and pipes performing b-scans, raster scans, and weld scans
- > Precision positioning providing reliable scan maps
- > No pipe diameter adjustments required
- > High power and high torque motor drives

XS System Configurations

XSR Scanner

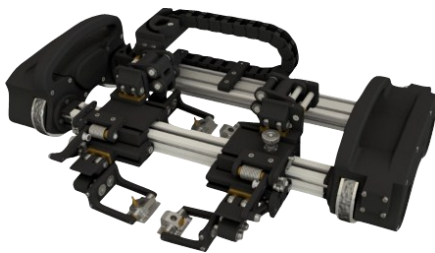


The XSR scanners are designed to handle a wide variety of scanning applications: from training and demos to fully automated raster scans. The XSR manual scanner is built with an indexing raster and friction brake to allow complete manual Phased Array scans.

Customizations:

- o Length: 300 or 600 mm
- o Number of Probes: 1
- o Transducer Types: Phased Array or Conventional Ultrasonic
- o Drive Type: Manual or Automatic

XSWR Scanner

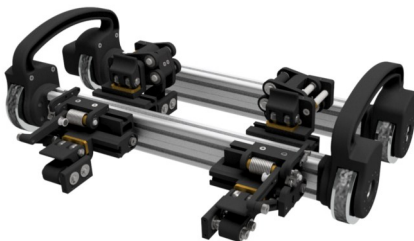


The XSWR scanner is designed for a wide range of application ranging from fully automated raster scans to automated weld scans. It has been designed to efficiently switch between the raster and weld scan configurations allowing you to quickly move between jobs.

Customizations:

- o Length: 300 or 600 mm
- o Number of Probes: 1, 2 or 4
- o Transducer Types: Phased Array , TOFD, or Conventional Ultrasonic
- o Drive Type: Manual or Automatic

XSW Scanner



The XSW scanner is specially engineered to streamline weld scans. This scanner is fully customizable and additional modules can be mounted to the scanner to meet the unique requirements of each job. This scanner has the option to mount 2, 4, or 6 probes.

Customizations:

- o Length: 300 or 600 mm
- o Number of Probes: 2, 4, or 6
- o Transducer Types: Phased Array or TOFD
- o Drive Type: Manual or Automatic

Chain Module



The chain module can be added to any of the XS scanners to allow for scanning on nonmagnetic pipelines. The chain module wraps around the pipe and latches to the scanner securing it to the pipe. It includes a quick-release latch for installing and removing the scanner from the pipeline, and a fine adjustment screw to precisely match the pipe circumference. The chain length can be customized and re-sized allowing the scanner to accommodate a wide range of pipe sizes.

Re-configurable: This line of scanner systems was built around the concept of modularity, so each of these scanners can be re-configured and upgraded to meet the specific needs of the field technician. Talk with a member of our staff today to find out how to customize the XS "Switchgear" scanner to meet your scanning needs.

Package Contents

- XS “Switchgear” Customized Scanner
- X Controller/UT Instrument with Touch Screen
- Analyst™ XR Software
- Main Cable Assembly , 100 ft (30 m)
- Rugged Transport Case (x3)
- Transducer
- WS3 Couplant Delivery System
- Notebook PC and Case
- Coaxial Cable

Additional Modules

- Probes: 1, 2, 4, or 6
- Transducers: single element, dual element, TOFD, or Phased Array
- Custom Lengths
- Manual or Automatic Drive Units
- Chain Module

Scanner Specifications

External Circumferential Pipe Diameter	~ 89 mm (3.5 in)
External Longitudinal Pipe Diameter	300 mm: 7.01 m (23 ft) 600 mm: 4.57 m (15 ft)
Weight	300 mm: ~9.1 kg (20.06 lbs)
Standard Transducer	Single element with water column or dual element with contact
Probe Angle Adjustments	Self- Normalizing
Steering	Yes
Sealed Enclosure	Yes

Drive Axis Specifications

Speed	~ 406.4 mm/s (16 in/s)
Adhesion	4x Neodymium-Iron-Boron magnetic wheels
Maximum Material Thickness	18.5 in (472 mm)

Ultrasonics Specifications

Internal Pulser/ Receiver	1x Tx/Rx or optional 2x Tx/Rx
Transducer Frequency	1-30 MHz
Maximum Pulse Rate	Application Dependent. Capable of up to 10 kHz
Pulse Voltage	-200 V
Pulse Width	8-500ns, 4ns increments
Damping	50 Ω
Receiver Gain	88dB Analog, 0.1dB increment
Filter, Waveform	1-30 MHz, 1 MHz increment LPF
Sampling Rate	100 MHz
Resolution	12 bit capture with digital gain to 8 bits
Waveform Length	Up to 16000 samples
Trigger Source	Internal or encoder-based
Transducer Range	1-30 MHz
Post-Trigger Delay	1 to 4294967296 samples, 1-sample steps
Software	~1,000,000 records @ 10 ms ea.

Controller Specifications

Dimensions	235x324x191mm (9.3x12.8x7.5in)
Weight	5kg (11lbs)
Volume	14.54L (887in ³)
Power Requirement	100-240VAC, 50-60 Hz or 12-24 VDC
Power Supply	VAC via brick power converter or 12VDC through BPS
Inputs	Remote joystick cable (optional) Cat6 ethernet cable
Outputs	Scanner control Scanner Power Encoder Signals (option)
Scan Plan Input/ Diagnostic Indicators	Color 1/4 VGA touch screen
Display	flexible, any Windows-based laptop or tablet
Connectivity	Gigabit Ethernet