MA-X VIEW 600™ Powered by Klein *BLUE* TECHNOLOGY

INTEGRATED GAP FILLER – INCREASED SURVEY EFFICIENCY - UNSURPASSED VALUE

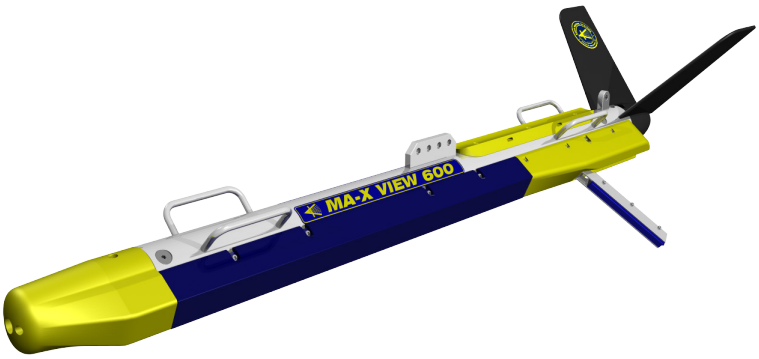
KLEIN REDEFINES MODERN SIDE SCAN SONAR, AGAIN.

Klein Marine Systems introduces the industry's first integrated single beam side scan and gap filler sonar.

MA-X VIEW 600 side scan sonar delivers unprecedented focused 600kHz imagery at an optimum range of 50 meters per side with capability of reaching 120 meters per side.

MA-X Technology (Patent Pending) provides imaging of the nadir zone (gap) with the same interpretive characteristics of side scan sonar improving survey times by approximately 40%. This means 40% less survey time at sea, 40% less fuel consumption and a higher probability to complete the survey in a window of good weather!

Superior image quality combined with an increase in efficiency provide an unmatched value proposition.



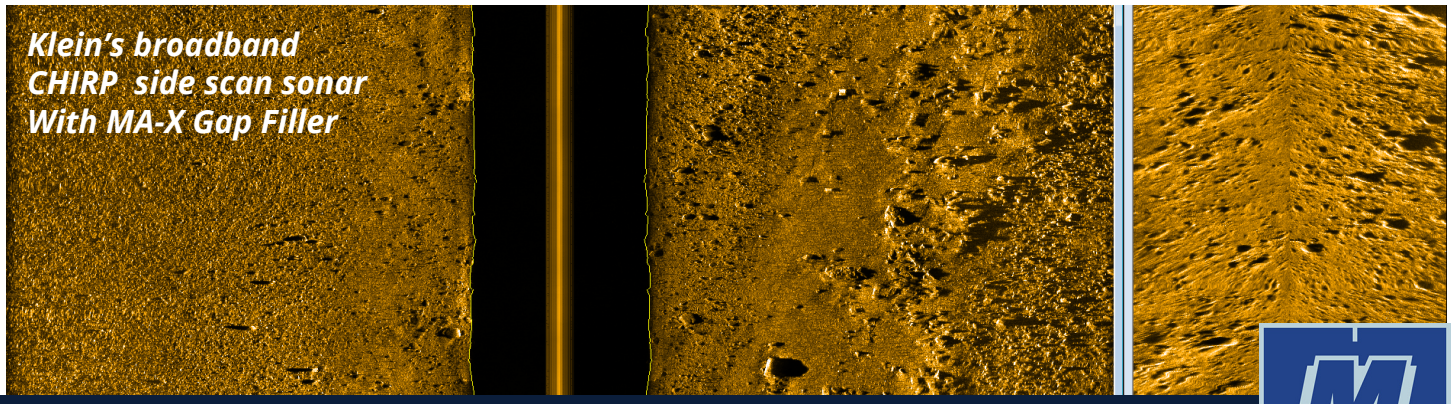
Key Features:

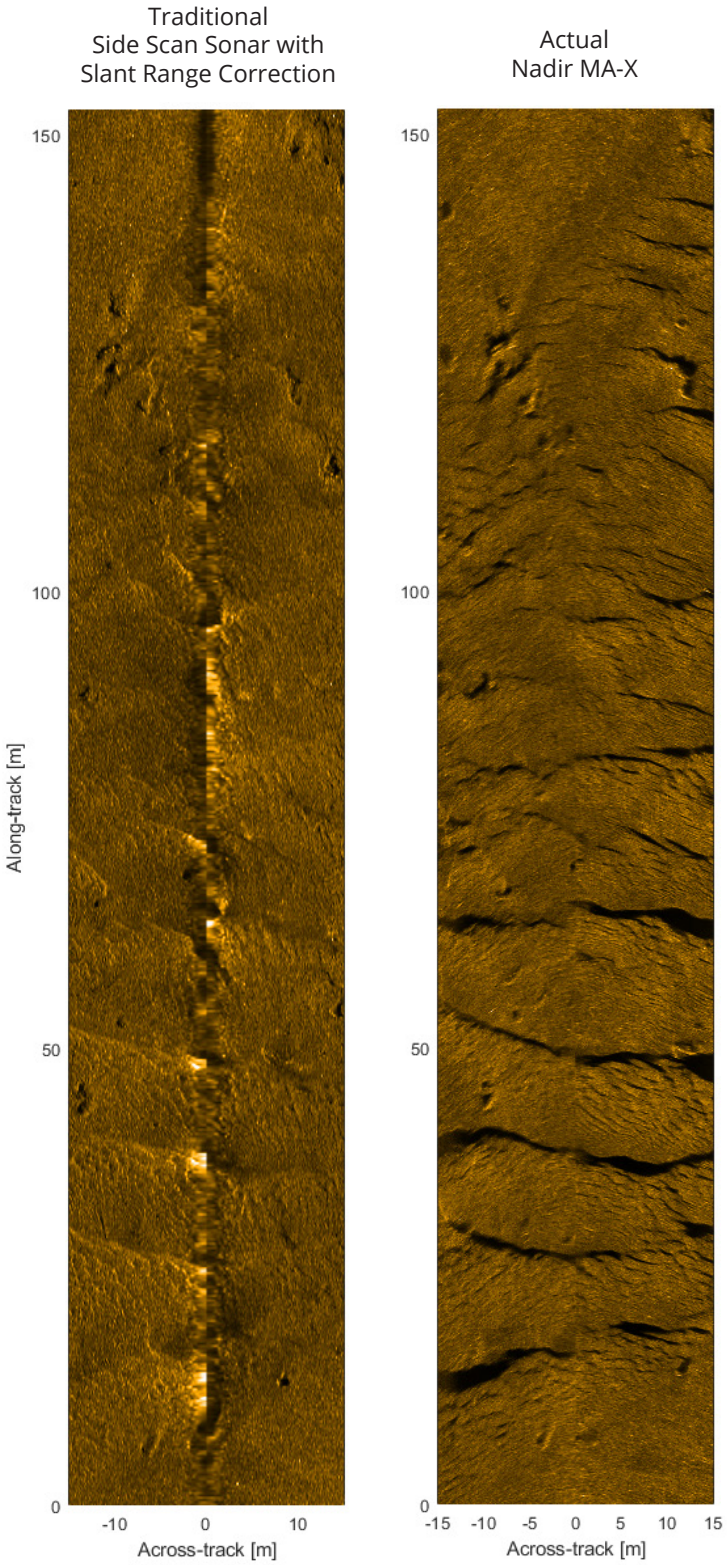
- Complete Nadir Coverage
- 40% increase in survey efficiency
- 600 kHz Side Scan/850 kHz Nadir
- Broadband CHIRP
- Klein *BLUE TECHNOLOGY* for Superior imaging performance
- Depth Rated to 300 m
- Ergonomic design and one-man deployable
- Smart Telemetry
- Operates on AC or DC Power

What MA-X VIEW 600 can do for you:

- **Construction/UXO:** Great reduction in shipboard costs.
- **First Responders, Search and Recovery and Harbor Security:** When time is of the essence, greatly reduces search time.
- **Hydrographers & Surveyors:** Maximum survey efficiency.

The Difference Is In The Image

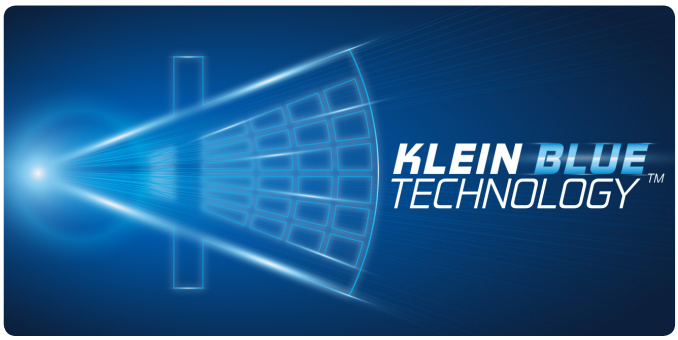




THE NADIR ZONE (GAP)

The nadir zone is the area directly below the towfish, just to the left and to the right of the towfish making up approximately 5% of the range scale. In this area the pings from side scan sonar produce very little shadow due to geometry. To perform any measurement in this area with side scan sonar, the surveyor needs to make a second pass to properly ensonify the nadir zone of the previous pass.

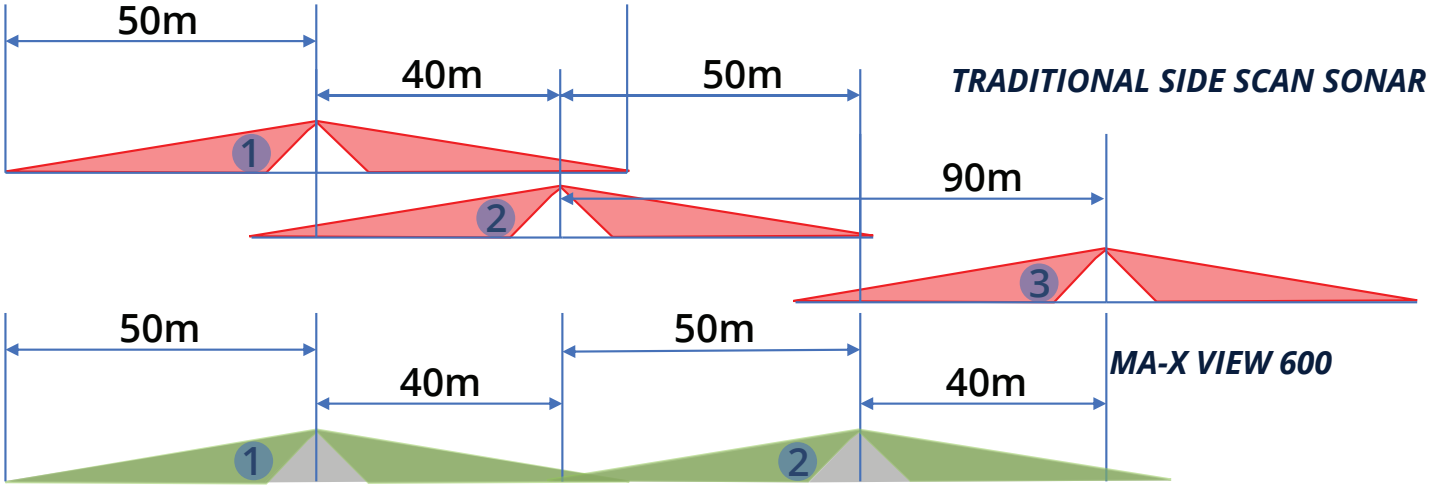
The **MA-X** technology of the **MA-X VIEW 600** generates acoustic shadows in the nadir area with the tail transducers and displays them in the **MA-X** window of SonarPro™.



Klein ***BLUE*** *TECHNOLOGY* represents innovations in transducer, signal conditioning and processing design which produces unmatched image quality and range performance.

Klein ***BLUE*** *TECHNOLOGY* design optimization achieves a new level of acoustic performance.

MA-X VIEW 600 : RAISING THE BAR FOR SURVEY EFFICIENCY



Gap filler is the "Holy Grail" of seafloor imaging -

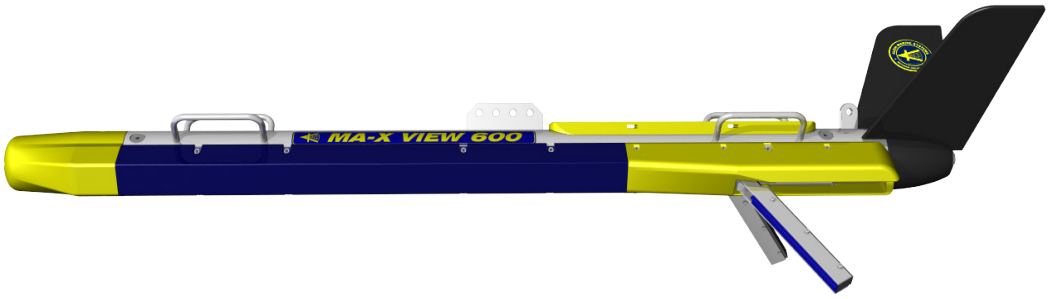
In just two passes with **MA-X VIEW 600** the surveyor achieves the same coverage previously achieved in three. No need to go over the nadir zone twice! The savings over time of shipboard costs makes the return on investment shorter than ever before.

A note for rental companies -

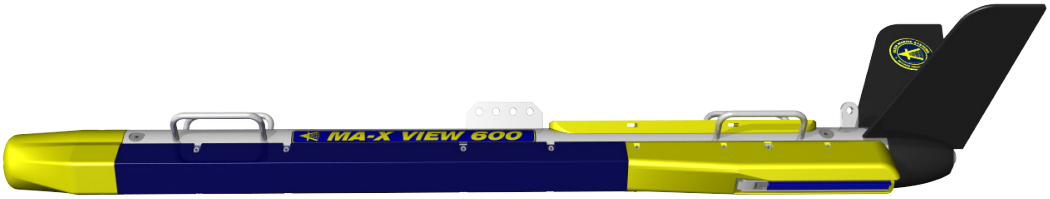
MA-X VIEW 600 incorporates Smart Telemetry - adopted across all of Klein's modern systems (Klein 4900, 4000 and D3500TF). Smart Telemetry provides continuous, high quality imaging over a broad variety of cable types and cable lengths in excess of 7,500 meters. This feature is designed to support rental companies which frequently switch equipment to different winches with different cable lengths.

Special Applications -

Klein **MA-X VIEW 600** is designed to provide portability, submergence and optimal stability at all depths to a maximum of 300m. For specialized applications, keel weights and K-Wing options are available.



The retractable arrays are easily opened with one finger and can retract in case of a direct hit from an obstacle in the water (or on deck). At the same time they are very robust and can withstand up to 12 knots of currrent. At the end of the survey, the operator can snap them into the closed position for ease of storing.



MA-X VIEW 600

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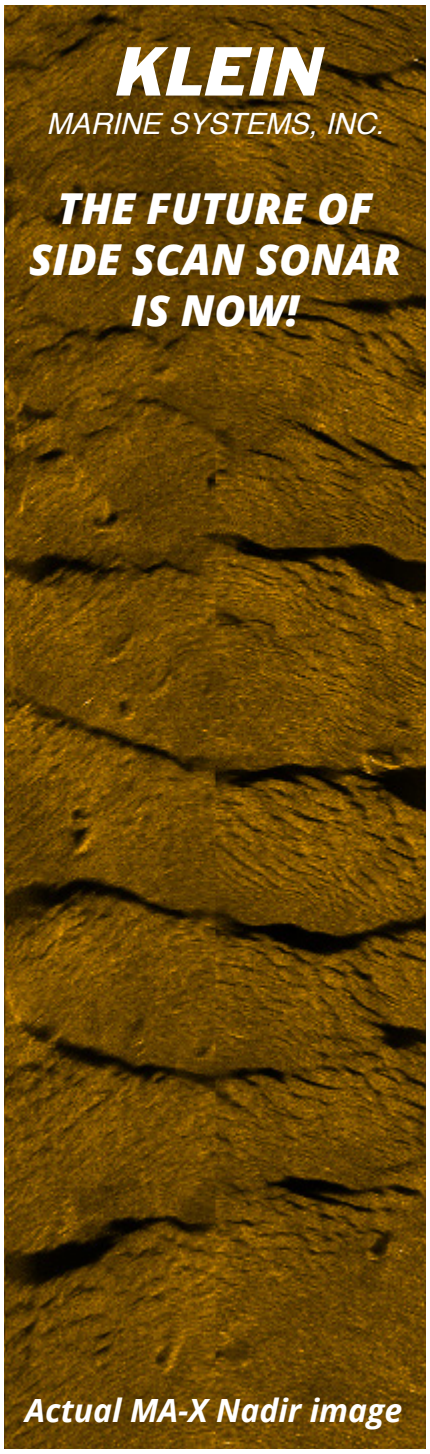
Specifications:

MA-X VIEW 600 Sonar Specifications	
Technology	Single Beam
Frequency	600kHz (SSS) 850 kHz (Nadir MA-X)
Pulse Type	FM CHIRP
Horizontal Beamwidth	0.23° (SSS)
Vertical Beamwidth	40° (SSS)
Across Track Resolution	1.2 cm (SSS)
Max Range (Per Side)	120 m (SSS)
Vertical Beam Center	Tilted down 30° from Horizontal (SSS)
Output Data Format	SDF or XTF or both – selectable
Input Voltage	12 VDC or 110/220 VAC (50-60 Hz)
Power Consumption	75 W
MA-X VIEW 600 General Specifications	
Construction	Electro-Polished 316 Stainless Steel
Body Length	1.42 m (56 in)
Outer Diameter	8.9 cm (3.5 in)
Weight	24.7 kg (54.5 lbs) (in air) 13.5 kg (29.7 lbs) (in water)
Depth Rating	300 m
Standard Accessories	• Heading, Roll and Pitch Sensor • Depth (Pressure) Sensor: 0-300 m • Water Temp. Sensor: 0-35° C • Safety Cable • Reusable Carrying Case, Tow Fish • Laptop with SonarPro installed
Optional Accessories	• K Wing I • Keel Weight • Ruggedized Laptop • Pole Mount Bracket • Magnetometer interface • Responder Interface

Specifications subject to change



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