



Maxars TM weld profiling robot system

**OPERATIONAL PERFORMANCE
AND TECHNICAL DATA SHEET**

Weld profiling robot, Vacuum
evacuation system, Lifting yoke

TECHNICAL DATA SHEET

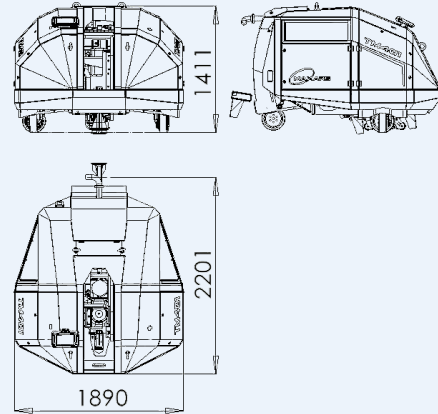


TECHNOLOGY

PRODUCT NAME:

Maxars TM401 weld profiling robot

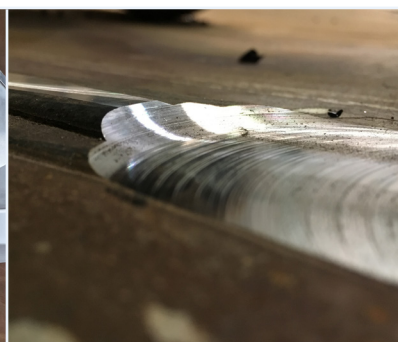
6-axis mobile robot system for automated, high-rate and CNC-quality weld profiling and fatigue strength improvement of inside and outside girth weld seams in wind turbine support structures.



TECHNICAL DATA

Axes of movement	6
Sensing / input system	Laser scanning
Motion control / Actuation system	Servo and servo-hydraulic system
Accuracy	±0.2 mm
Machining rate	600 - 1,200 mm/min.
Input power	400V / 32A
Weight	Approx. 2,600 kg.
Control panel	Siemens 9" TFT HMI-panel, SIMATIC KTP900F Mobile
Machining tool	Sandvik R200-080Q32-20M
Certification	CE
Regulatory compliance	EU Machinery Directive 2006/42/EC, EN ISO 12100.
Noise level	Approx. 80 dB.
Onsite transport/handling	Dedicated lifting yoke for use with fork-lift truck
Elevation	Movable and mobile platforms available for operating the Maxars TM401 weld profiling robot at height and addressing outside circumferential weld seam in monopiles placed on rollerbeds with headroom underneath for manoeuvring self-propelled modular transporters (SPMT). Contact us for options and data sheets.

Video



TECHNICAL DATA SHEET

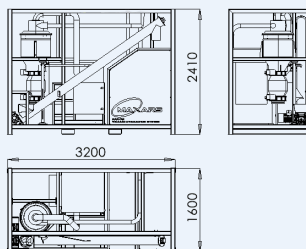


TECHNOLOGY

PRODUCT NAME:

Maxars TM Vacuum Evacuation Unit

High-capacity cyclonic action vacuum evacuation unit for continuous transport and removal of metal, wood, plastic and dust shavings and particles over distances of up to 40 meters.

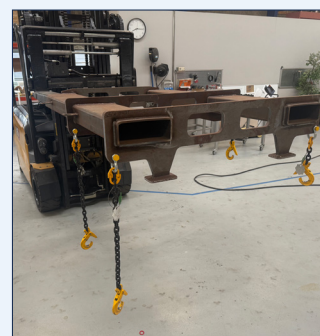
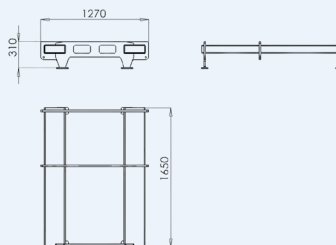


TECHNOLOGY

PRODUCT NAME:

Maxars TM401 Lifting yoke

Lifting yoke for onsite handling and transport of the Maxars TM401 weld profiling robot.



TECHNICAL DATA

	TM Vacuum evacuation unit	Maxars TM401 Lifting yoke
Input power	400V / 32A	-
Weight	Approx. 1,500 kg.	Approx. 300 kg.
Certification	CE	CE
Regulatory compliance	EU Machinery Directive 2006/42/EC, EN ISO 12100.	EU Machinery Directive 2006/42/EC, EN ISO 12100.
Hose reel	Electrically operated. Mounted with 40 meters heavy-duty hose.	-
Noise level	Approx. 80 dB.	-
Onsite transport/handling	Fork-lift truck	Fork-lift truck

Video



Contact

Claus Valsted, CEO

cv@maxars.com

+45 21 25 75 15

Morten Flatau, Project Manager

mf@maxars.com

+45 21 25 75 00

Hjulmagervej 13 | DK-9490 Pandrup | Denmark

Office hours are 8:00 AM to 4:00 PM (CET)

www.maxars.com



OPERATIONAL PERFORMANCE AND ADVANTAGES

Weld seams and support structures	Both inside and outside girth welds in 5+ meter diameter monopile and tower sections, including conical sections (max. 5-degree taper).
Working environment	Delivering dust-free weld profiling by replacing belt and disc grinding with machining. Reducing noise from weld profiling to approx. 80 dB.
Productivity	Single-pass flush profiling at a rate of 30-60 meters/hour depending on weld geometry and conditions.
Quality/precision	Operator-independent and CNC quality machining to an XYZ-accuracy of ± 0.2 mm and surface roughness of $<Ra 3.2$ across weld seam geometries.
Automation	One-click setup for inside or outside girth weld seam profiling. Tool-depth setting in increments of 0.1 mm for removal of weld toe undercuts Automatic, laser-guided acquisition, characterisation and tracking of weld seam Preprogrammed geometric improvement of same-thickness joints, thickness transition joints (both with and without taper) and misaligned joints.
Handling	Storage-to-section deployment and section-to-section transfer in less than 15 min. Using a fork-lift truck. Seam-to-seam transfer in approx. 5 min.
Profile geometry	Uniform weld profile with large-radius transition from weld toe to plate material.

Contact

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