



# WIDE SURFACE PREPARATION

ROBOT  
PlusPlus ++

 **MONTIPOWER**  
Ultimate Surface Preparation



# BETTER PREPARED

## FOR PEAK PERFORMANCE

It all started with Monti Werkzeuge GmbH (“Monti”). A German company that engineers, manufactures and distributes hand-tool and automated machine systems for surface preparation. Since our founding in 1987, we have been developing and marketing innovative, patented technologies to customers world-wide in the automotive, oil & gas, and industrial infrastructure markets. We are a recognized market leader and true trailblazer in our industry. Monti is ISO-9001 accredited and we service our customers from our headquarters in Germany and our own subsidiaries in the USA, Holland, Australia, Singapore and Brazil. MontiPower BV from Groningen, Holland is the R&D and Service Centre for Marine Subsea Surface Prep Equipment and for other marine & coastal applications including tanks & terminals.

Two world come together. We are proud about the cooperation and partnership with Robot++ for the development of the HighMate Prepper®. This is a new milestone for both companies.

This innovation resulted in a splendid strategic partnership for sales and service all over the world.

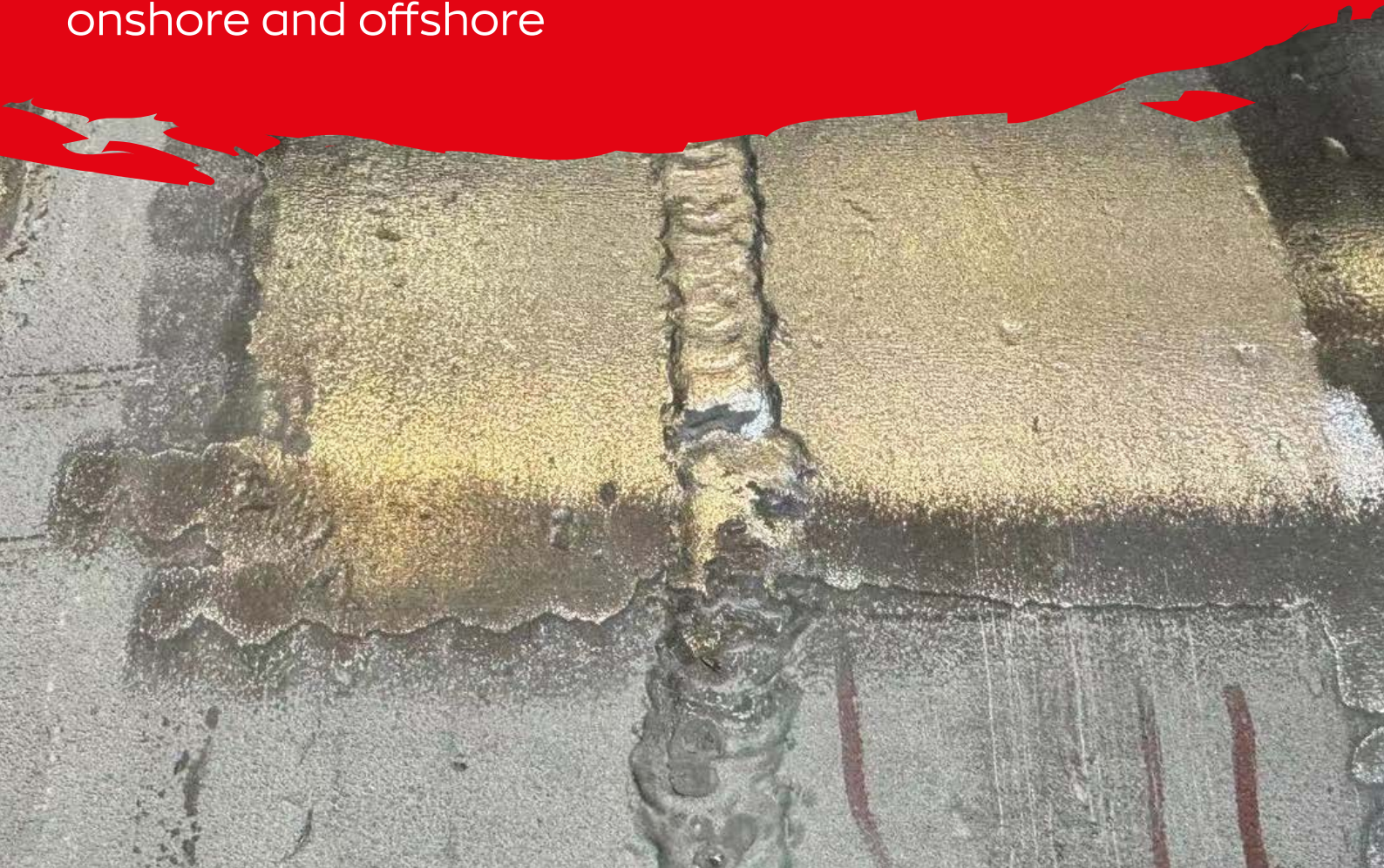
**1 TEAM. 1 GOAL. 1 MISSION.**

**BETTER  
PREPARED**



# THE CLEANTECH PREPPER®

Weld Seam and Spot Repair Preparation  
onshore and offshore



A close-up photograph of a worker wearing a full-body protective suit, including a hood and mask, and blue gloves. The worker is holding a black hose or cable, likely connected to a robotic arm. The background is a plain, light-colored wall.

# THE NEW ORDER OF SURFACE PREPARATION

This HighMate Prepper® Q4 Robot enables optimal coating performance through a programmable and automated process providing a constant and reliable roughness profile to the substrate. Simply program the desired roughness and the HighMate Prepper® will deliver a regular peak height and peak density to optimize your substrate surface, all without safety hazards, dust or loose media. This HighMate Prepper® solution can also be included in factory applied coating processes.



# GREEN SURFACE PREPARATION TECHNOLOGIES FOR DEMANDING SERVICES

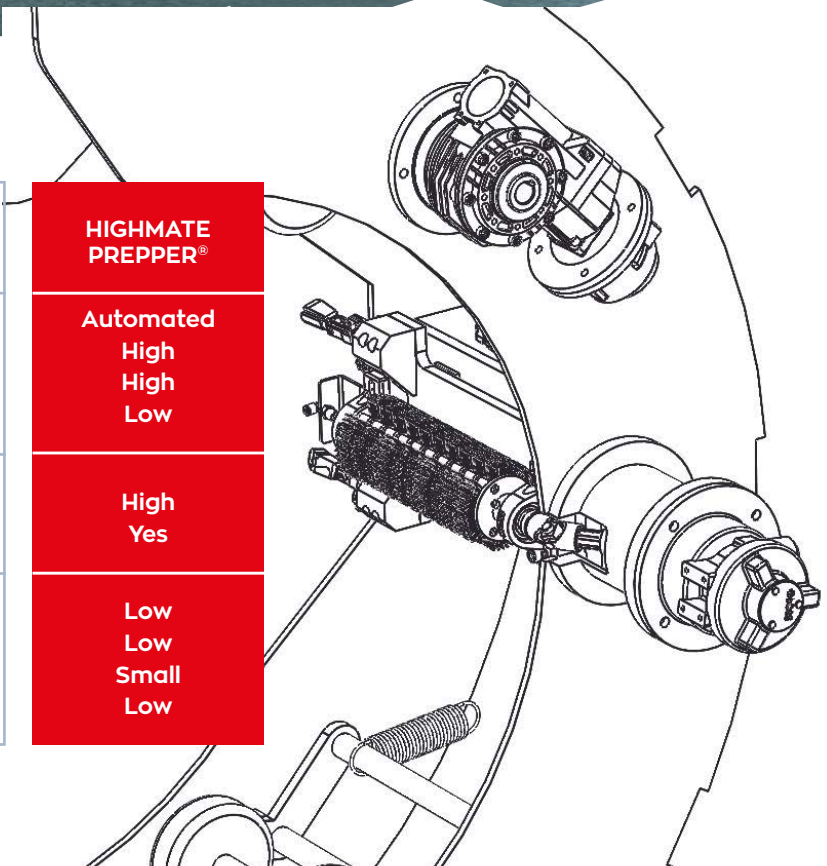
## TECHNOLOGY

Mode of operation  
Cleaning impact  
Cleaning speed  
Consumables & Waste

Reliability/Anchor  
profile precision  
EHS (dust free)

Cost to operate  
Power requirements  
Equipment footprint  
PPE/HSA impact

	Sandblasting	Manual Handtool	HIGHMATE PREPPER®
Mode of operation	Manual	Manual	Automated
Cleaning impact	High	Low	High
Cleaning speed	Fast	Slow	High
Consumables & Waste	High	High	Low
Reliability/Anchor profile precision	High	Medium	High
EHS (dust free)	No	No	Yes
Cost to operate	Medium	Medium	Low
Power requirements	High	Low	Low
Equipment footprint	Large	Small	Small
PPE/HSA impact	High	High	Low



# WHY THE HIGHMATE PREPPER<sup>®</sup>



▶ **FASTER**

▶ **ECONOMICAL**

▶ **SURFACE PROFILE AND  
CLEANLINESS QUALITY**

An aerial view of a large offshore oil rig in the middle of the ocean. The rig is a complex of steel structures, including a tall derrick and various platforms. The water is a deep blue, and the sky is clear. The rig is supported by several legs extending into the water.

# ***THIS IS WHY***

- ◊ Surface Profile without flat areas between a peak and a valley
- ◊ Unique oscillating brushes enable uniform, optimal surface coverage
- ◊ Cleanliness and Profile for Coating Adhesion and Durability
- ◊ Adjustable Settings
- ◊ Process monitoring and autoadjustments through laser and sensors
- ◊ Different Wire Brush Belts of Monti fit for purpose
- ◊ Minimal logistic interventions
- ◊ Programmable via smart device
- ◊ Faster than conventional abrasive blasting for welds and spot repair
- ◊ Device is scalable to wider units for higher productivity
- ◊ Recyclable brushes (Monti Loyalty Program)
- ◊ Dust collection built-in
- ◊ Low energy consumption
- ◊ Rental options available

# 83%

## **INADEQUATE SURFACE PREPARATION**

Corrosion is often an electrochemical reaction whereby oxygen and water cause iron to rust or copper to turn green.

Corrosion causes enormous economic damage -approximately 4% of GNP. Areas that are affected by corrosion must be treated or replaced, and for transport pipes this can quickly run costs up into the hundreds of thousands of Euros. Corrosion also presents enormous risks because pipes carrying gas or other hazardous materials can break at areas weakened by corrosion.

The solution for corrosion consists of removing one or more of the three primary causes of corrosion - water, oxygen or the electrochemical reaction. Traditional coatings for metals, such as bitumen, polyethylene (PE), polypropylene (PP) and epoxy powder coating (FBE), cannot prevent water and/or oxygen from reaching the metal. Transport pipelines often use cathodic protection to stop the electrochemical reaction, whereby an electric current stops the ionization of the iron. All of this requires constant monitoring of the coating protection and its performance. Optimal surface protection is a critical factor in enhancing the performance of protective coatings. That is why rust and corrosion require the best surface preparation possible!



# REASONS FOR COATING FAILURE

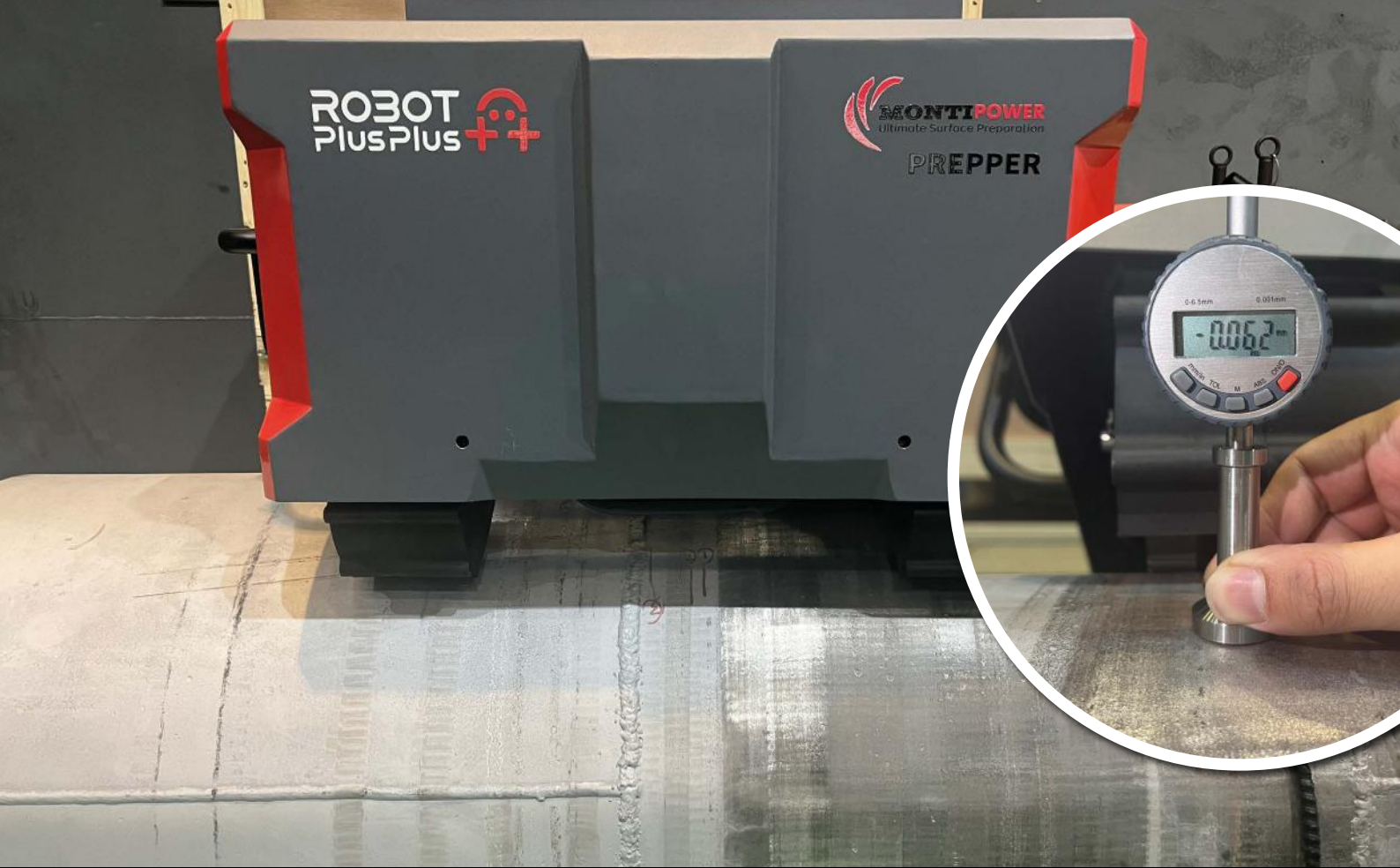
A pie chart illustrating the reasons for coating failure. The chart is divided into four segments of varying sizes, with the largest segment representing application errors. The background of the chart is a dark, textured image of a planet's surface, possibly Mars, with a white circular border.

**1% DEFECTIVE COATING MATERIALS**

**11% APPLICATION ERRORS**

**6% POOR SPECIFICATION COATING SELECTION**

**5% ENVIRONMENTAL CONTROLS**



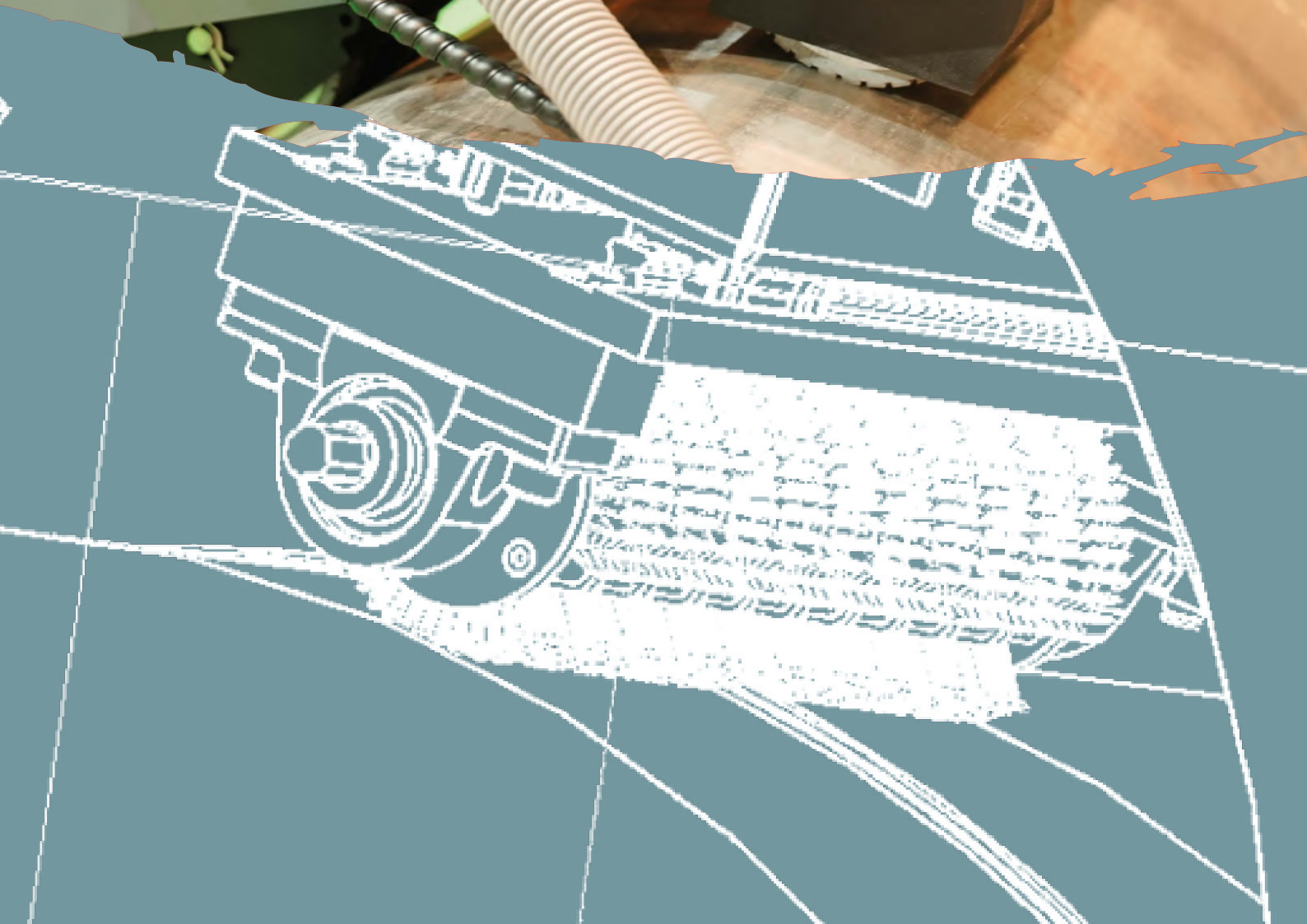
# THE NEW HIGHMATE PREPPER®

**PREPARATION  
IS EVERYTHING**



**MONTIPOWER**  
Ultimate Surface Preparation  
**PREPPER**

PlusPlus++






**BETTER  
PREPARED  
FOR PEAK  
PERFORMANCE**



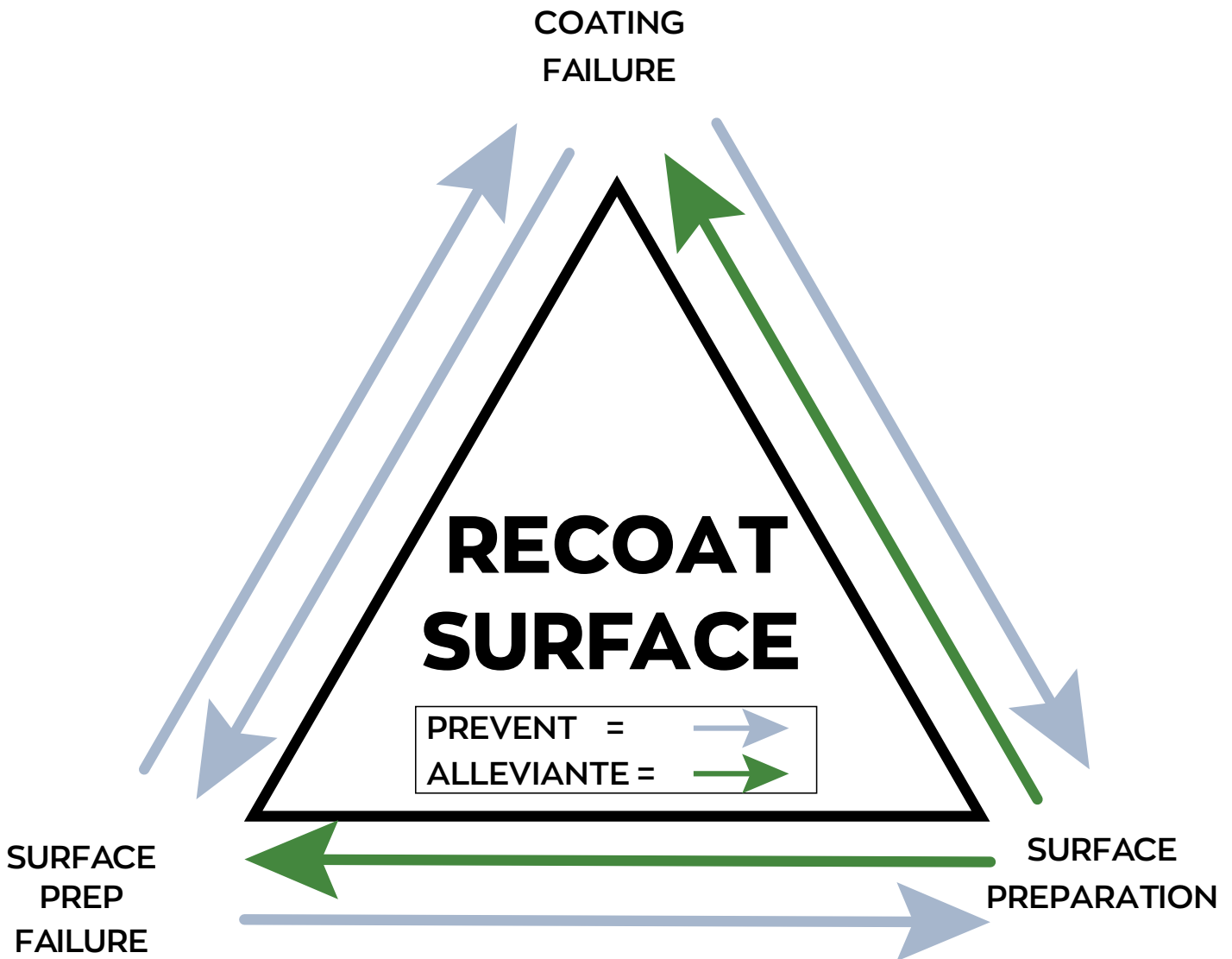
**THE MOST ADVANCED  
SURFACE PREPARATION  
TECHNOLOGY EVER**



The background is a close-up photograph of a heavily rusted metal surface. The rust is a mix of bright orange, dark brown, and black, with some lighter, greyish areas where the metal is more exposed. Overlaid on this background are several white, geometric line patterns. On the left side, there is a fan-like pattern of lines that radiate from a point and curve outwards. At the bottom, there is a series of parallel lines that curve upwards and to the right, resembling a stylized wave or a series of steps. The overall aesthetic is industrial and technical.

**REMOVE SURFACE  
PREPARATION  
FROM YOUR  
FAILURE EQUATION**

# THE NUMBER 1 CAUSE OF COATING FAILURE IS IMPROPER SURFACE PREPARATION



CLEANTECH PREPPER®  
PREVENTS AND ELIMINATES  
THE OPPORTUNITY FOR COATING FAILURE

# BETTER PREPARED

## FOR PEAK PERFORMANCE



MontiPower - Part of Monti Group  
MONTI - Werkzeuge GmbH  
Reisertstr. 21 | 53773 Hennef | Germany  
T +49 (0) 2242 9090 630  
info@montipower.com  
www.montipower.com

MontiPower BV.  
W.A. Scholtenlaan 13  
9615 TG Kolham | Holland  
info@montipower.com

In cooperation with  
www.robotplusplus.com