



Automated
welding

3D profiling

MÜLLER OPLADEN & WATTS MUELLER

Customer:
Decom Tools

Presentation by:
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Place: Mid-term
Conference Webinar
Date: 10.02.2021

Müller Opladen over a 100 years of German machine building tradition and experience



Josef Müller

Founder of the company in 1919
Managing director between from 1919 to 1963



Willi Müller

Managing director from 1963 to 1979



Josef Müller II

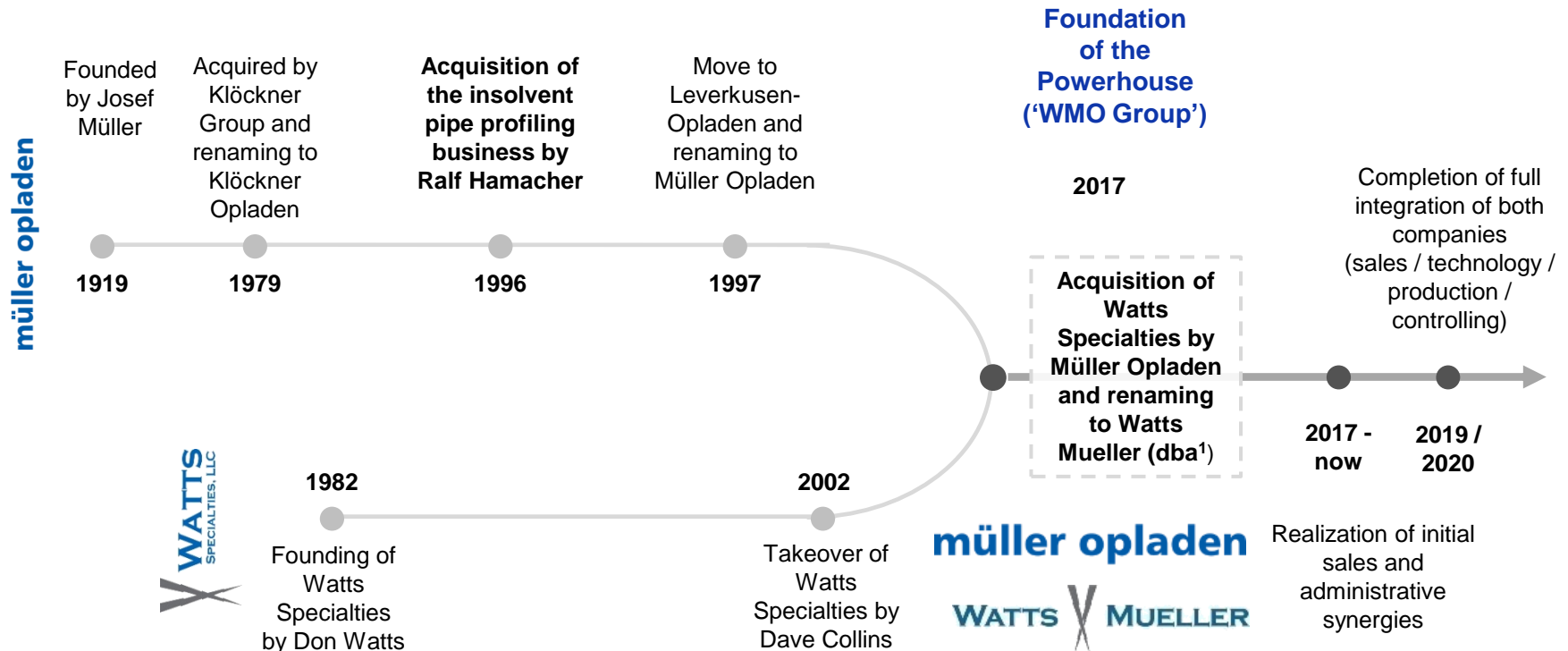
Managing directors since 1996

Ralf Hamacher



Interim management

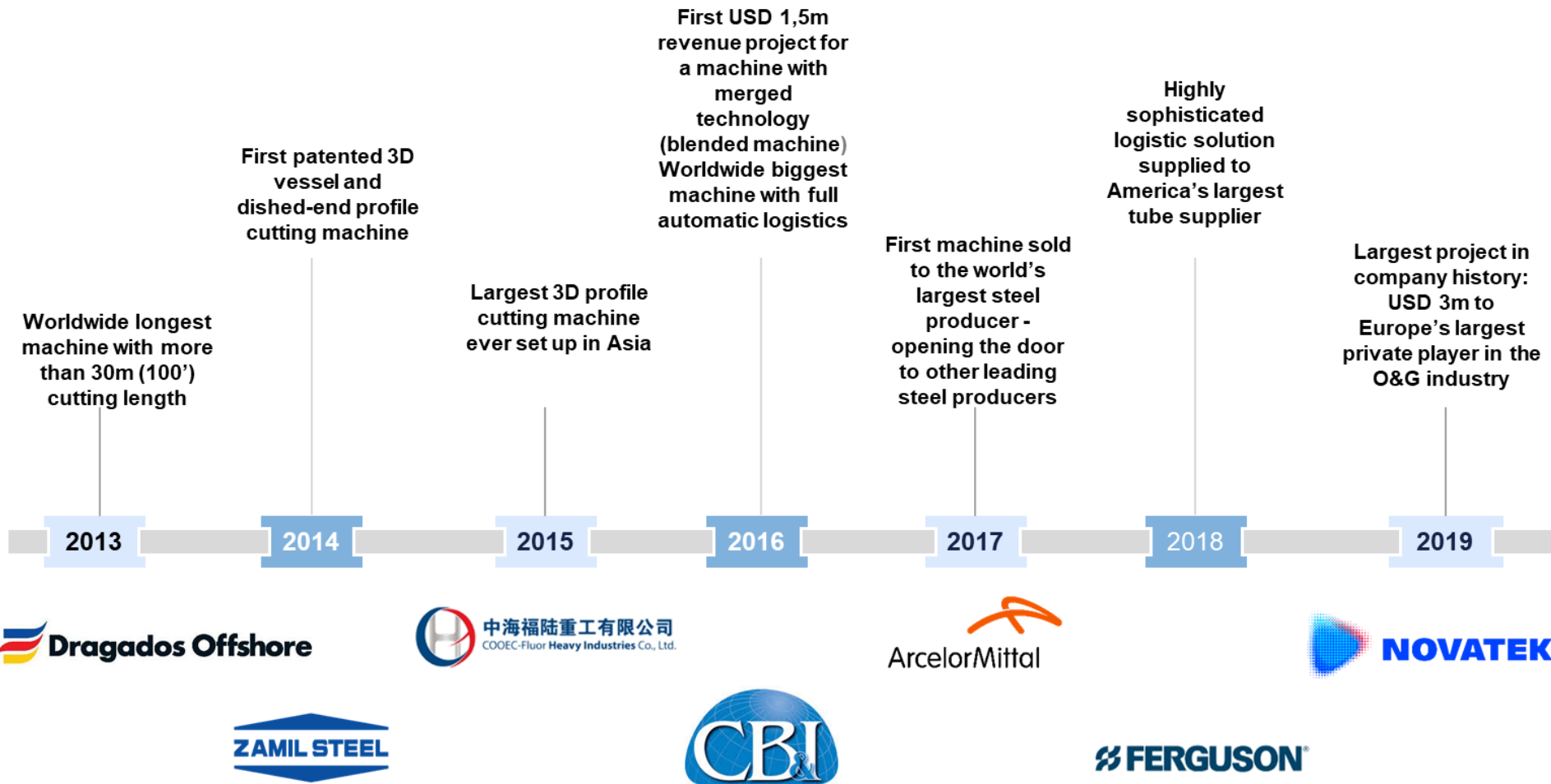
Watts Mueller – worldwide biggest manufacturer of CNC Pipe Profilers



Selected corporate information

1. **Business model: Engineering and fabrication of machines along with sophisticated software (niche player)**
2. **Legal status: Private ownership; limited liability**
3. **Average export level: Mueller Opladen > 75 %, Watts Mueller > 10 %**
4. **Customers: Multinational corporations and mid caps with business in core industries for energy and infrastructure**
5. **Track records: More than 1,000 machines in 72 countries**
6. **Average annual turn-over: about USD 15 Million**
7. **High skilled qualification level of employees (almost 30 % of the employees with university degrees)**
8. **Product characteristics: High innovate machines and software with high and reliable quality**

Selected corporate Mile Stones



Locations in Opladen Germany and Puyallup USA

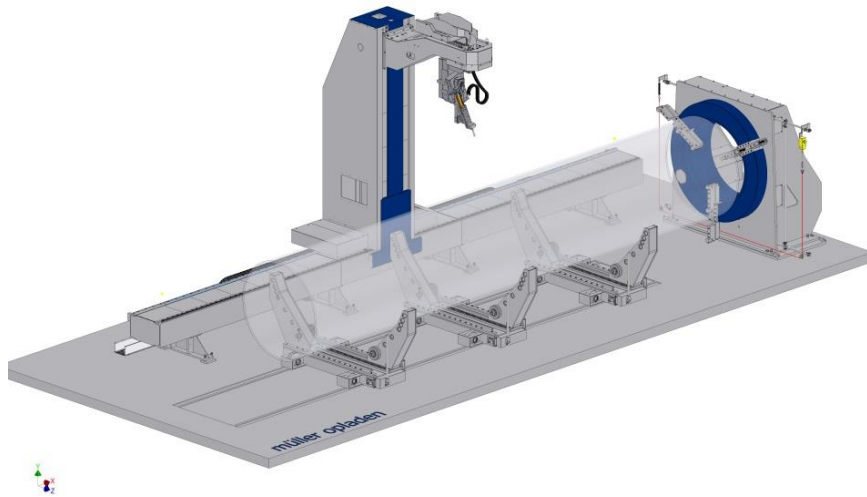


**Assembly in Opladen
Germany**

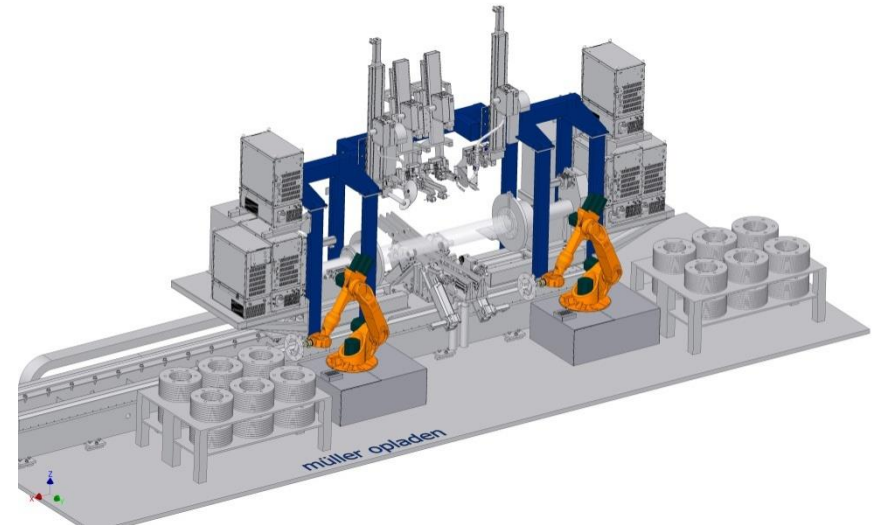


**Assembly in Puyallup WA
USA**

Business units

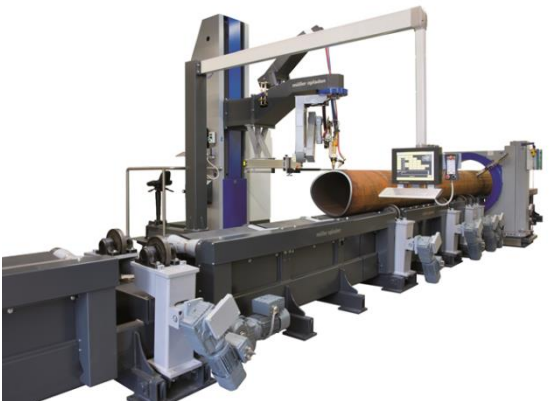


**3D profiling
machines**

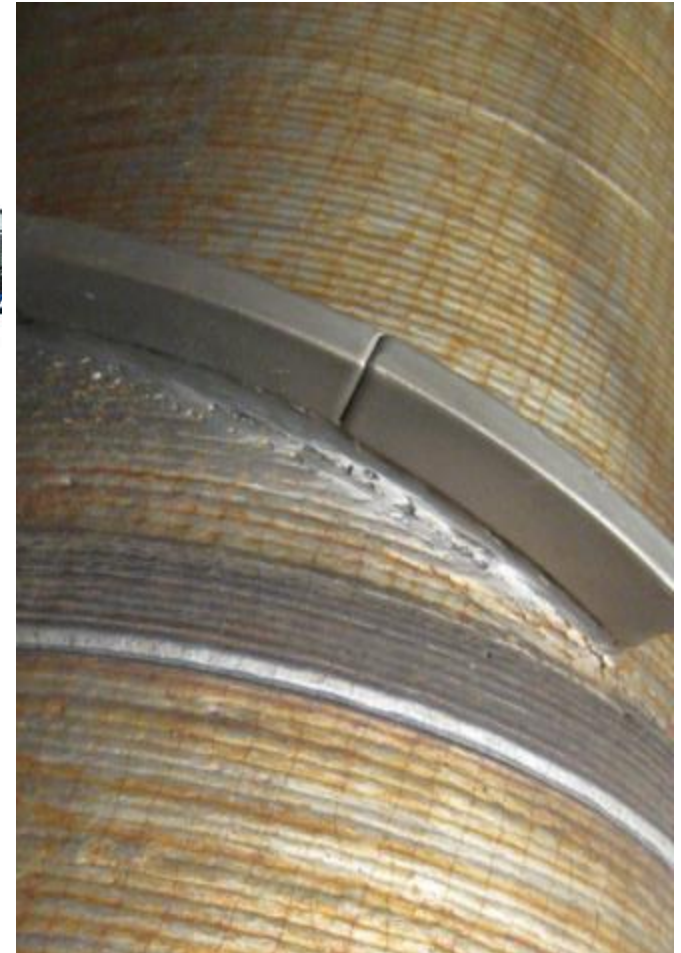


**Automated welding
systems**

Business unit 3D profiling machines



Business unit automated welding solutions



International sales distribution network of established specialist trading companies



Core activities: Research & development



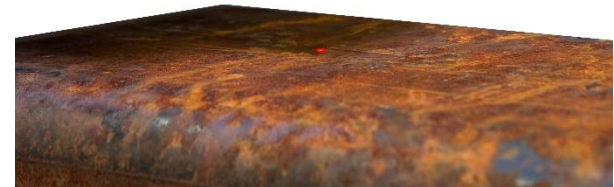
Sensing Systems – Most advanced solutions



Electro Mechanical Tracer



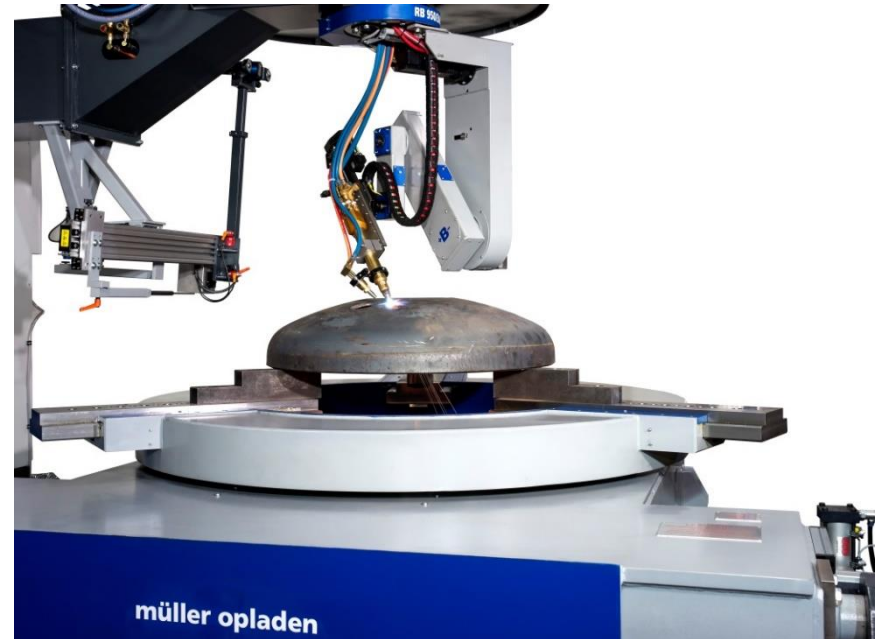
Laser Sensor



MO Heavy-Duty series for OD 200 – 4,000 mm (8 – 160")

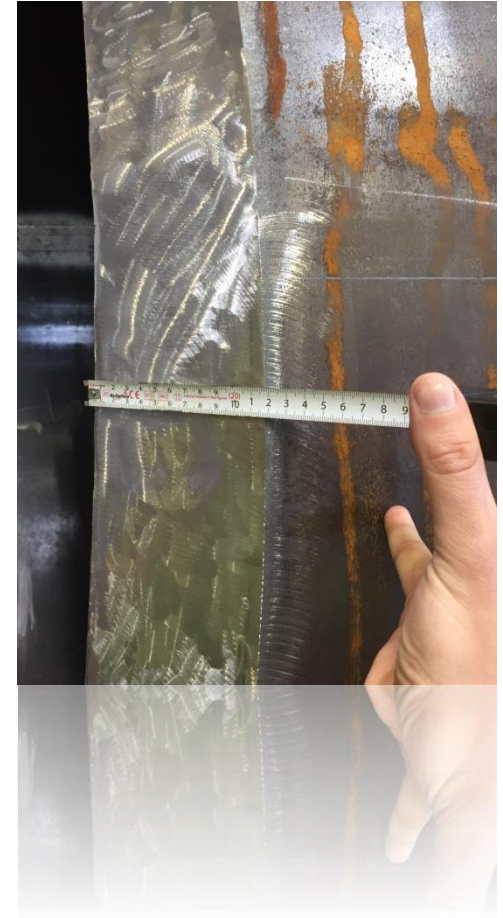


MO 4000/6 Heavy-Duty RD

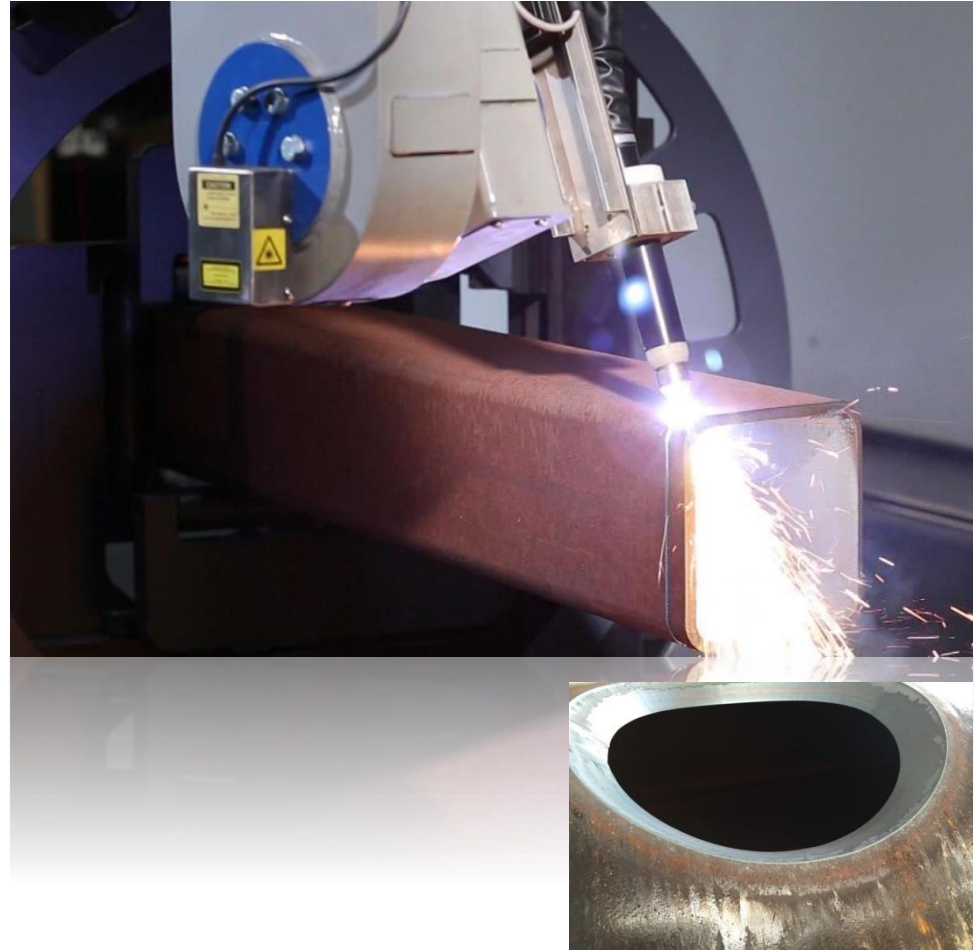
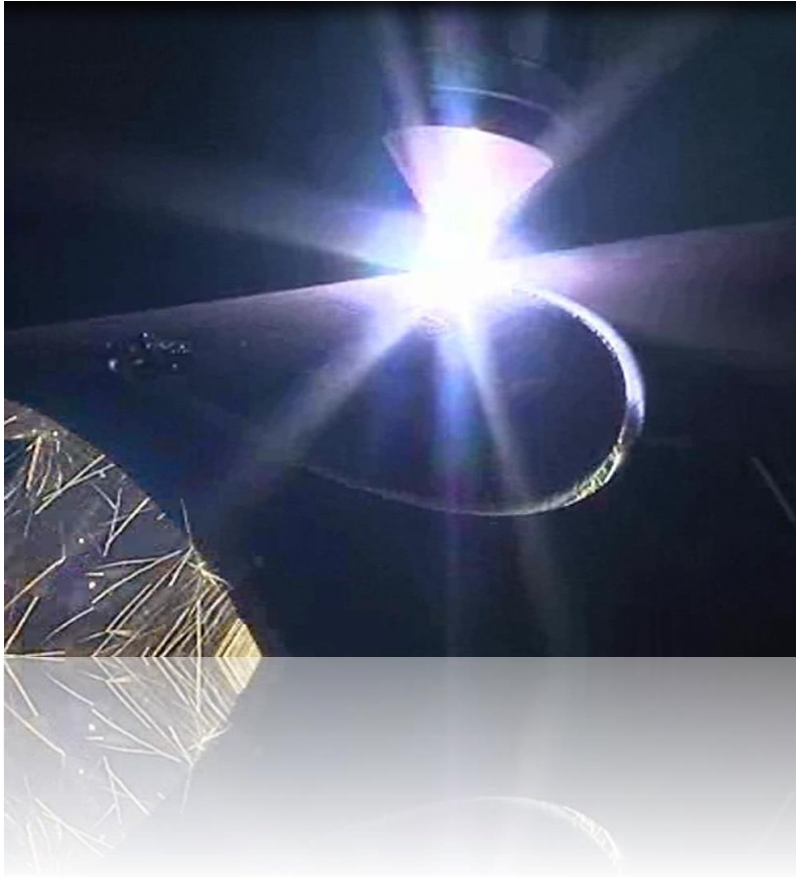


Cutting module for dished ends

Oxy-fuel cutting with automatic piercing and pre-heating



Plasma cutting



Economic solutions for simple cutting tasks



**Straight cut-off fixture
W-132**



**Table top cutting fixture
W-60-20-SM**

Automated welding systems(1)



**Automatic multi-axis for 1 ton
positioner for the MIG-MAG welding
of valves**



**Automatic multi-axis for 15 tons
positioner for the MIG-MAG welding
of valves**

Automated welding systems (3)

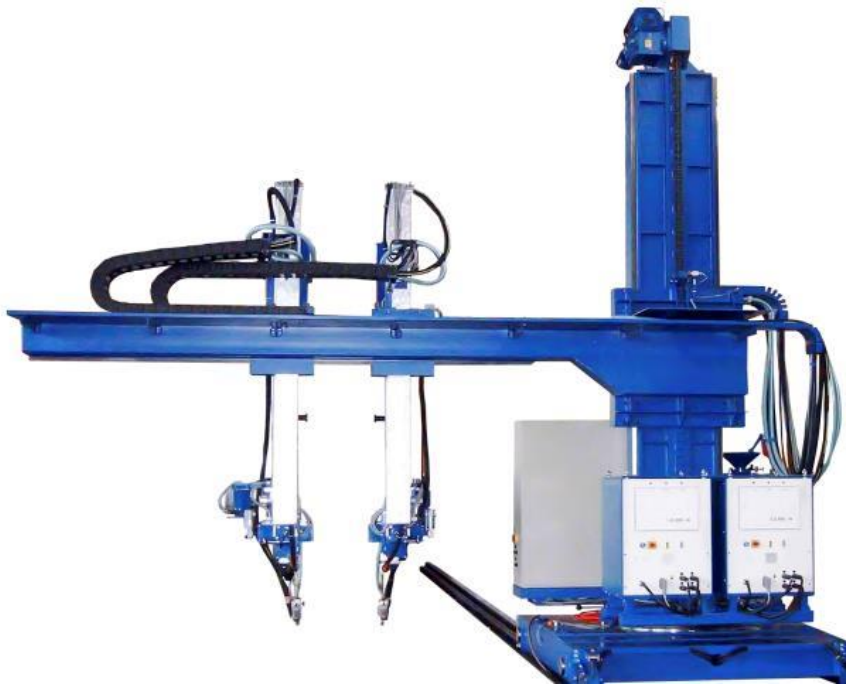


Circumferential welding system for submerged-arc-welding of fittings



Welding system for powder plasma build-up-welding on drilling heads

Automated welding systems (5)



Longitudinal welding system with 2 welding heads for the MIG welding of the roofs and sidewalls of passenger carriages

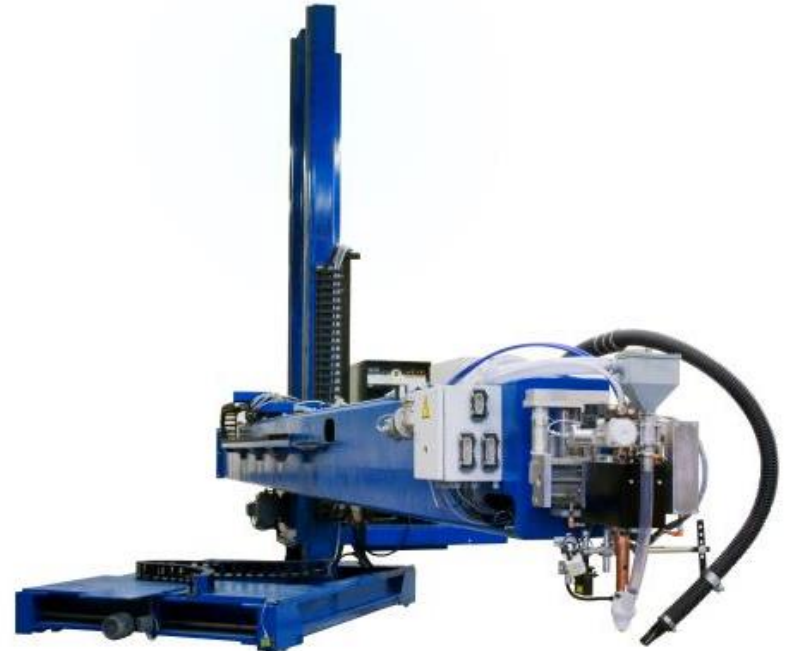


Longitudinal welding system with 2 welding heads for the MIG welding of steel beams

Column & booms



Column & boom, lean design



Column & boom, heavy-duty design

Selection of reference customers (1)



Alstom, Germany
Automated welding solution

Selection of reference customers (4)



CB&I, USA

Combination of MO Classic and Watts series

World's biggest machine with full automatic logistics



CB&I, USA

Combination of MO Classic and Watts series

Selection of reference customers (6)



COOEC, China
MO Heavy-Duty series

Largest machine in Asia



COOEC, China
MO Heavy-Duty series

Selection of reference customers (7)



Dragados Offshore, Spain
MO Heavy-Duty series

World's longest machine 30m (100') cutting length



Dragados Offshore, Spain
MO Heavy-Duty series

Selection of reference customers (9)



Zamil Steel, Saudi Arabia
MO Heavy Duty series

World's first patented vessel and dome cutter



Zamil Steel, Saudi Arabia
MO Heavy Duty series

Selection of reference customers (10)



Keppel Fels, Singapore
MO Classic series

Selection of reference customers (10)



Keppel Fels, Singapore
Automated welding solution

Selection of reference customers (12)



Gasanlagenbau Petzold, Germany
Automated welding solution

Selection of reference customers (15)



Saipem Brazil
MO Robo series

Selection of reference customers (16)



Siemens, Germany
Automated welding solution

Reference customers in offshore plant construction



Platform construction



Top side construction

Selected reference customers

- | | |
|---|--|
| • Aker Solutions
<i>Norway</i> | • PTSC
<i>Vietnam</i> |
| • Bosnor
<i>Mexico</i> | • Saipem
<i>Angola, Brazil, Canada, Congo, Italy, Nigeria, Saudi Arabia</i> |
| • Kencana Petroleum
<i>Malaysia</i> | • Sonamet
<i>Angola, Nigeria</i> |
| • Larsen & Toubro
<i>India, Oman, Qatar, Saudi Arabia, UAE</i> | • Techint
<i>Brazil</i> |
| • Agility Group
<i>Norway</i> | • Dragados
<i>Mexico, Spain</i> |
| • Bosshelf
<i>Azerbaijan</i> | • Keppel Fels
<i>Singapore</i> |
| • COOEC
<i>China</i> | • Lamprell
<i>UAE</i> |
| • CUEL
<i>Thailand</i> | • PPL
<i>Singapore</i> |

Reference customers in wind turbine construction



Selected reference customers

- Bilfinger Mars Offshore
Poland
- Cimtas
Turkey
- Dragados
Spain
- Navacel
Spain
- ST3
Poland
- Steel Engineering
United Kingdom
- Tata Steel
United Kingdom
- Vitkovice Power Engineering
Czech Republic

Basis Traktor 1



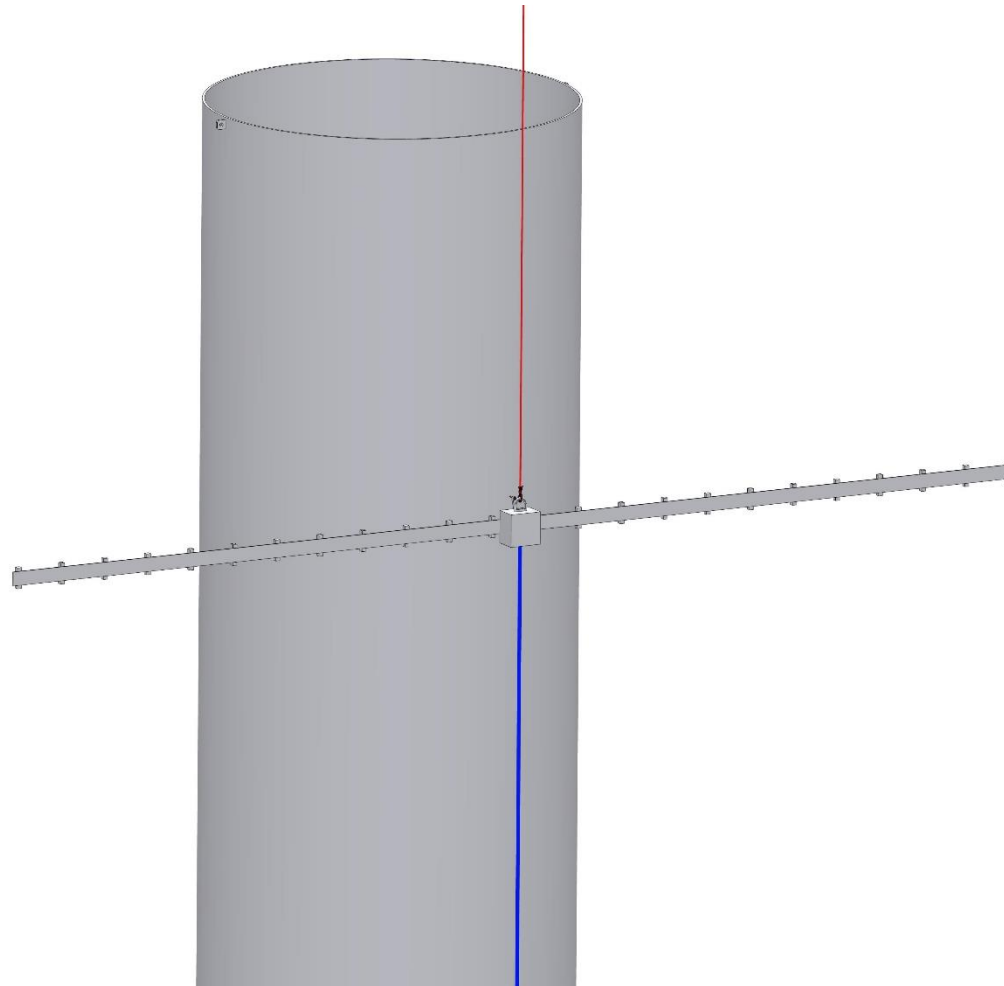
Basis Traktor 2



Basis Traktor 3



Müller Opladen Terminator 1



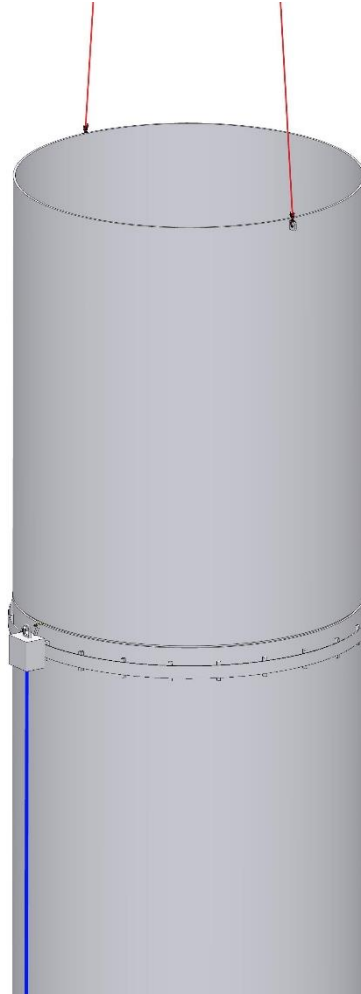
Müller Opladen Terminator 2



Müller Opladen Terminator 3



Müller Opladen Terminator 4



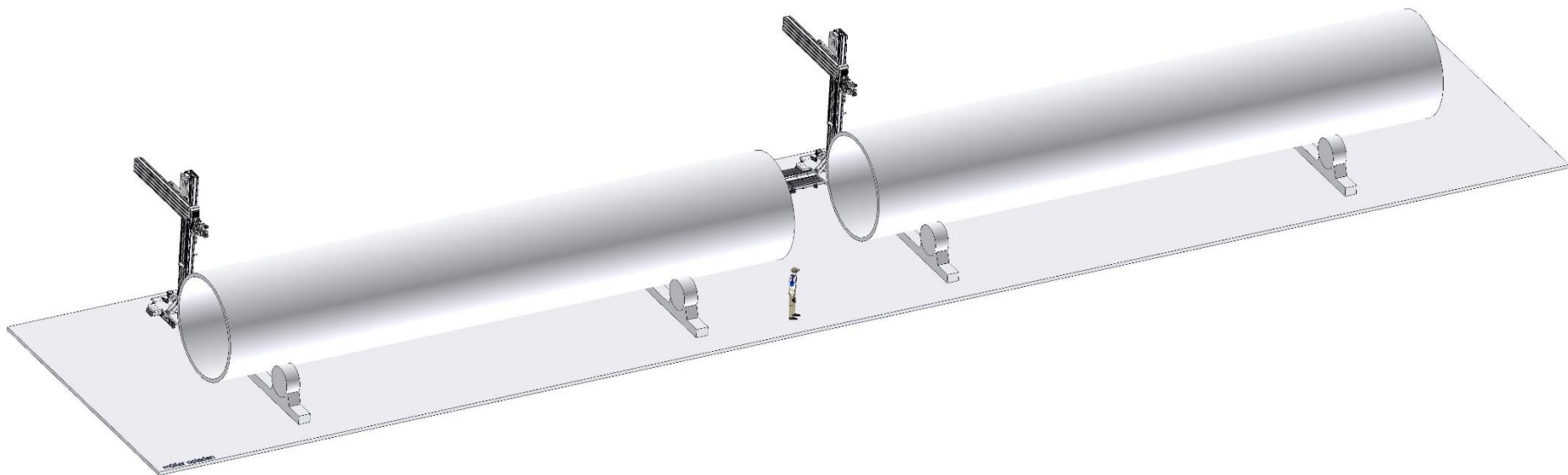
Müller Opladen Terminator 5



Features Müller Opladen Terminator:

- For wind towers with a diameter of 3.000 – 8.000mm
- Only one crane needed
- Same crane that places Terminator can pick up as well tower segment
- Completely remote controlled
- **NO** operator needs to climb around the tower
- Levels itself once magnetic base is attached to the tower
- Rails move around tower automatically and attach themselves magnetically
- System for rail length adaption to actual tower circumference and self-securing hook up
- Terminator can move and cut more than 360° around tower
- With special welding equipment lifting eyes can be welded on as well

Müller Opladen Recycling Tandem 1



Müller Opladen Recycling Tandem 2

Features Müller Opladen Recycling Tandem:

- Double wind tower scrapping system with **only one operator**
- Wind tower segments of 12m – 70m are cut with oxyfuel torch
- Oxyfuel torch on motorized automated column and boom system on rails
- Camera system for easy monitoring
- Wind tower segments on protected and re-inforced tank rollers on rails
- Segment gets cut into the desired dimensions with automated software
- No operator programming needed
- Cutting either into long strips and 2 rings or only long strips
- Cutting from outside and inside automatically controlled possible
- Camera system together with software allows very easy point to point cuts if required



Further information:

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