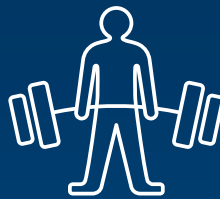




Bending to perfection.



HEAVY DUTY

MAXIMUM PERFORMANCE FOR
THE HIGHEST DEMANDS

- ⊕ Plant construction
- ⊕ Chemical industry
- ⊕ Boiler and power plant industry
- ⊕ Machine and steel construction
- ⊕ Shipbuilding and offshore

schwarze-robitec.com

ENGINEERING PARTNER – NOT JUST
STANDARD SOLUTIONS

PRODUCTION SOLUTIONS FOR THE FUTURE

For decades, Schwarze-Robitec has been developing tube bending machines for demanding industrial applications. As a development partner to numerous industries, both technical expertise and a deep understanding of industrial processes are incorporated into every solution.

The focus is therefore not on the individual machine in isolation, but on **holistic production solutions**.

Overview:

- ⊕ Machine concepts precisely tailored to the production process
- ⊕ Technologies proven in continuous operation
- ⊕ Solutions designed for long-term economic efficiency

WHEN DEMAND BECOMES THE STANDARD

TUBE BENDING MACHINES FOR EXTREME APPLICATIONS

Companies in plant engineering, shipbuilding and the energy sector face the challenge of maintaining precision and efficiency even under extreme conditions. Large tube diameters, thick wall sections and high bending moments require machines that deliver long-term stability and reliability.

Our Heavy Duty solutions are designed precisely for these requirements: **powerful, robust and built to withstand maximum loads**. Developed for demanding applications with high forces and long operating cycles, our Heavy Duty machines ensure consistent precision even under extreme conditions and form the backbone of stable production processes.

- High bending moments for large tube dimensions

Maximum machine rigidity under continuous load

Reliable forming of demanding materials
- Stable processes for project-based and series production

Integration into existing production environments

TECHNICAL DATA

			SR 60	SR 80	SR 100	SR 165	SR 220	SR 265	SR 320	SR 350
Tube size	NPS		2	3	4	6	8	10	12	14
	mm		60.3	898.9	114.3	168.3	219.1	273.1	323.9	355.6
Max. tube outside diameter x wall thickness		SCH	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10
Carbon steel (Rm 450 N/mm²) / Stainless steel (Rm 750 N/mm²)		mm	5.5 / 2.8	7.6 / 3.1	8.6 / 3.1	11 / 3.4	12.7 / 3.8	15.1 / 4.2	17.5 / 4.6	19.1 / 4.8
Max. section modulus	in³		0.72	2.23	4.3	12.2	24.5	45.5	75	98
	cm³		11.8	36.5	70	200	402	747	1,223	1,609
Max. bending radius (CLR)	in		7.1	11.1	19.1	23.1	31.1	18.2	28.2	8.3
	mm		200	290	500	600	800	1,250	1,500	1,750
Tube length	ft		6.40	6.40	9.60	9.60	9.60	9.60	9.60	9.60
	mm		2,000	2,000	3,000	3,000	3,000	3,000	3,000	3,000
Max. bending angle		Deg	180°	180°	180°	180°	180°	180°	180°	180°
Max. bending speed	Forward, steplessly adjustable	RPM	8	5	3	2	0.5	0.2	0.2	0.2
	Return, constant	RPM	10	7.5	5	4	1.9	0.7	0.7	0.7
Bending direction		↔	Clockwise – counterclockwise on request							
Machine weight approx.	lbs		11,500	16,500	17,600	24,250	33,000	77,000	88,100	110,000
	kg		5,250	7,500	8,000	11,000	15,000	35,000	40,000	50,000

EXTREME FORCES REQUIRE MAXIMUM STABILITY

PRECISION UNDER EXTREME CONDITIONS

In demanding industrial applications, the ability to control high forces is crucial to achieving consistent quality. Heavy-duty tube bending machines are therefore designed for maximum stability, load capacity and long-term precision.

Key features:

- ⊕ High machine rigidity for large bending moments
- ⊕ Powerful drive systems for large tube dimensions
- ⊕ Consistent precision even under continuous load
- ⊕ Robust construction for long-term operation

The result is **safe and reproducible bending processes** – even under extreme requirements.



Note: The technical data shown refers to a sample configuration. Each machine can be individually adapted to your specific requirements. Illustrations may include optional equipment. Custom solutions are available on request. Subject to technical modifications. Additional optional equipment available on request.

SR 420	CNC 60 HD	CNC 80 HD	CNC 100 HD	CNC 165 HD	CNC 220 HD	CNC 265 HD	CNC 320 HD	CNC 350 HD	CNC 420 HD	CNC 60 HD MW	CNC 80 HD MW	CNC 100 HD MW	CNC 165 HD MW	CNC 220 HD MW
16	2	3	4	6	8	10	12	14	16	2	3	4	6	8
406.9	60.3	88.9	114.3	168.3	219.1	273.1	323.9	355.6	406.9	60.3	88.9	11.3	169.3	219.1
80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10	80 / 10
21.4 / 4.8	5.5 / 2.8	7.6 / 3.1	8.6 / 3.1	11 / 3.4	12.7 / 3.8	15.1 / 4.2	17.5 / 4.6	19.1 / 4.8	21.4 / 4.8	5.5 / 2.8	7.6 / 3.1	8.6 / 3.1	11 / 3.4	12.7 / 3.8
145	0.72	2.23	4.3	12.2	24.5	45.5	75	98	145	0.72	2.23	4.3	12.2	24.5
2,371	11.8	36.5	70	200	402	475	1,223	1,609	2,371	11.8	36.5	70	200	402
18.3	7.1	11.1	13.1	23.1	31.1	8.2	18.2	8.3	18.3	5.1	8.1	11.1	16.1	21.1
2,000	200	290	350	600	800	1,000	1,250	1,750	2,000	150	225	300	425	550
9.60	6.40	6.40	9.60	12.80	16.00	16.00	19.20	19.20	19.20	6.40	6.40	9.60	12.80	16.00
3,000	2,000	2,000	3,000	4,000	5,000	5,000	6,000	6,000	6,000	2,000	2,000	3,000	4,000	5,000
180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°	180°
0.2	8	5	3	2	0.5	0.2	0.2	0.2	0.2	8	5	3	2	0.5
0.7	10	7.5	5	4	1.9	0.7	0.7	0.7	0.7	10	7.5	5	4	1.9
	Clockwise – counterclockwise on request									Clockwise – counterclockwise on request				
132,200	11,800	16,500	27,500	33,000	60,500	99,000	138,000	150,000	160,000	23,000	26,500	34,500	41,500	79,000
60,000	5,250	7,500	12,500	15,000	27,500	45,000	62,500	67,500	72,000	10,500	12,000	15,700	18,900	36,000

STABLY INTEGRATED INTO INDUSTRIAL PRODUCTION PROCESSES

AUTOMATION & PROCESS INTEGRATION

Heavy-duty tube bending machines can be flexibly integrated into existing production structures. Depending on the application – from project-based manufacturing to automated processes – each machine is precisely adapted to the specific workflow.

Options:

- ⊕ Integration into existing workshop and production processes
- ⊕ CNC control for complex bending operations
- ⊕ Optional automation and handling solutions
- ⊕ Application-specific extensions for increased process reliability

This results in **robust and clearly structured production processes** with high operational reliability.

HIGH-PERFORMANCE SYSTEMS FOR EXTREME REQUIREMENTS

HIGH-PERFORMANCE SYSTEMS FOR EXTREME REQUIREMENTS

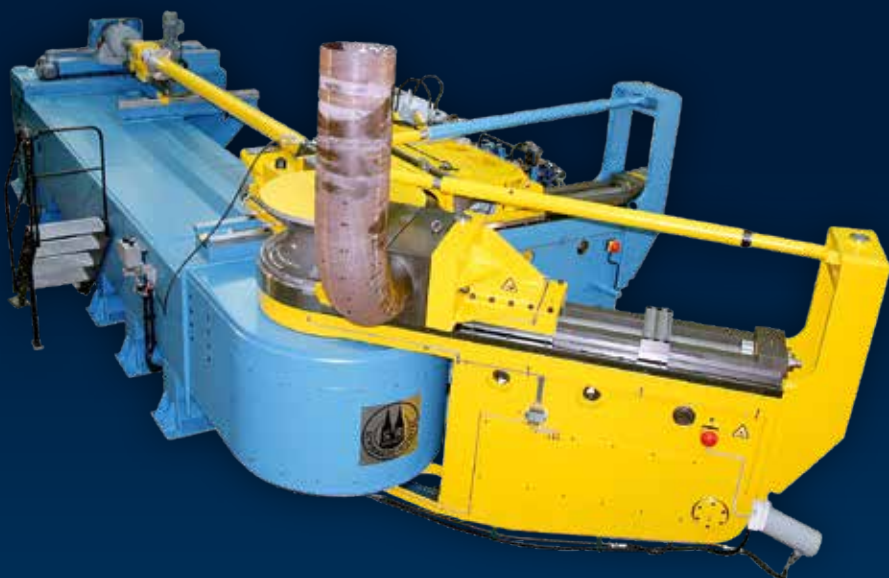
Our Heavy Duty portfolio includes a range of machine concepts specifically developed for large tube dimensions, high bending moments and demanding industrial applications. All systems are based on robust platforms and can be precisely adapted to your specific requirements.

This creates a tailored solution on a solid foundation for both **project-based and series production under high loads**.

Optional equipment and extensions:

- ⊕ Powerful hydraulic drive systems
- ⊕ CNC controls for complex bending processes
- ⊕ Multi-radius tooling to reduce setup times
- ⊕ Customized tooling systems for large tube dimensions
- ⊕ Automation and handling solutions as required





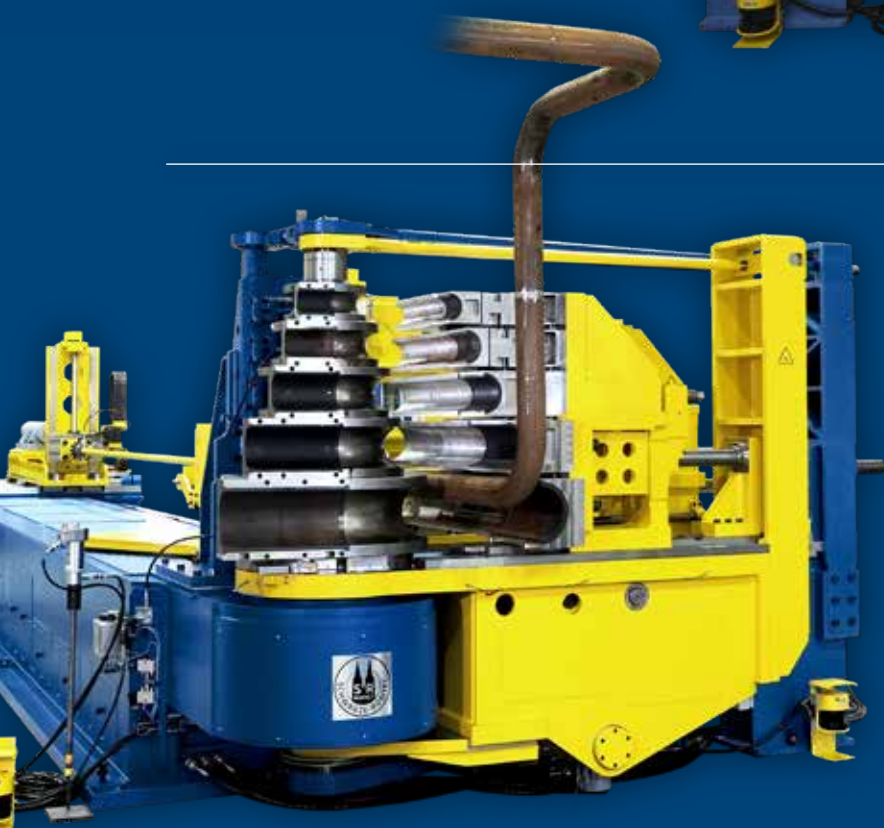
SEMI-AUTOMATIC TUBE BENDING MACHINES – SERIES 6 SINGLE BENDS

Robust and economical solutions for project-based single bends or small series with high material thicknesses.



AUTOMATIC TUBE BENDING MACHINES

CNC-controlled power units for large tube dimensions and continuous load in industrial applications.



TUBE BENDING MACHINES WITH MULTI-BEND TOOLING

Efficient solutions for complex bending processes with reduced setup times and high process reliability.

SERVICE & PARTNERSHIP

LONG-TERM PERFORMANCE REQUIRES RELIABLE PARTNERS

Our approach does not end with the commissioning of the machine. Our goal is a **consistently stable and high-performance production**. That is why we support our customers throughout the entire lifecycle of their systems – often for many decades.

Our service approach:

- ⊕ Consulting & engineering
- ⊕ Service, maintenance and spare parts
- ⊕ Customized design and project support
- ⊕ Long-term support and process optimization

INVESTMENT SECURITY & VALUE RETENTION

LONG-TERM PERFORMANCE – SUSTAINABLE THROUGH DURABILITY

In the heavy-duty segment, sustainability primarily means one thing: machines that operate reliably over decades. **Robust designs, high-quality components, and maintenance-friendly concepts** ensure long-term use – even under extreme conditions.

Heavy-duty solutions are engineered to withstand continuously high forces while maintaining maximum precision.

Technological highlights:

- ⊕ Massive, torsion-resistant machine frames
- ⊕ Designs engineered for continuous heavy-duty operation
- ⊕ Durable, low-maintenance assemblies
- ⊕ Long-term spare parts availability
- ⊕ High-quality drive and hydraulic systems



This results in **robust, economical solutions** with long service life and lasting value retention.

SCHWARZE-ROBITEC – BENDING TO PERFECTION.

For more than 120 years, Schwarze-Robitec has stood for high-quality tube bending machines and customized bending solutions – made in Germany. As an internationally active specialist, we develop high-performance machine concepts for demanding industrial applications – precise, reliable and future-proof.

With in-depth industry expertise, strong engineering capabilities and a clear focus on quality and durability, we support our customers as a technology and development partner throughout the entire lifecycle of their systems.

Schwarze-Robitec – Precision that sets standards.

CONTACT US

Discover how our innovative solutions can transform your production into a smooth, efficient and precise operation.



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