

Superior Machines
for Bending
of Plates and Sections

ROUND O



Rolls-Royce,
General Electric.

Focus on Customer Needs

ROUND0 has been developing machines for bending plates and sections for customers around the world since 1964. Our technical expertise and vast experience contribute to the superior quality, design and performance of each machine we build. For many years, we have been the world leader in our field, serving over 10 000 satisfied customers and maintaining a rock-solid financial basis.

Our Skills-Your Security

ROUND0 engineers and technicians employ cutting-edge technologies and renowned Swedish technical skills and know-how, to make the products we create represent quality, performance and reliability unique on the global market. Our extensive technical expertise means that we can always recommend the best possible solution to meet the needs of our customers.

Agents around the World Provide First-Rate Service

Our global network of dedicated agents and distributors ensures that there is always a sales representative nearby, and guarantees that you receive first-class advice before, as well as first-class service and support after you have bought your ROUND0 machines. It is our policy to respond to all customer support inquiries within 24 hours.

Doing Business

The way we view our customers and business deals is distinguished by a sense of honesty and trust. Long-term and deep customer relationships with large numbers of repeat customers show that our way of doing business works. Prospective customers are always welcome to request references from our existing customers – including the leading bending companies in the world.



Parliament
building, Berlin.



Vestas, Micon.



Bob Vorsteg, service manager
at COMEQ, Inc. our distributor
for the North American market.

Flexible Design for Optimal Solutions

Starting with the widest and most powerful standard range in the world, we can adapt and develop machines to match the exact needs and wishes of our customers. In addition, ROUND0 develops its own CNC systems, combining renowned standard components and ROUND0 software, allowing us to customize the control of our machines in the best possible manner. We are a company whose solutions always live up to the technical standards we promise. We view every request from a customer as an exciting challenge. The harder the problem, the more we are inspired.

Greater Freedom in the Bending Process

Our machines offer endless possibilities for bending advanced materials and unique components of all sizes. Plates and sections bent on ROUND0 machines can be found in everything from fire extinguishers to rockets launched into outer space.

Full Control of Manufacturing

ROUND0 manufactures its own parts and key components in-house, utilizing famous Swedish design and engineering skills and attention to details. Our manufacturing facilities include a 4 000 m² welding shop, where all machine frames are produced in accordance with our high standards. Unlike our competitors, all our frames and major components are stress-relieved, allowing our machines to retain for decades the same tight machine tolerances as the day they are commissioned.

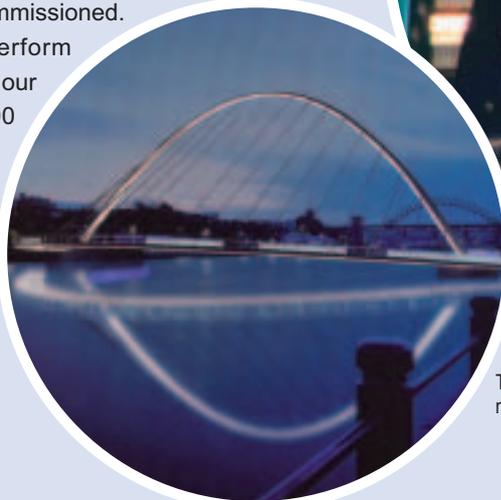
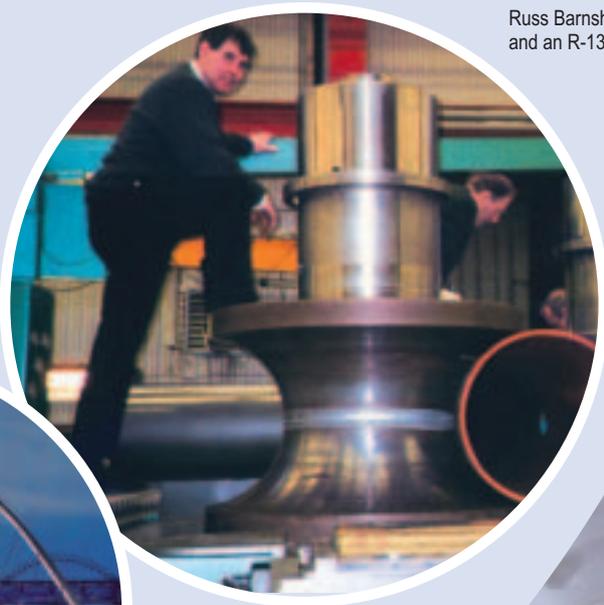
We assemble and perform final inspections on all our machines in our 6 000 m² main production facility, giving us full control over the entire production process, ensuring the very high-

Russ Barnshaw, owner of Barnshaw Section Benders Ltd, of Birmingham, England, one of the world's largest bending companies, has this to say about ROUND0:

ROUND0 has been our 1st choice for plate and section bending machines for all our plants for over thirty years.

ROUND0 gives us the security we demand regarding technical competence and flexibility, reliability of the machines and possibilities of having quick service. ROUND0 is one of our most important partners and our more than 60 ROUND0 machines are corner stones of our operations.

Russ Barnshaw
and an R-13-S.



The Gateshead Millennium Bridge, UK.



ROUND O Plate Bending Machines



PSS 700

Powerful Solutions for Optimal Results

Lowered drop end



PASS 310 4-roll machine
for corrugated plates

If you are looking for a plate bending machine that meets your strictest requirements, just turn to ROUND O. Our machines are always more powerful and more heavily proportioned in terms of frame, roll size, bearings and torque than machines from other suppliers. The result is higher reliability, greater precision and longer service life.

Advantages to Hydraulic Drive

Our products feature fully hydraulic roll rotation, side roll adjustment and drop end control. Combined with infinitely variable speed adjustment, this provides the operator with complete control over the process in any bending situation.

Ensured Parallelism

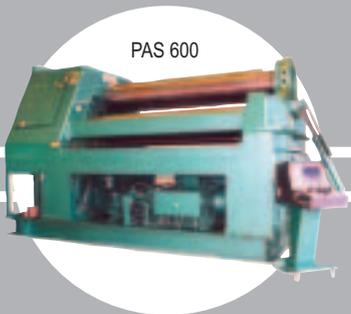
The parallelism of the rolls is one of the most crucial factors in achieving a good bend and is absolutely essential for optimal use of CNC controls. This is ensured in all ROUND O machines, even under heavy loads.

Spherical Roller Bearings for Longer Service Life

All our plate bending rolls are mounted in spherical roller

PS 310
3-roll machine





PAS 600



bearings of the highest quality, resulting in minimal friction losses and longer service life. In addition, the rolls can be tilted to achieve the best results in operations such as cone bending.

A Bit More Expensive, Guaranteeing You Peace of Mind.

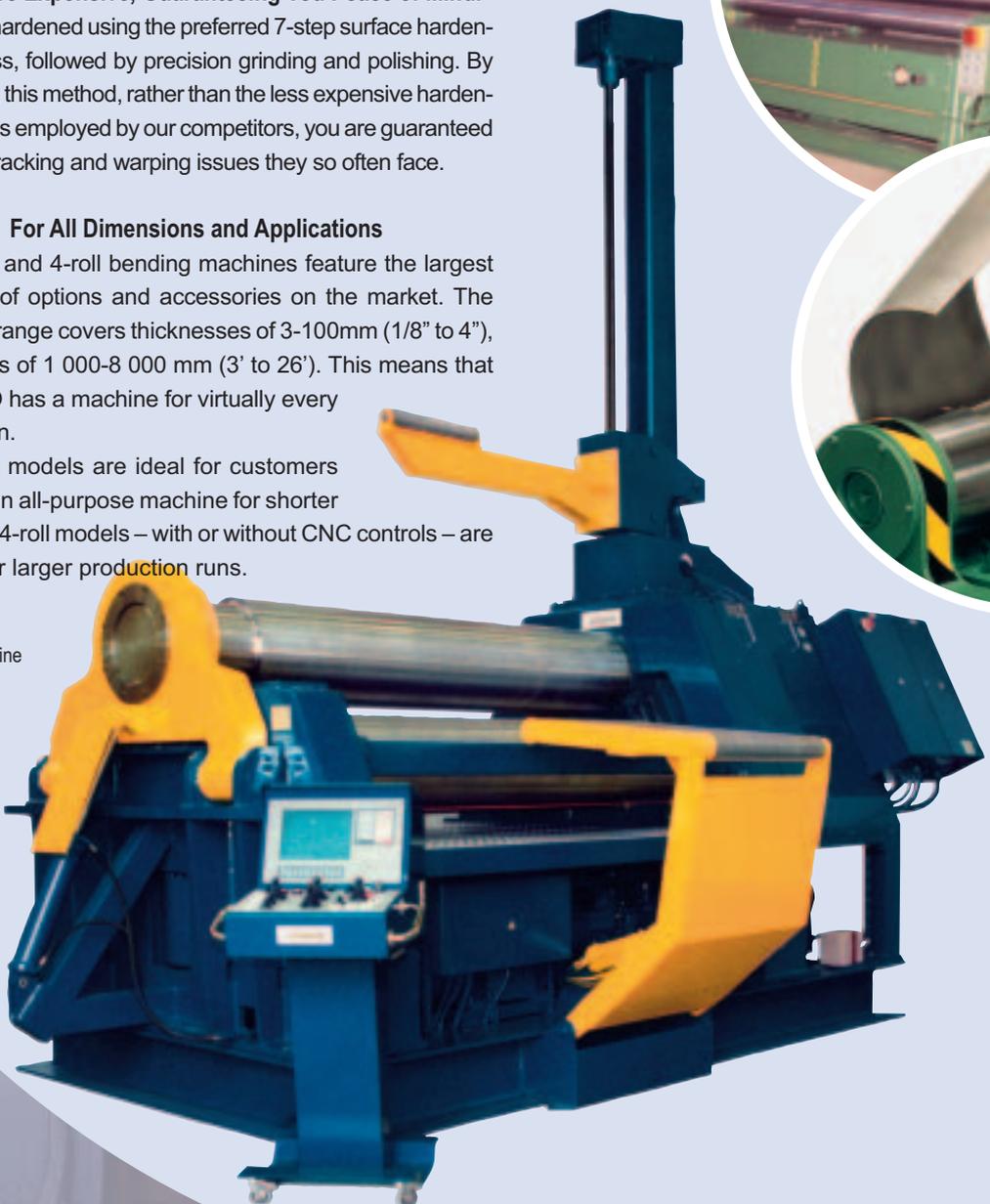
Rolls are hardened using the preferred 7-step surface hardening process, followed by precision grinding and polishing. By employing this method, rather than the less expensive hardening process employed by our competitors, you are guaranteed to avoid cracking and warping issues they so often face.

For All Dimensions and Applications

Our 3-roll and 4-roll bending machines feature the largest selection of options and accessories on the market. The standard range covers thicknesses of 3-100mm (1/8" to 4"), and widths of 1 000-8 000 mm (3' to 26'). This means that ROUND0 has a machine for virtually every application.

Our 3-roll models are ideal for customers needing an all-purpose machine for shorter runs. Our 4-roll models – with or without CNC controls – are perfect for larger production runs.

PAS 500
4-roll machine



PAS 700



PASS 110



Cone bending



ROUND O Section Bending Machines



Spiraling device



Largest Selection on the Market

Pulling roll unit



ROUND O offers the largest selection of section bending machines on the market. We produce over 20 different standard sizes, from the R-1, our smallest machine with a capacity of L-50 X 50, to the R-15-S, the largest section bending machine in the world, which can bend HE 800 beams the hard way! Our machines are more powerful and more heavily proportioned in terms of frame, shaft size, bearings and torque than machines from other suppliers. CNC controls and a wide array of options are available for all models.

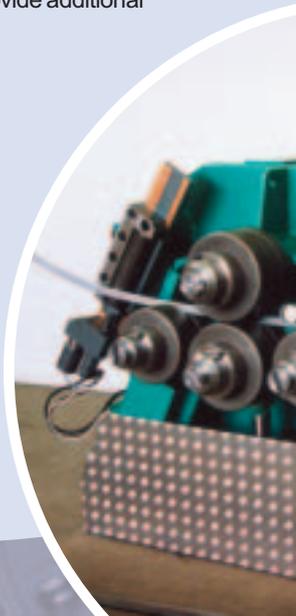
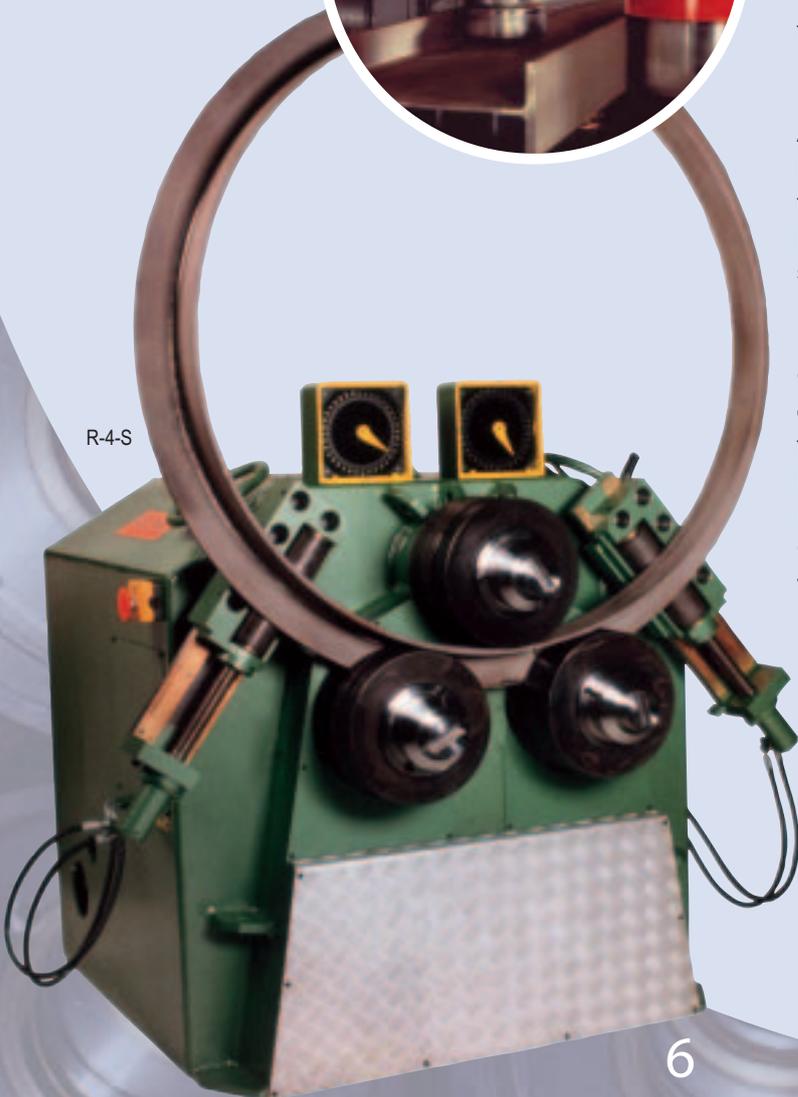
All Three Rolls Powered

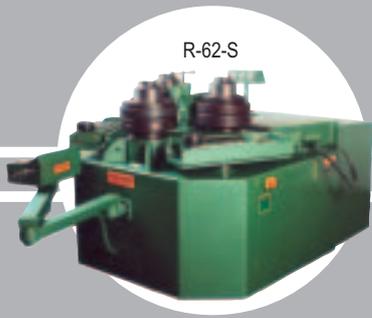
All ROUND O machines feature three-roll drive for optimal bending and to minimize the risk of slipping. Except for the very smallest models, all ROUND O section bending machines come standard with hydraulic, infinitely variable speed drive.

Greatest Efficiency and Flexibility

Our machines are readily adapted to handle a wide variety of bending jobs. The larger models are also optimized for bending beams the hard way. Both lower rolls are independently hydraulically adjustable, which provides maximum versatility plus the ability to prebend both ends. Guide rolls adjustable in all three directions provide additional versatility.

R-4-S

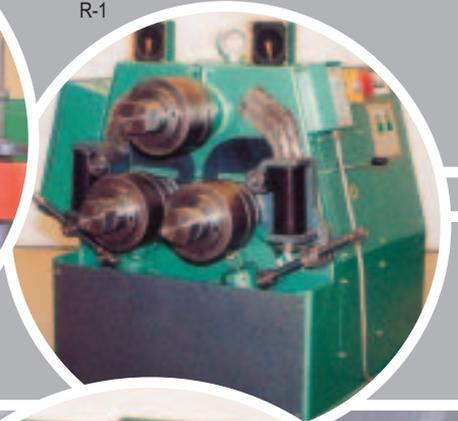




R-62-S



R-13-S



R-1



R-72-S

Standard Options and Accessories

The largest selection of standard options and accessories on the market includes:

- Horizontal, vertical or combined design.
- Hydraulic pulling roll unit for bending I, U, and H beams the hard way for larger models.
- Equipment for spiraling pipes and flat bars.
- Pushing roll unit placed beneath the upper roll.
- Digital readouts showing the position of the lower rolls.
- Digital readouts showing the position of the guide rolls.
- Bending rolls for pipe, square and rectangular tubing and other special sections.
- Mandrel bending equipment.

Four Rolls for Three-Dimensional Bending

ROUND O also supplies section bending machines with four rolls. This type of machine is perfect for producing body shell components and similar parts where three-dimensional bending is required.

For more detailed information, please ask for our separate product leaflets.



Final inspection and testing of an R-15-S, the world's largest section bending machine.

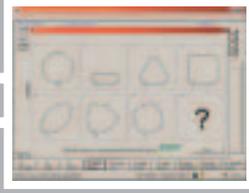


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4-R-3-S



ROUND0 CNC Controls



The First with a CNC System

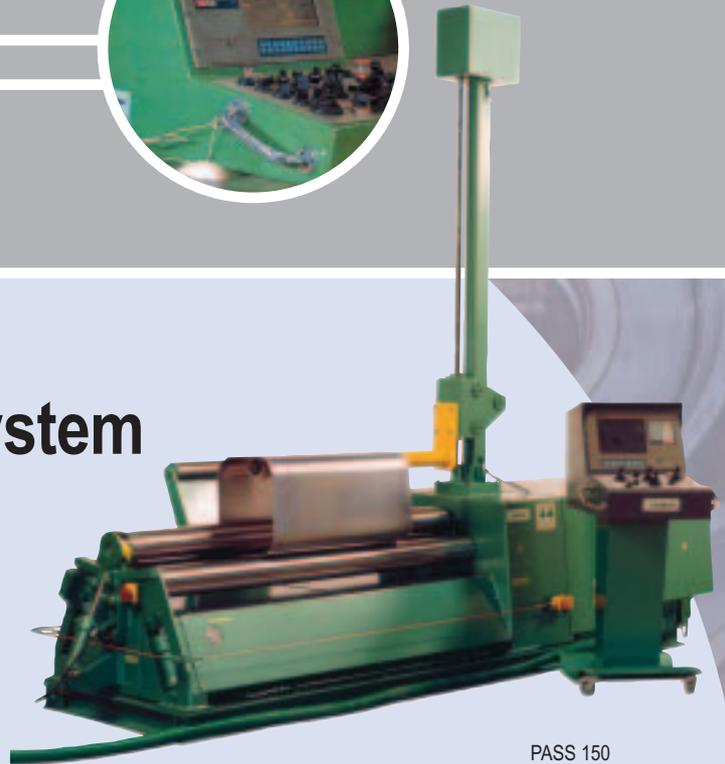
In 1985, we were the first to develop CNC controls specifically adapted to bending machines. Since then, we have steadily enhanced and expanded the capabilities of our systems, allowing us to maintain our position as the world leader in this area as well.

For Maximum Performance

Efficient multiple production is the main advantage of CNC controls. ROUND0's CNC system is based on our own I/O control board combined with an industry-standard PC running ROUND0 software on Windows® – all to achieve maximum performance.

Easy-to-Use Program

With clear commands in every user's own language and preset functions, the operator can create programs in a logical and simple way. Our unique geometry program enables users to create programs directly from drawings, and to quickly calculate the position of side/lower rolls to achieve a given radius.



PASS 150

Store Roll Settings in the System

The program can also be created via the "Teach-in" function, which stores in the control system roll settings used during manual bending. The interpolation function allows the machine to simultaneously rotate and change the position of, for example, one side/lower roll, achieving varying radii and smooth transitions on the plate/section.

Unlimited Capacity

The control systems have practically unlimited capacity regarding the number of programs and the size of each program. The computer in the CNC system can be connected to the customer's network, providing a simple means of data backup. The software can also be installed in an office PC, allowing finished bending programs to be created in advance. This allows the machine to be available for production for a longer period of time.



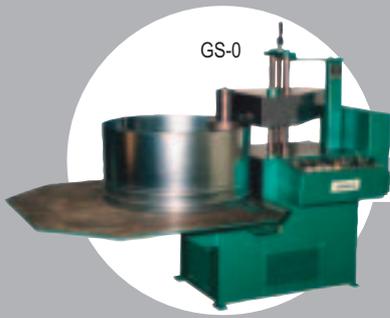
R-52-S

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Lifting roll



ROUND O Machines for Special Purposes



GS-0



Quick rolling machine PM-1



Joggling machine S-0

For Unique Needs

ROUND O is also famous throughout the world for providing an advanced range of specialized machines for plate and section bending and plate forming. These machines include everything from adaptations of our standard rolls to unique specialized tools for working with particular products or solutions. Here are a few examples:

- Beam bending machines for bending beams the hard way, type Beambender. The largest machine can bend beams the hard way with a height of up to 1 250 mm (48").
- Quick rolling machines, type PM, for large production runs of cylinders. Cycle times as short as 10 seconds per cylinder are possible. For plate thicknesses up to 12 mm (1/2") and widths of up to about 2 000 mm (6').
- Flanging and punching machines, type SF, for flanging and punching cylinders in the same operation. Cylinder diameters of 350-3 000mm (14" to 120") and plate thicknesses up to 8 mm (5/16").
- Plate straightening machines. Straighten plates with thicknesses of 2-40 mm (14ga. to 1 1/2") and widths of up to 4 000 mm (13'). Produced with 5, 7 or 9 rolls, depending on tolerance requirements.
- Beading and joggling machines. For beading/joggling of cylinders and cylinder heads.
- Welding positioners. Available in eight sizes, for loads from 7 500 N to 350 000 N (1 500 to 75 000 lbs).



Flanging and punching machine SF-3



Beambender B-15000-S



Welding positioner LH 30000



Plate straightening machine PRH-500





Question and Compare

Hans Messer, Sjölund A/S in Denmark:

Before every purchase, we have asked these questions, and for us, ROUND0 is the clear winner.

We have been ROUND0 customers since 1980, and use over 15 of their machines in our operations. It's important to us to have machines that are highly reliable, of high quality and versatile. This allows us to meet the high and varied demands of our customers.

When purchasing plate and section bending machines, considering all aspects in the long run is critical for how profitable your investment in machinery will be – today and in the future. Your choice will also determine how well your company will be able to meet your customers' demands for the quality and precision of the work you perform. Here are a few important things to bear in mind.

Are there references from satisfied customers concerning service life and quality?

Thanks to the careful way in which ROUND0 produces machines, we have achieved a level of quality and service life that is superior to that provided by all other suppliers on the market. Feel free to ask us for references.

Can the machine meet your present needs? Will it meet future needs?

ROUND0 machines are more powerful and robustly proportioned than products from other suppliers. This means that your company will be able to grow as its needs to, without having to exchange or purchase a new machine.

To what extent are technical expertise, support and service provided?

ROUND0 provides your company with prompt and advanced technical support throughout the service life of your machine. This means that your company will be able to make greater use of a ROUND0 machine over a longer period of time than anyone else can offer.





What is the cost of your machine distributed over its expected service life?

Ask whoever you please, and you will hear that ROUND-O machines are the most cost-efficient machines on the market. We believe that no other supplier can demonstrate a lower cost per service hour than we can. If your situation changes and you should ever need to sell a ROUND-O machine, you can always be assured of getting a good price for it.



Is the machine a key piece of equipment in your operations?

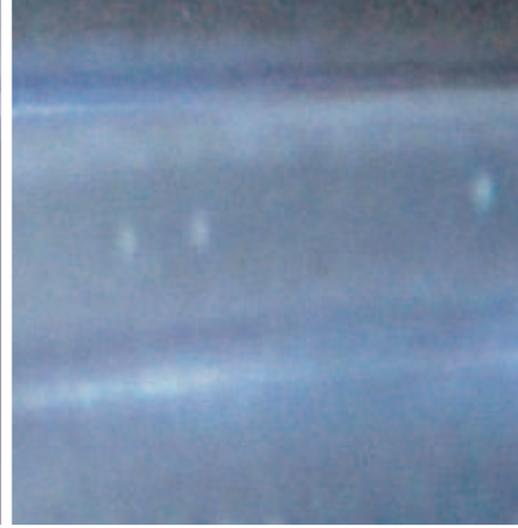
ROUND-O machines are world famous for their quality, long service life and reliability. With ROUND-O machines, the risk of interrupted or lost production is minimized.



How is the capacity of a machine indicated and defined?

For plate bending machines, ROUND-O always guarantees a straight edge in prebending of no more than 1.5-2 times the thickness of the plate, even for diameters as low as 1.4 times that of the upper roll. Most other suppliers on the market cannot provide such a guarantee.

Please contact us, and we would be pleased to discuss additional questions to which you should demand answers. We will also help you to contact references who will speak freely about the advantages of ROUND-O machines.



Welding shop



Main plant

ROUND O is the world's leading manufacturer of plate and section bending machines. Starting with a strong standard product range, we are able to tailor machines to suit the needs and wishes of our customers.

The company was formed in 1964, and has since delivered more than 15 000 machines to satisfied customers around the globe. The company is still in the hands of its original owners. This has provided us with a stability and continuity that is unique in our industry. We are currently represented throughout the world via our own subsidiaries, distributors and agents.

ROUND O has a team of over 75 dedicated employees, capable of shipping over 300 machines per year, of which 97% are exported around the world.

ROUND O

