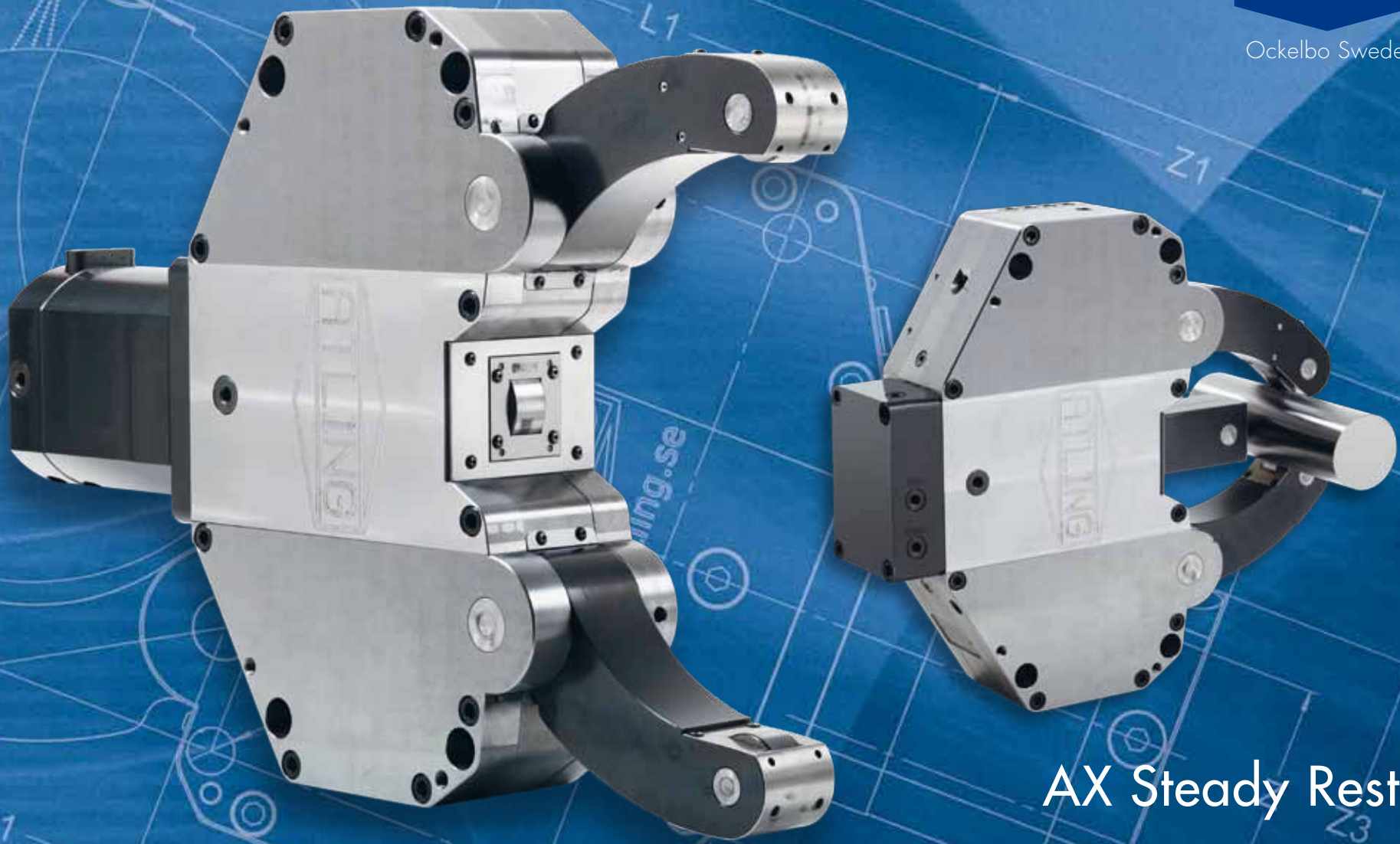
Atling proudly presents the next generation self centering steady rests

ATLING

Ockelbo Sweden



AX Steady Rests

The New AX Steady Rest

The Atling AX series is the result of several years of development and is our third generation of steady rests. The development have been a collaboration between engineers, customers, technicians and resellers to ensure the covering of all possible needs and demands of our clients. And also to be able to create the quality our customers expects when they buy an Atling steady rest.

This new series has a brand new look and comes with several new design features that is extending the life time of the steady and it parts.
Some features that earlier only where optional has now become standard.
The Atling AX series housings are made from Swedish high-quality cast iron and all moving parts are also hardened. To prevent ingress of chips in the housing all models are equipped with roller wiper seals.

11 Sizes
11 sizes is included in the standard program.
It reaches from the clamping range of 6 – 70 mm to 450 – 870 mm.

Swing Away Levers
This option helps you if you need the levers to open an extra amount when changing the workpiece. This choice can be applied for either the upper or the lower lever, or both at the same time. Whatever you choose, the size of the steady rest remains the same – same as the standard.
Our new swing away function is also easy to switch to and can be installed at a later stage. Only one plate needs to be changed, and that same plate is compatible with both levers.

Automatic Lubrication
All lubrication points are provided with oil trough integrated metering valves. Recommended lubrication intervals depend on the amount of load and other circumstances that may affect the steady rest.

Water Flush
To prevent chips from coming in between the rollers and the workpiece the AX series are now equipped with a water flush system.
Just connect the steady to the coolant system and it will be distributed throughout the levers as a protecting water curtain.

Stroke Control
Each steady rest comes prepared for installation of two inductive sensors to indicate two adjustable clamping diameters. (Not AXi)

Check Valve
Check valves are delivered as standard in all cylinders. If the main pressure drops, the check valve keeps the cylinder pressure in order to prevent accidents.

Air Barrier
Connect compressed air to the steady rest to prevent chips and coolant from entering the housing.

AX * * - * *

Model Size	1-11

Cylinder Position	Value
Rear Mounted	-
Intergrated	i

Swing Away	Value
None	-
Upper Lever	1
Lower Lever	2
Both Levers	3

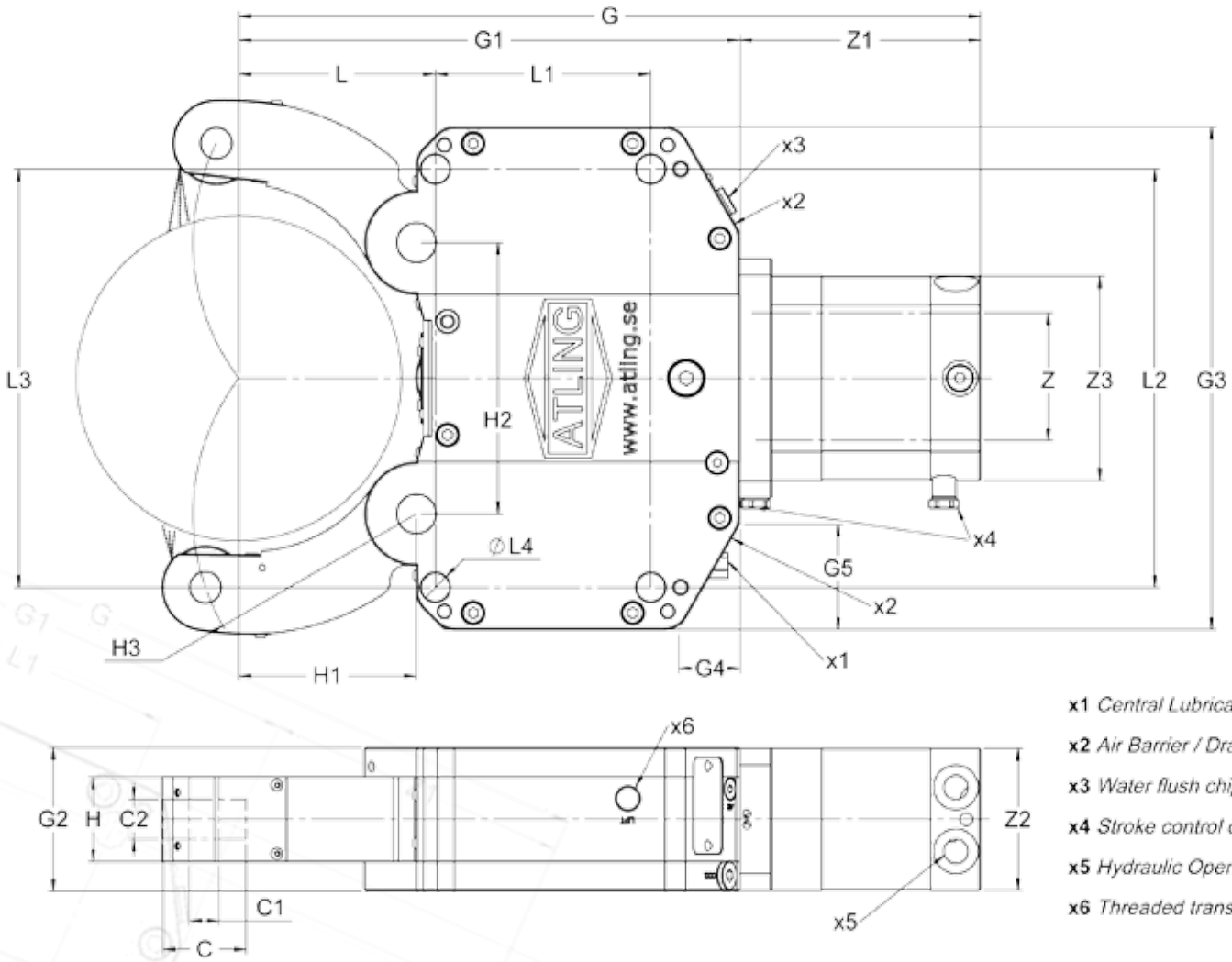
Lubrication Type	Value
Automatic	-
Manual	G

TECHNICAL SPECIFICTIONS

Model size	AX1	AX2	AX3	AX4	AX5	AX6	AX7	AX8	AX9	AX10	AX11
Gripping range, mm	6-70	8-105	12-125	12-160	20-200	30-255	45-320	85-360	100-510	250-680	450-870
Cylinder size, Ø mm	40	50	50	80	80	90	100	100	120	120	140
Total max gripping force, daN	300	1200	1200	3000	3500	4500	5500	5500	6700	6700	9200
Roller size, Ø mm	24	35	35	47	52	52	62	72	80	100	160
Max peripheral roller speed, m/min	730	930	930	805	890	890	655	765	685	570	570
Centering accuracy, mm	0,02	0,02	0,02	0,04	0,04	0,04	0,06	0,06	0,1	0,1	0,2
Repeatability, mm	0,005	0,005	0,005	0,005	0,005	0,005	0,005	0,005	0,02	0,02	0,02
Standard operating pressure, bar	20	30	30	30	30	40	40	40	40	40	40
Max operating pressure, bar	25	60	60	60	70	70	70	70	60	60	60
Weight, kg	8	17	23	45	48	83	158	157	283	325	1350
Optional specification											
Swing away, degrees/lever	7	3,5	4,5	7,5	7,5	9	8	10	7,5	*	*
Cylinder size for AXi, Ø mm	N/A	N/A	N/A	40	40	45	50	50	60	*	*

*= Available on request

Dimensions - AX



x1 *Central Lubrication G1/8"*

x2 *Air Barrier / Drain G1/8"*

x3 *Water flush chip protection G1/8"*

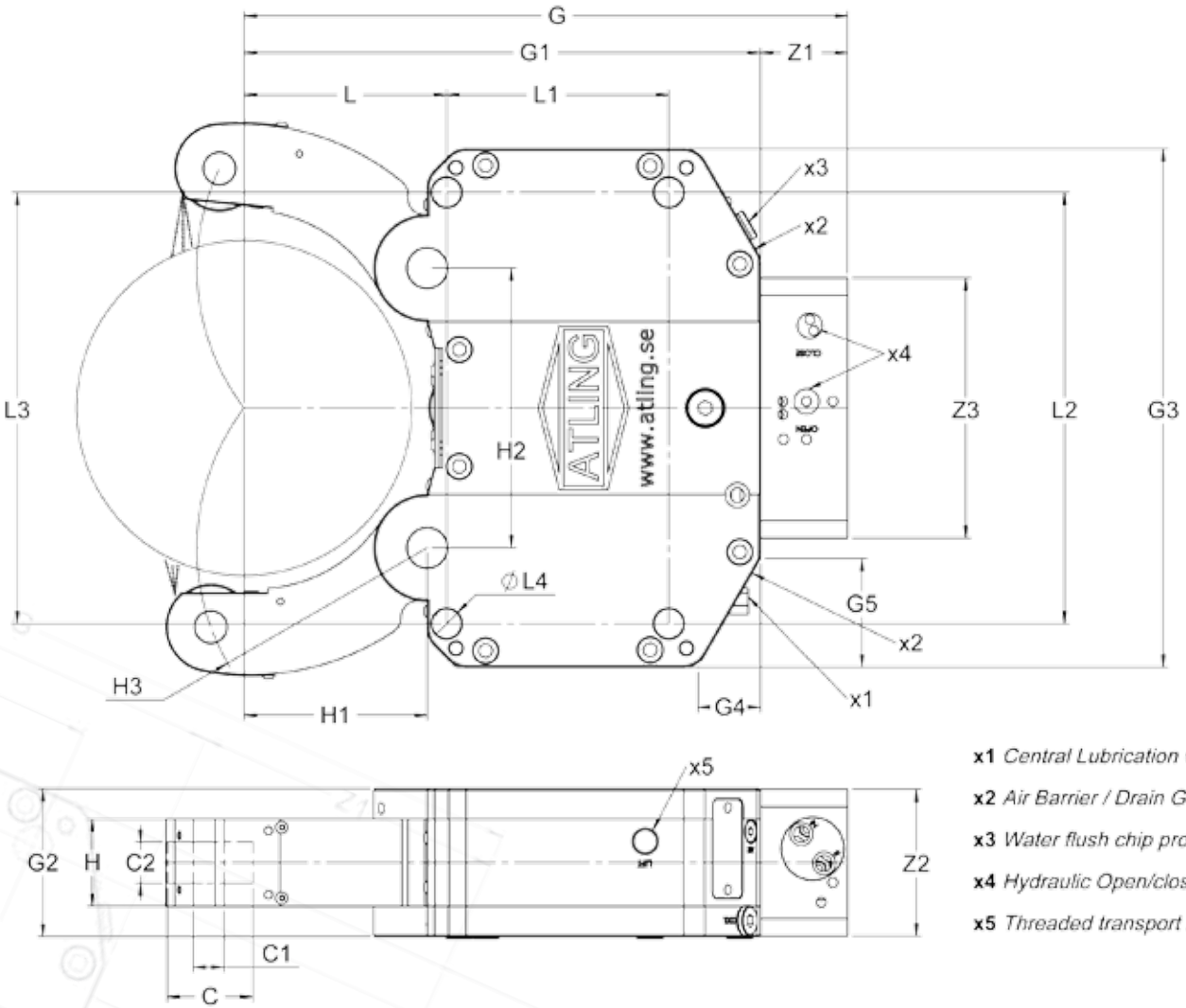
x4 *Stroke control connections M12x1*

x5 *Hydraulic Open/close G3/8"*

x6 *Threaded transport hole*

Model size			AX1	AX2	AX3	AX4	AX5	AX6	AX7	AX8	AX9	AX10	AX11
Gripping range		(mm)	6-70	8-105	12-125	12-160	20-200	30-255	45-320	85-360	100-510	250-680	450-870
Rollers	C	(mm)	24	35	35	47	52	52	62	72	80	100	160
	C1	(mm)	8	15	15	20	20	20	30	30	35	45	65
	C2	(mm)	15	19	19	25	25	25	29	29	29	32	75
Lever	H	(mm)	30	37	37	53	53	53	68	68	98	98	118
	H1	(mm)	44	60	65	90	111	124,5	167	191	252	350	480
	H2	(mm)	66	90	120	146	170	226	270	277	410	500	740
	H3	(mm)	55	75	88	116	140	168	215	235	325	430	606
Housing	G	(mm)	219	301	344	428	465	563	669	698	938	1062	1578
	G1	(mm)	137	200	231	290	314	380	465	493	661	794	1200
	G2	(mm)	60	70	70	90	90	110	145	145	145	145	198
	G3	(mm)	160	205	270	315	315	438	500	500	700	760	1198
	G4	(mm)	15	42,5	56	45	38	83	101,5	97	101	87	179
	G5	(mm)	24	34,5	67,5	45	66	132	105	100	179	107	135
Hole pattern	L	(mm)	51	70	77	115	123	146	178	208,5	292,5	415	640
	L1	(mm)	64	85	102	135	135	155	210	210	260	350	400
	L2	(mm)	118	170	220	262	262	365	400	400	620	500	1100
	L3	(mm)	118	170	210	262	262	365	400	400	620	700	1100
	L4	(mm)	11	14	14	18	18	23	23	23	26	35	35
Cylinder	Z	(mm)	40	50	50	80	80	90	100	100	120	120	140
	Z1	(mm)	82	101	113	138	151	183	204	205	276,5	268	378
	Z2	(mm)	59	69	69	89	89	109	144	144	144	144	197
	Z3	(mm)	86	106	106	128	128	140	155	155	190	190	250
Piston area	G	(mm)	12,6	19,6	19,6	50,3	50,3	63,6	78,5	78,5	113,1	113,1	113,1

Dimensions - AXi



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x4 *Hydraulic Open/close G3/8"*

x5 *Threaded transport hole*

Built-in Cylinder – AXi (Available from size 4)
This is our new replacement for our previous side-mounted cylinder – a built in cylinder that works together with a pressure booster. With this cylinder option you get the same clamping force as the corresponding steady but with the back mounted cylinder house as good as gone. This is suitable when the available space is very limited but you still need that big clamp size.

Model size			AX4i	AX5i	AX6i	AX7i	AX8i	AX9i
Gripping range		(mm)	12-160	20-200	30-255	45-320	85-360	100-510
Rollers	C	(mm)	47	52	52	62	72	80
	C1	(mm)	20	20	20	30	30	35
	C2	(mm)	25	25	25	29	29	29
Lever	H	(mm)	53	53	53	68	68	98
	H1	(mm)	90	111	124,5	167	191	252
	H2	(mm)	146	170	226	270	277	410
	H3	(mm)	116	140	168	215	235	325
Housing	G	(mm)	334	368	434	509	537	705
	G1	(mm)	290	314	380	465	493	661
	G2	(mm)	90	90	110	145	145	145
	G3	(mm)	315	315	438	500	500	700
	G4	(mm)	45	38	83	101,5	97	101
	G5	(mm)	45	66	132	105	100	179
Hole pattern	L	(mm)	115	123	146	178	208,5	292,5
	L1	(mm)	135	135	155	210	210	260
	L2	(mm)	262	262	365	400	400	620
	L3	(mm)	262	262	365	400	400	620
	L4	(mm)	18	18	23	23	23	26
Cylinder	Z1	(mm)	44	54	54	44	44	44
	Z2	(mm)	89	89	109	144	144	144
	Z3	(mm)	158	158	158	172	172	194

Custom Made Designs

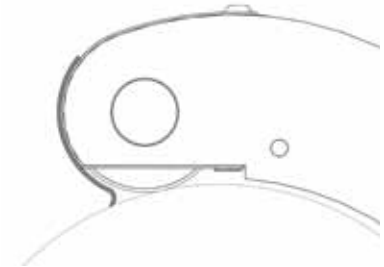
We have throughout the years done a wide range of special designed steady rests on request by our customers. We therefore have great experience in this field. Contact us to find a solution for your special needs.

Some of our special designs are:

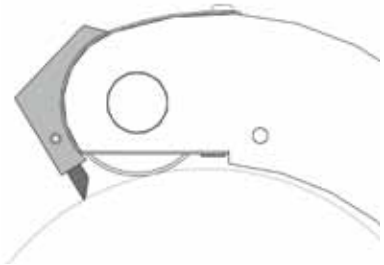
- Extra thin levers for turning of crankshafts
- Use of diamondpads on levers instead of rollers
- Steady rests for grinding machines
- Use of big rubber rollers for turning of hexagon bars.
- Pneumatic cylinder

Accessories

Workpiece Wiper
To prevent chips from coming between the bearing and the workpiece you can install a wiper on the end of each lever. The standard wiper seal is fitted to the lever for the right working diameter and is then attached to the lever with two screws.



Resilient Workpiece Wiper
This wiper works with any workpiece diameter as it adjusts to the surface and doesnt need any adjustments.



Mounting Bracket
If your machine isn't fitted with a bracket Atling can provide you with this. The specifications of the bracket will be unique for each particular machine.

Special Rollers
Atling offers a wide range of special made rollers in different sizes and material. For example; Rubber coated bearings to minimize the imprint on the work piece, cambered rollers for traveling steady rests, pads of diamond or hardened metal for grinding applications.


OPEN
CLOSE


AIR

Company Profile

Atlings Maskinfabrik AB in Ockelbo is situated in the middle parts of Sweden. The company was established here in 1947 and has been producing steady rests since 1976. Our customers are wide spread throughout the world, from USA in the west to Japan in the east. Thanks to our modern machine park we manufacture all parts for the steady rests with high precision.

The close work between our engineers and our machinists creates the ability to quickly produce unique solutions to fit our customers certain needs. This has also become one of our special strengths. What is important to us is to be available when our clients need us to provide with technical support or spare parts, for this we have resellers with technical competence and a possibility to get direct contact with our designers.

With the use of the Atling steady rest our clients produce parts for rock drills, wind turbines, shafts for fuel engines, amongst other products, with great accuracy.

Steady rests are an essential accessory for turning machines during the manufacturing of slim or heavy workpieces. Under the influence or cutting loads these workpieces will become unstable with a liability to bend or deflect. To maintain its physical properties and to obtain good concentricity and surface finish the steady rest becomes necessary.

When using a steady rest from Atling properly the workpiece is held centered. In cases of turning long shafts it is an advantage to use two or more steady rests to give support at several positions. In cases of extreme workpiece length it is recommended that a traveling steady rest is used. This enables proper support close to where the cutting loads appear. This requires a programmable slide or the steady to be mounted to the tool revolver.

Atling steady rests is suitable to fit practically any CNC or conventional lathe in the most critical space conditions. Mounting requires a fixed bracket which is offered by most machine tool manufacturers, although Atling can provide you with the necessary mounting accessories for any flat or slant bed machine.

Note: Dimensions and data given in this catalog may not always correspond to the latest design features and are subject to change without notice.

We are represented all over the world.
Please contact us to find your nearest sales agent.

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Edition 1