

# **Steady Rest Installation manual**

www.atling.com





Self-Centering Steady Rests Hydraulic AXI, ASI, AXE, ASE, ANE- series



Before using the machine read and fully understand the contents of this manual

# Steady Rests AXE, AXI, ASE, ASI and ANE-Series

#### Dear Customer

Thank you for selecting a product from Atlings Maskinfabrik AB. Our products are recognized by high quality and accuracy. Active cooperation with our distributors gives us a high level of service, which will fulfil Your expectations.

How to install the Atling Steady Rest, and to using it, we recommend you to read and fully understand the contents of this book, and also the Operator's Manual. This, for you as a customer, to take full advantage of all built in features of the Steady Rest.

Do not hesitate to contact Atling or your nearest distributor if there are any questions. We appreciate any suggestions that will improve our product.

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# 1 Safety Instructions



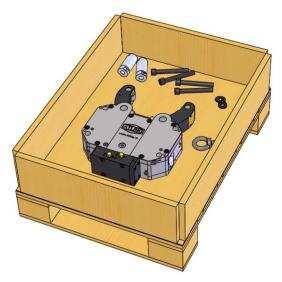
Wrong installation and/or careless or wrong use can result in serious damages and even dangerous to life. All personnel operating or coming in contact with the steady rest, shall read and fully understand the content of this manual. Atling or nearest supplier shall be contacted if there is any uncertainty.

#### **Before installation:**

- Ensure that the Steady Rest can be installed in the machine without any risks, for installing personnel or other personnel who is working in the same facilities!
- Switch off and lock all incoming energy to the machine with a personal locking device, as example electrical power, hydraulic pressure, compressed air e t c!

### 2 Control of delivery

Check that all the delivery regarding the Steady rest is okay and without damage, and that all the ordered equipment is there, and are okay.



#### 3 Control of the machine

Before starting the installation in the machine check some points first!

#### 3.1 Necessary equipment

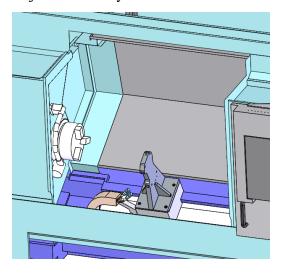
Check that the machine has necessary equipment according to the delivered Steady Rest, and that it can be used to operate the Steady Rest, as for example: hydraulic unit, hydraulic valve, cooling water, lubrication, pneumatic overpressure, digital input for stroke control e t c.

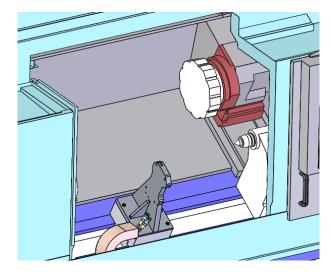
#### 3.2 Check installing and adjusting of machine

Check that the installing of the machine is finished and all the important measurement that affect the Steady Rest is adjusted correct, example chuck, machine bed and tailstock!

#### 3.3 Control of Steady Rest Bracket

Adjust the Steady Rest Bracket to be 90° to the machine bed and machine center line!

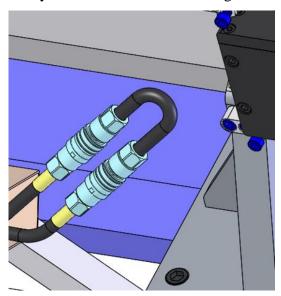




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#### 3.4 Rinsing of hydraulics

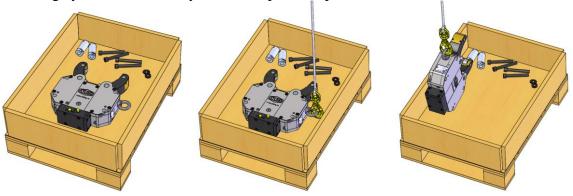
To avoid extraneous particles in the hydraulic system, please connect the hydraulic hoses in the machine for steady rest, to each other, and open the hydraulic valve for steady rest. Then let the hydraulic oil flush through the system and through the hydraulic unit filter and rinsing the hydraulic oil before connecting to the Steady Rest.



# 4 Mounting of Steady Rest

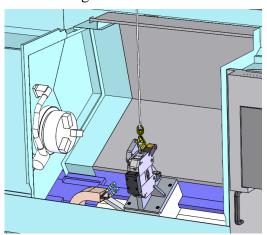
### 4.1 Lifting the Steady Rest

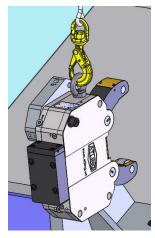
Connect the lifting eye to the Steady Rest lift point marked "Lift", connect the lifting hook to the lifting eye and lift carefully with example a shop crane.



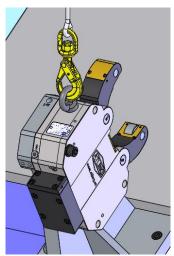
# 4.2 Mounting of Steady Rest to Bracket / Adapter Plate

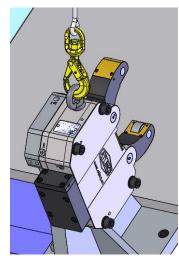
Lift the Steady Rest to one side of the Steady Rest Bracket / Adapter Plate, and mount one of the mounting screws to one of the mounting holes that best fit, depending of machine.





Adjust the Steady Rest carefully so all the mounting screws can be applied, and tighten them only slightly.

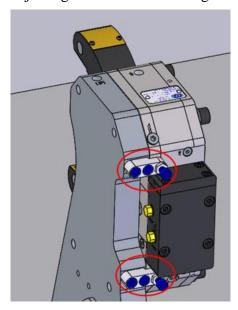


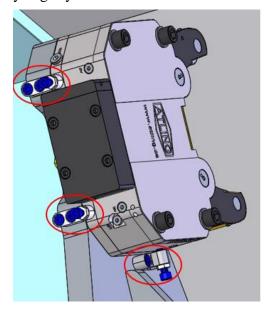


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# 4.3 Mounting of adjustment devices

Mount all the adjustment devices to the Steady Rest Bracket / Adapter Plate and tighten the adjusting screws and mounting screws only slightly.

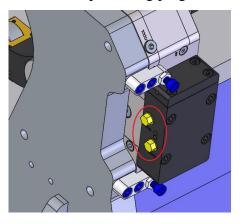


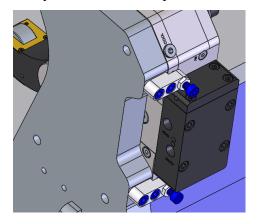


# 5 Connecting points to the Steady Rest

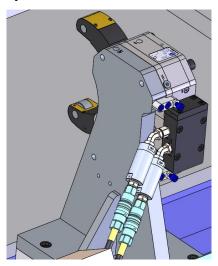
# 5.1 Connecting hydraulic Open and Close

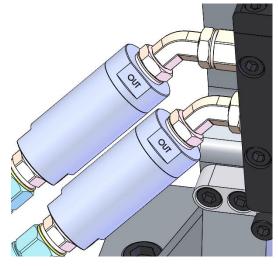
Remove the protecting plug at the steady rest cylinder marked "Open" and "Close"...





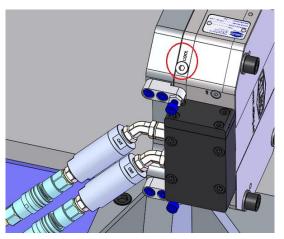
...and install the supplied In-Line filters, and also the necessary hoses and couplings to the hydraulic valve.

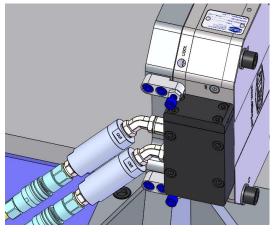




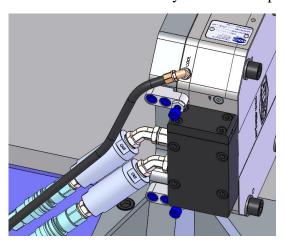
# 5.2 Connecting of cooling

Remove the plug from the cover, marked "Cool"...



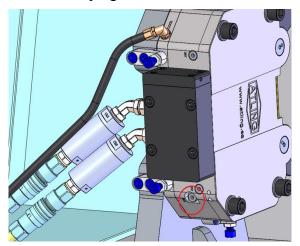


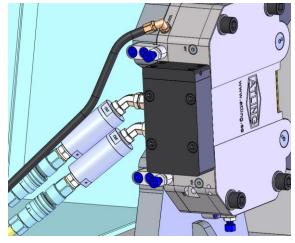
...and install the necessary hose and couplings for cooling water or compressed air.



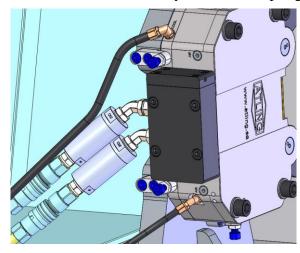
# **5.3 Connecting Iubrication (Automatic Oil)**

Remove the plug marked "Lub" at the rear side of the housing...





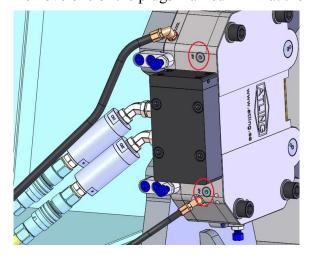
...and install the necessary hose and couplings for lubrication to the lubrication Unit.

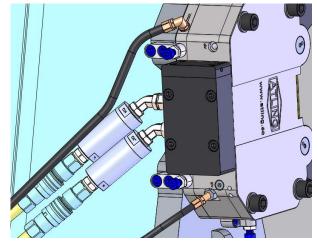


Oil Lubrication Unit: Pumping pressure 12-45 bar, Relief pressure: Max 3 bar, lubrication intervals 3-5 minutes.

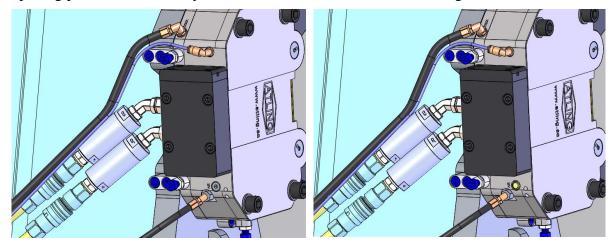
#### 5.4 Connecting of Air barrier

Remove one of the plugs marked "Air" at the rear side of the housing, presumably the top...





...and install the necessary hose and couplings for compressed air as a protecting Air barrier (0,5 bar). Sometimes it can also be good to install a filter at the second Air connection point or as an alternative a small short hose, to avoid increasing of pneumatic pressure, during opening process of the steady rest, and in the same time use as drainage.

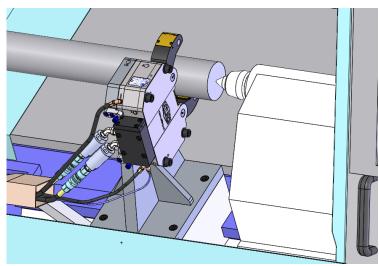




# 6 Centering of steady rest

### 6.1 Check of straightness

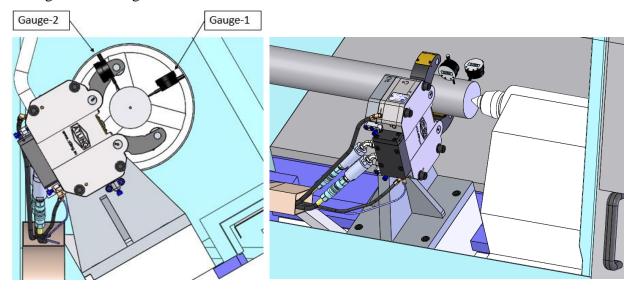
Set up a working piece, machine it, and verify the straightness and surface before centering of the Steady Rest.



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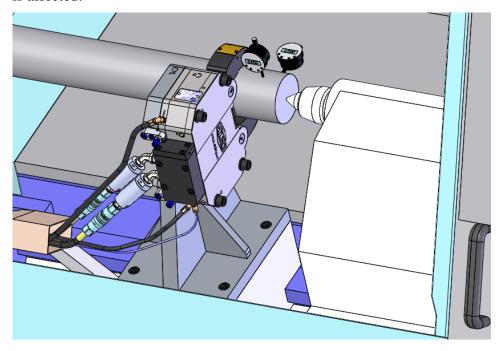
#### 6.2 Mounting of gauges

Install two gauge according to the pictures below, the first one straight in front of the Steady Rest, and the other one 90° to the first one. That makes it easier to adjust the Steady Rest during the centering.



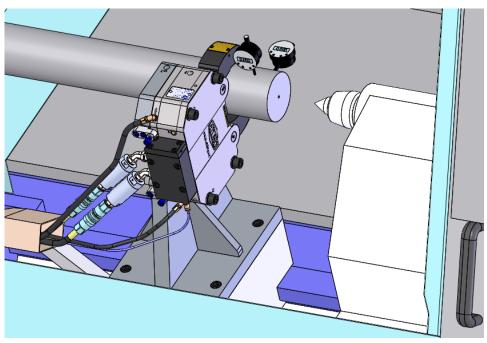
# 6.3 First Steady Rest clamping

When clamping the working piece for the first time, be sure that the mounting screws and adjusting screws not are tight to the Steady Rest, so it's possible for the Steady Rest to move a little. Clamp the working piece with the Steady Rest, and rotate the working piece slowly a little. Tighten the adjustment devices and the mounting screws a little, and check if the gauge is affected.



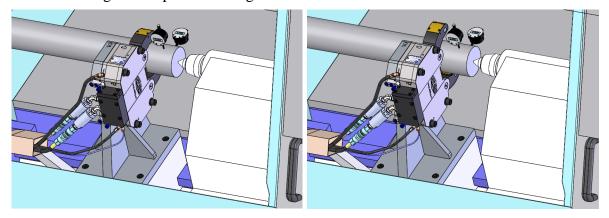
#### **6.4 Remove Tailstock**

Remove the Tailstock from the working piece, rotate the working piece slowly a little, and check again if the gauges is affected.



# 6.5 Adjusting the Steady Rest

When clamping the working piece with the Steady Rest according the description above it's almost necessary that the Steady Rest needs to be adjusted more, because of the opposite conditions regarding hanging and pushing. If it's possible, loosen the mounting screws a little and adjust the centering with the adjusting devices. If it is a heavy working piece, it's almost necessary to unclamp before adjusting. Sometimes it's necessary to do this step several times before reaching an accepted centering!



# 7 Notes
