



Presses & Automation – Since 1975

Instruction Manual Servo feeder





AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



Azimuth Servo Feed Instruction manual

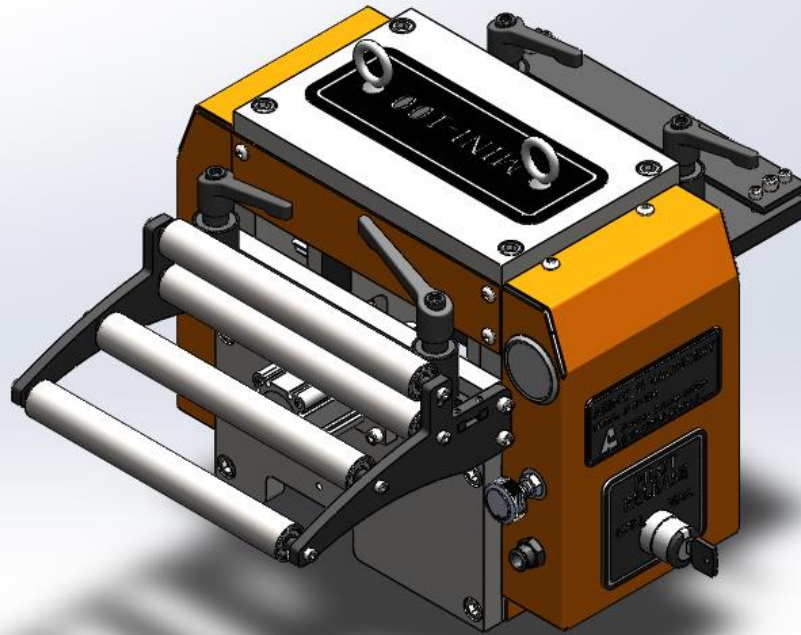




Table of Contents

1.	Word of Caution	4
2.	Installation	5
2.1.	Adjusting the Feeder Pass Line Height	5
2.2.	Roller Pressure and Spacing Adjustment	7
2.3.	Using the Pneumatic Pilot Release	7
2.4.	Manual Release	9
2.5.	Automatic Release	9
2.6.	Feeder specification	10
2.7.	Adjusting Belt Tension and Checking Belt Life	11
2.8.	Belt Tensioning	12
2.9.	Belt Replacement	12
3.	Electrical Control	13
3.1.	Main Menu	13
3.2.	Job Screen	14
3.3.	Components of a Job	15
3.4.	Manual Mode	16
3.5.	Alarms	18
3.6.	Maintenance Screen	20
3.7.	Uncoiler (Optional)	21
3.8.	Feeder Signals & Press Communication	22
4.	Maintenance	23
4.1.	Machine routine maintenance needs	23
4.2.	Machine troubleshooting instructions	24
	APPENDIX	26
	APPENDIX I: AZ-FX SERIES DRAWINGS	26



1. Word of Caution

- ⚠ This machine is rated for **208V/60Hz** in star configuration. Make sure to properly connect the machine.
- ⚠ Before using the machine with material, make sure to perform a visual inspection and try to cycle it 5 times to verify that nothing has been damaged during transport (guarding system, etc.)
- ⚠ Never operate this machine until you've read & understood that this machine is dangerous. Placing your hands or any part of your body in this machine could lead to serious injuries or death.
- ⚠ Never operate this machine without the use of a guard or safety device that will always protect you from injuries.
- ⚠ Never work on this machine unless the power is turned off and locked.

***** Never put your hands in the machine unless the power is turned off and locked out *****



2. Installation

This section covers the mechanical set-up of the servo-driven feeder. Please make sure to fully understand these instructions before attempting to make mechanical adjustments to the machine. All servo feed products drawings and dimensions are presented in Appendix I.

2.1. Adjusting the Feeder Pass Line Height

Adjusting the feeder pass line height is slightly different for direct-mount and rack-mount feeders. Each of these configurations have their own instruction below.

Direct Mount

When the feeder is directly mounted to the press's bolster plate using the provided mounting plate, use the height adjustment screw to make any change to the feeder pass line height.

Please note that the screw offers a limited pass line height adjustment. However, the provided mounting plate offers different mounting hole sets for higher or lower pass lines.

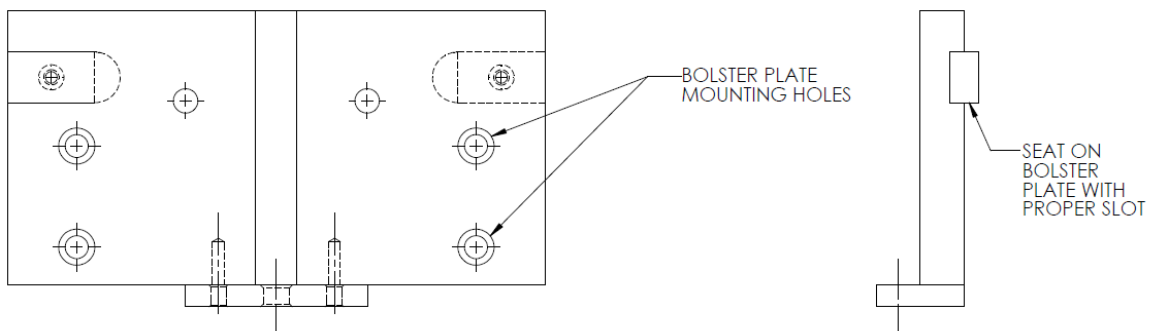


Figure 1: Feeder mounting plate

When the feeder is mounted on an Azimuth Feeder Rack, the pass line height can be adjusted by a wider range, using the built-in screw jack to raise or lower the feeder on the rack. Turning the handle will change the height of the pass-line. A height ruler is included on the feeder rack to approximate the current pass line height.

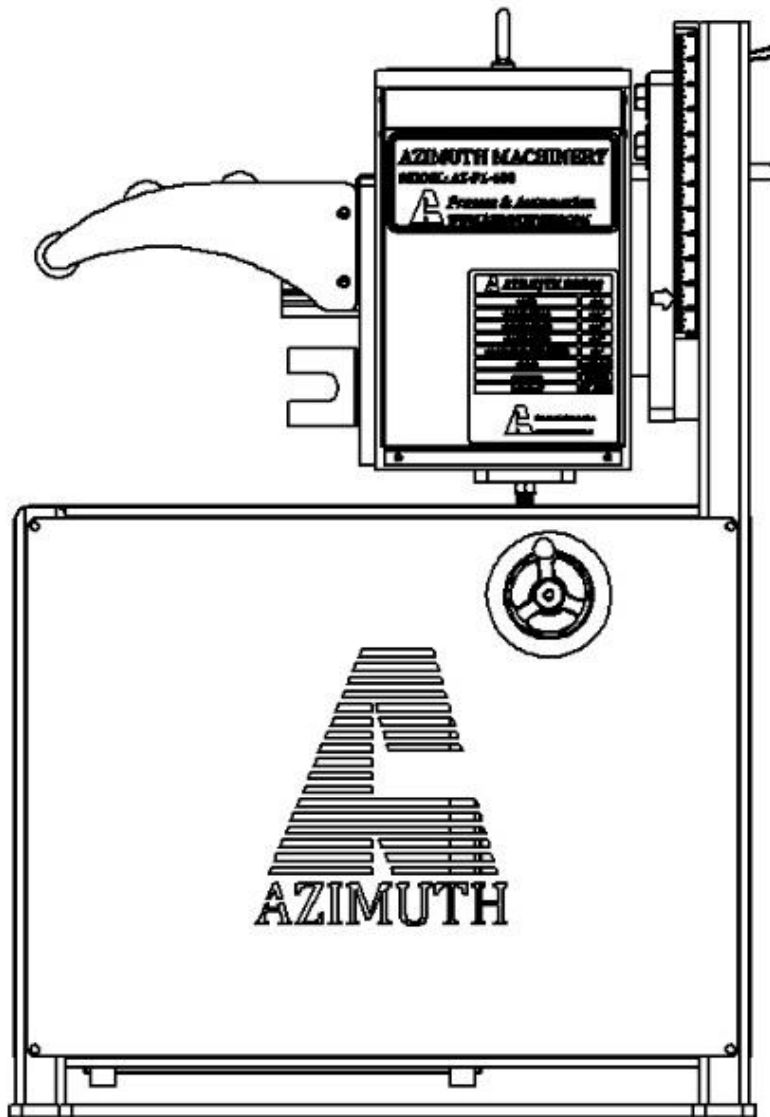


Figure 2: Rack-mounted feeder



2.2. Roller Pressure and Spacing Adjustment

To adjust the pressure and/or the spacing of the rollers on the sheet metal strip, please use the air pressure valve to increase or decrease roller pressure (PSI). The pressure sensor above allows for verifying the pressure.

Adequate pressure is reached when there is no slippage of the sheet metal strip. Excessive pressure may cause deformation of the sheet metal.

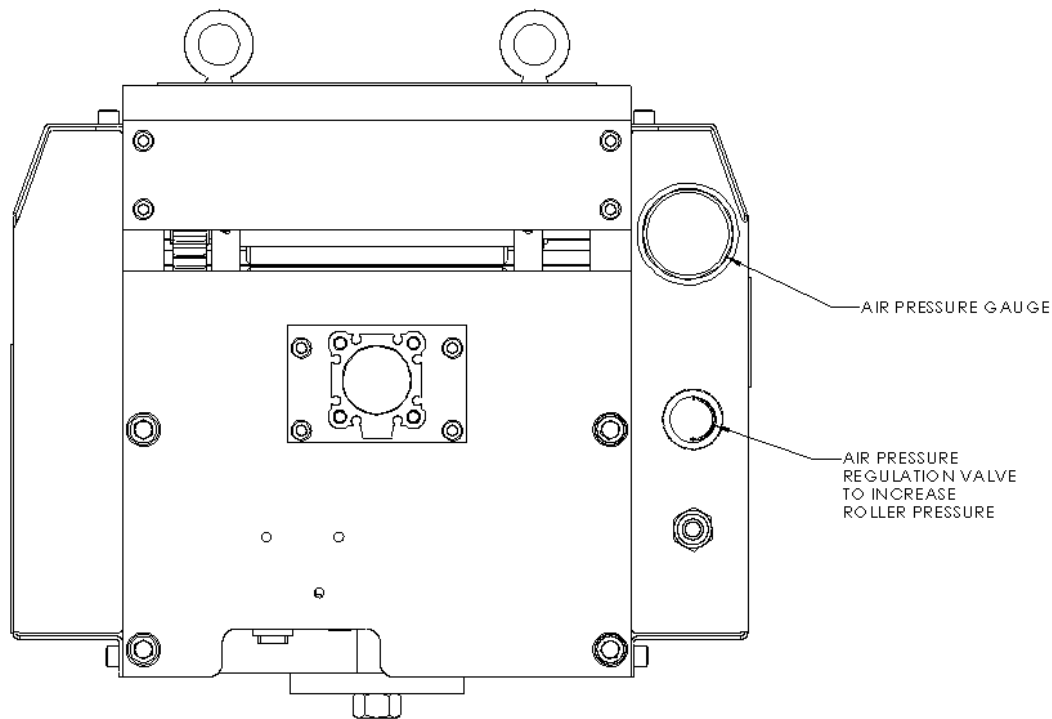


Figure 3: Roller pressure adjustment

2.3. Using the Pneumatic Pilot Release

The feeder is equipped with a pneumatic cylinder to release the pressure off the rollers.

The air pressure supplied to the cylinder **must not exceed 60 psi (0.4 MPa)**. **Any higher pressure may cause damage to the feeder.**



AZIMUTH MACHINERY

T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com

6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6

If your air supply pressure is higher, please restrict flow completely using the feeder's pressure regulator before plugging it into the feeder, then adjust the regulator until the pressure gauge reads around 0.4 MPa (60 psi).

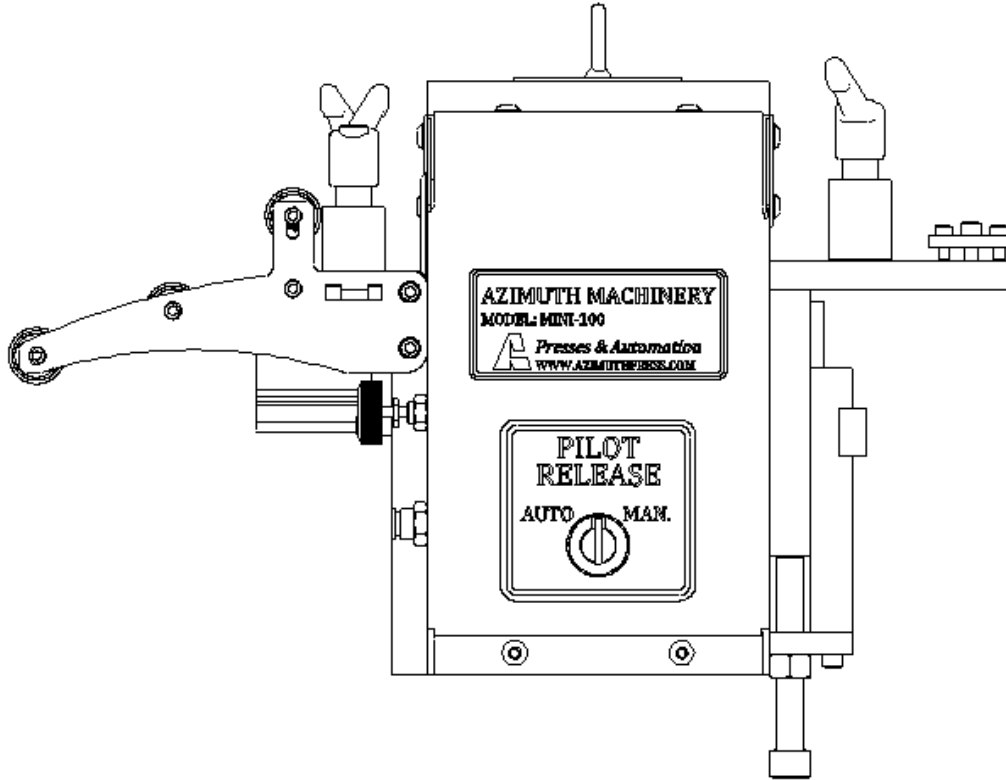


Figure 4: Pilot release mode switch

2.4. Manual Release

Turning the pilot release switch to manual mode will override the signal from the HMI and will disengage the rollers' pressure, allowing you to change sheet metal coils and set-up new material. Once you are done setting up your feeder with your new coil, turn the switch back to AUTO to enable automatic pilot release.



Figure 5: Manual pilot release

2.5. Automatic Release

Automatic pilot release mode allows the HMI to send a signal to the pilot release cylinder to disengage the rollers' pressure between feed cycles when the press is punching the metal strip.



2.6. Feeder specification

When setting up a new coil, set the pilot release to manual mode. Feed the new material through the feeder by hand and switch the pilot release back to AUTO.

Adjust roller pressure following the instructions from section 2.2.

Model Parameter	Unit	MINI-50	MINI-100
coil width	Inch	2.5	4.5
Thickness Min	Inch	0.01	
Thickness Max	Inch	0.14	
Roller dia	Inch	1.8	
Pilote Realse		Pneumatic	
MAX SPEED	Inch/s	12.5	
Std. Voltage		230VAC-3PH	
Motor Power		400 W	
Air		60 PSI	

Table 1: Feeding width capacity in inches

Thickness gauge	MINI-50	MINI-100
28	2.50	4.50
26	2.50	4.50
22	2.50	4.50
20	2.50	4.50
18	2.00	4.00
16	1.88	3.88
14	1.75	3.75
12	1.50	3.50
11	1.25	3.25
10	1.13	1.50



2.7. Adjusting Belt Tension and Checking Belt Life

The servomotor powers the rollers with a timing belt and timing pulleys. To ensure that the system runs well, it is important to periodically check the belt for excessive slack or cracks in the rubber.

Always make sure the power is off and locked before performing maintenance on the belt.

To access the timing belt compartment, undo the four bolts that hold the side guard without a pressure gauge, and remove the guard.

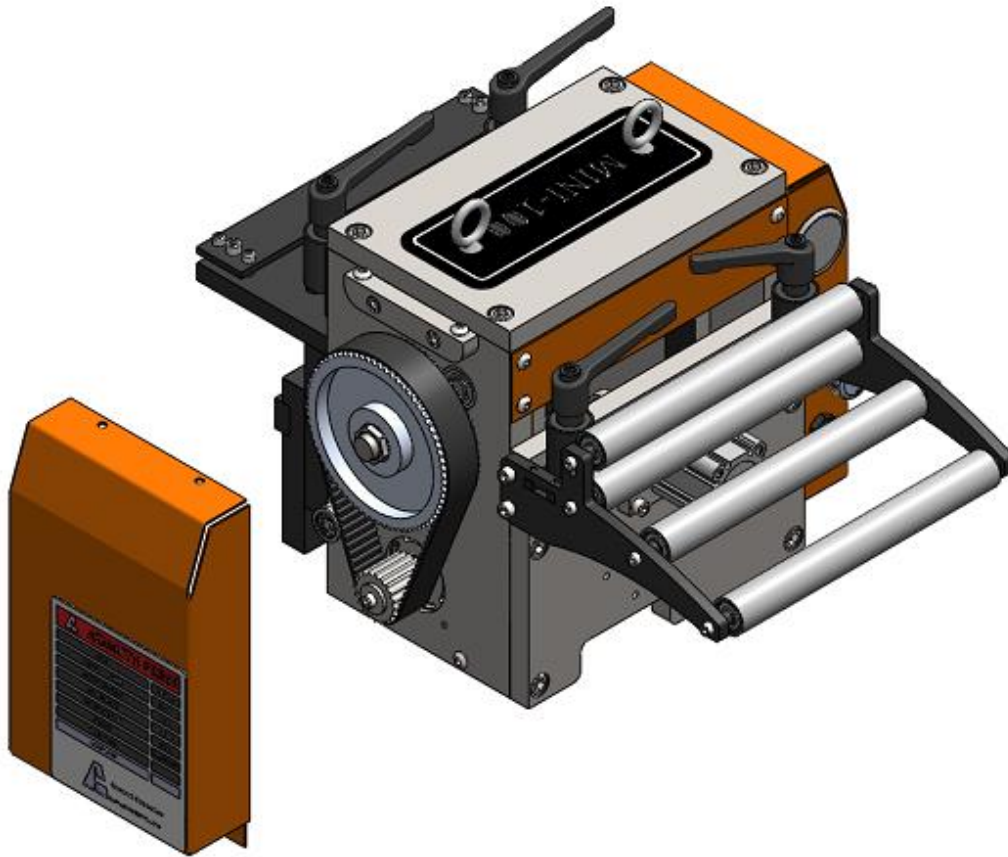


Figure 6: Timing belt compartment



2.8. Belt Tensioning

Belt tension should be checked periodically and adjusted when needed using the feeder's belt tensioner.

To put tension back in the belt, loosen the two bolts that hold the tensioner in place and push it against the timing belt.

When the tension is sufficient on the belt, tighten the two bolts of the tensioner.

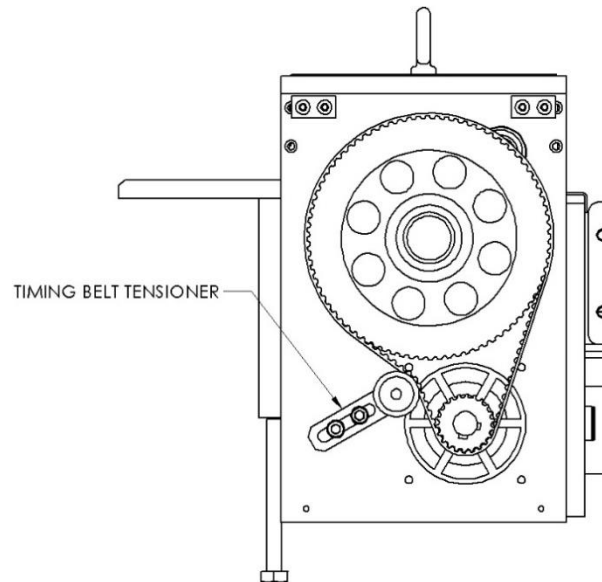


Figure 7: Belt tensioner

2.9. Belt Replacement

When the belt presents clear sign of wear or damage, it is time to replace it. A cracked belt is more prone to snapping and this will cause the feeder to stop functioning. The replacement part number is **480-5M-10**.

To replace the timing belt, first loosen the two bolts on the belt tensioner, then pull the tensioner back. Remove the old timing belt and put on the new one. Push the tensioner against it and tighten the two bolts when sufficient tension is reached.



Figure 8: Replacement timing belt

Always put the side guard back on the feeder before operating it. The timing belt presents pinch points and could lead to injury.



3. Electrical Control

3.1. Main Menu

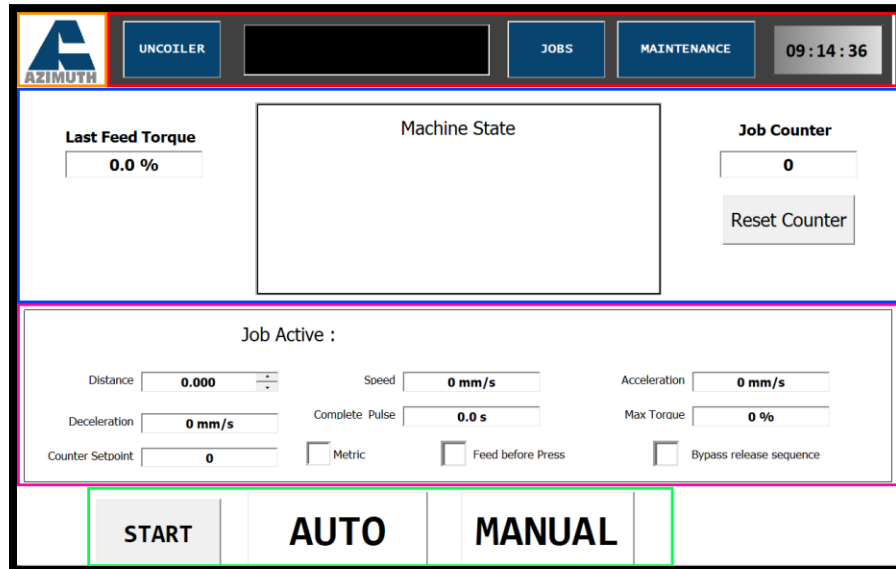


Figure 9: Main menu

Take note that the following electrical instructions may vary depending on the client personalized application.

You can always access the main screen from the navigation bar up top by pressing on the [Azimuth logo](#).

The [navigation bar](#) allows you to access the menu for the uncoiler, alarms, the programmable jobs menu, and the maintenance screen which allows you to change advanced settings. Note that a password is required to access the maintenance screen.

[Last feed torque](#) displays what the torque was for the last feed executed, note that this does not include manual jogging or micro steps. The [machine state](#) will display what the feeder is currently doing. The [job counter](#) increases every time a feed is executed.

You can also view and change information about [the current job](#), note that changing information here will not save it to the current job.



The **bottom bar** allows you to change the mode from auto and manual and also serves to change screens. Pressing on AUTO from the main screen will change to AUTO mode, pressing MANUAL from the manual screen will change to MANUAL mode. Note that both modes will reset, and you won't be able to toggle back, *when an alarm is active*. The start button allows you to start the machine when the feeder is set at feed before press.

3.2. Job Screen

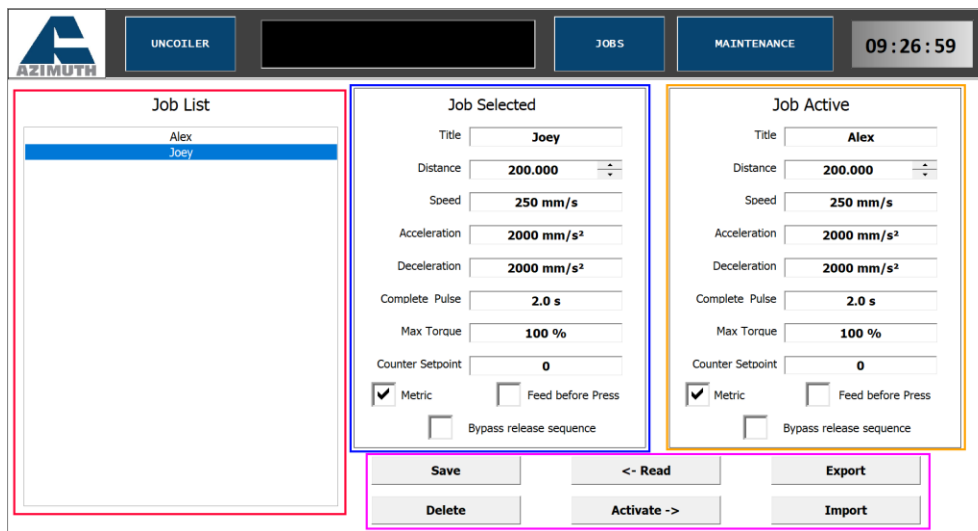


Figure 10: Job Screen

The **job list** shows the job that are saved in the machine.

The **selected job** shows the job which was selected in the list. If you press on the “Alex” job in the list, it will show its content.

The **active job** is the one which is currently in use by the feeder. The job selected merely shows you the content of the saved job.

The section below shows you actions that you can take on a job.

Save takes the job currently selected and saves it to the list. To **create a new job**, you must change the title and then save it.

Delete removes the job selected from the list *forever*. There is *no way to recover it* except if it was exported.

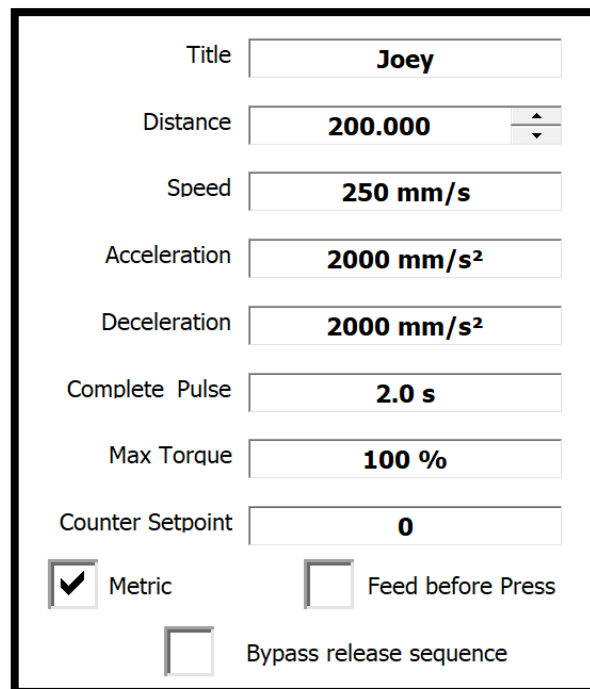
Read will take the active job and move it into the selected job, but it *will not save it* into the list.

Activate makes the current selected job into the active job.

Export will create a file on the HMI or on the USB stick that represents the job. This allows you to make backups.

Import will import a job that was exported back into the job list.

3.3. Components of a Job



Title	Joey
Distance	200.000
Speed	250 mm/s
Acceleration	2000 mm/s ²
Deceleration	2000 mm/s ²
Complete Pulse	2.0 s
Max Torque	100 %
Counter Setpoint	0
<input checked="" type="checkbox"/> Metric	<input type="checkbox"/> Feed before Press
<input type="checkbox"/> Bypass release sequence	

Figure 11: Job components

Title: The name of the job.

Distance: The distance the feeder will advance. This is in metric if metric below is selected.

Speed: This is the speed at which the feeder will move. Will always be metric.

Acceleration: How quickly the feeder will reach its speed. Will always be metric.

Deceleration: How quickly the feeder will stop. Will always be metric.

Complete Pulse: After every feed cycle a pulse will be given corresponding to the amount of time give here. Check for “Feed Complete” output on the electrical schema.

Max Torque: Represents the force in percentage that the motor is allowed before giving an alarm. Note that there is also *a max torque in the maintenance menu* that applies in manual mode.

Counter Setpoint: When the feeder reaches the counter setpoint then it will stop. Leave at zero to disable.

Metric: Check when you want the recipe to be in metric. Note that this only applies to the recipe, *to change the overall unit* you need to go to the maintenance menu. Be warned that checking metric **will not automatically convert the distance**; this needs to be done manually.

Feed before press: Selects whether the feeder starts the press or if the press starts the feeder.

Bypass release sequence: Bypasses the release part of the sequence, allowing the feeder to operate without releasing the pilot.

3.4. Manual Mode

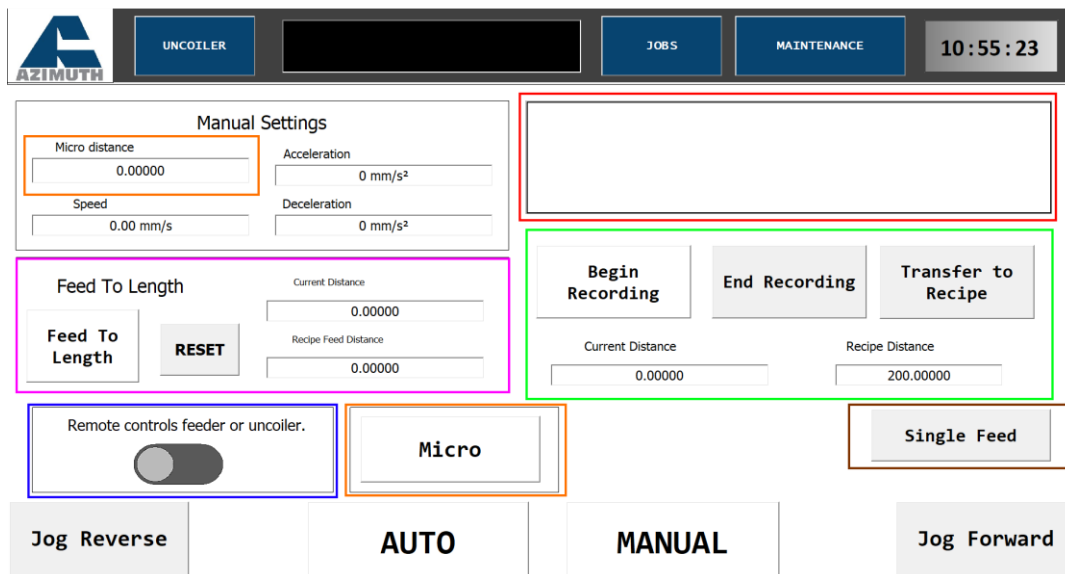


Figure 12: Manual mode explanation



AZIMUTH MACHINERY

T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com

6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6

NOTE: Manual mode must be selected for all of its controls to be accessible.

Feed To Length allows you to feed forward, but not past the total distance found in the recipe. To activate the feed to length mode then press the button and it will change color, the current distance will change from -1 to 0. Keep in mind that feed to length can go further than demanded, be careful and set a low acceleration and speed. You cannot micro step when using feed to length.

The **upper right blank box** will show state messages of the feeder, what the feeder is currently doing.

Recordings allow you to **record a distance** regardless of whether you've jogged forward or backwards. By pressing on the begin recording button the current distance will change to 0. You may then jog as you wish. Once you press end recording the total distance the feeder has moved forward will freeze and you can then transfer it to the active recipe using the button.

Micro-stepping can be activated **with the Micro button**. The feeder will then move the micro distance instead of jogging continuously when you press the button. Micro mode will be reset when selecting feed to length.

You can control whether the wireless remote moves the **uncoiler or the feeder**, should the machine have an uncoiler.

You can **execute a single feed** by maintaining the button for one second and then the entire time the feeder is moving.



3.5. Alarms

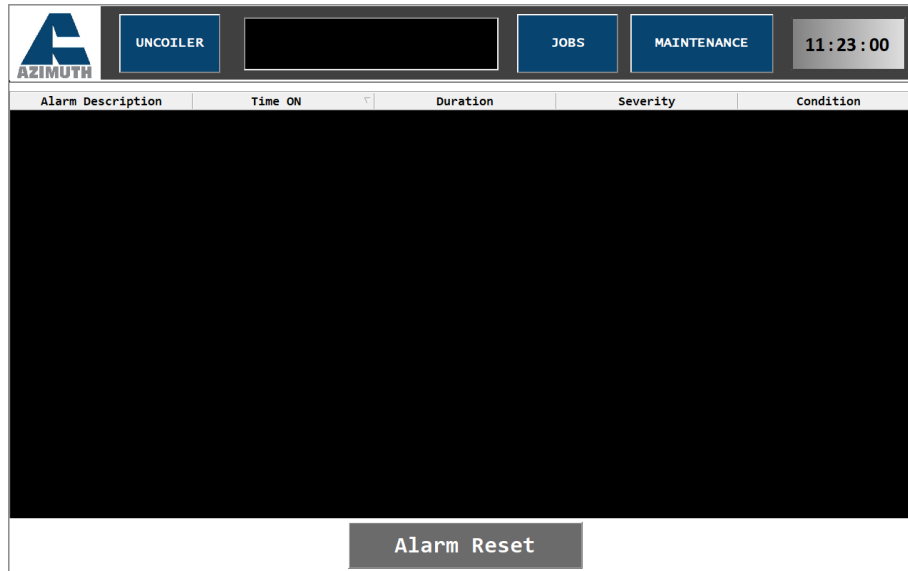


Figure 13: Alarm screen

The alarms screen will display alarms and allow you to reset them. Note that if the press gives out a fault signal, then the press controller will need to be reset before the alarm on the feeder.



Table 2: List of possible alarms

Alarm	Possible Problem	Solution
Double Feed	The feeder received a feed signal while waiting for a reset or release signal.	Make sure the controller's output are properly configured and that all wiring is properly connected.
Feed Signal Lost	The feed signal was lost during feeding.	Make sure the cam angle settings for the feed are properly set on the press controller, or increase the speed of the feeder. Make sure that all wiring is properly connected.
Max Torque	The maximum torque set in maintenance (if in Manual) or in the recipe (if in Auto) has been reached.	Inspect the mechanics of the feeder and die to make sure nothing is blocking it from operating properly. Make sure the proper material is selected. The max torque value is set too low or the machine is forcing more than it should – set it higher. Make sure a recipe is selected upon start-up.
Pilot Manual	The pilot release is manually activated.	Turn the selector on the side of the feeder to the proper position
Press Fault	The press controller is giving an error.	Clear the fault with the press controller. Make sure everything is properly wired.
Safety Activated	A safety has been activated.	Check all E-Stops and doors. Verify proper wiring.
Servo Drive Error	An error with the servo drive has occurred.	Press reset and if the error comes back then lookup the error code on the drive inside of the panel and take appropriate measures.
Single Feed Error	Single feed button has not been maintained long enough.	Make sure to maintain the single feed button all the while the feeder is feeding.
Uncoiler Auto Error	Feeder was put in Auto but the uncoiler was not.	Always put the uncoiler in Auto mode before the feeder.
Uncoiler Pilot Error	The uncoiler pilot release is manually activated.	Turn the selector on the side of the uncoiler to the proper position
Uncoiler Overload	Uncoiler motor has been overloaded	Perform a mechanical inspection of the uncoiler to make sure nothing is blocking it.



3.6.Maintenance Screen

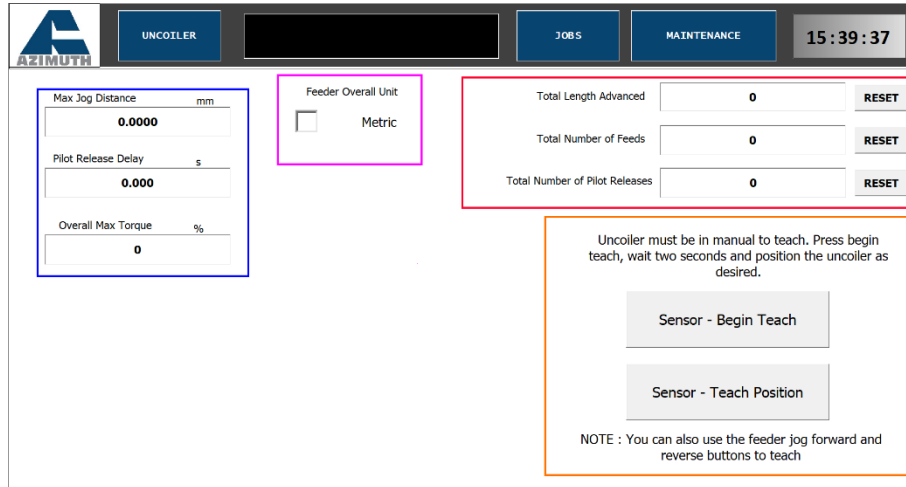


Figure 14: Maintenance menu

Max jog distance is the maximum the feeder can feed, in manual, while keeping the button pressed. If **the wireless remote loses its signal during a feed cycle**, it will **keep on feeding indefinitely**. This setting helps mitigate that issue by setting a limit. **Pilot release delay** is the time it takes for the pilot to go back down. It is to ensure that whenever a feed is triggered then the pilot is already back in the correct position. **Overall Max Torque** is the torque limit when the feeder is in manual mode.

Feeder Overall Unit is the unit of the feeder when it is in manual. By default, it is in inches.

There are **three counters which track different stats** on the feeder. How long the machine has fed, the total number of feeds executed and the number of pilot releases performed.

There is an experimental functionality that **allows you to reteach the setpoint position** of the sensor for the uncoiler. Use at your own risk for now.



3.7.Uncoiler (Optional)

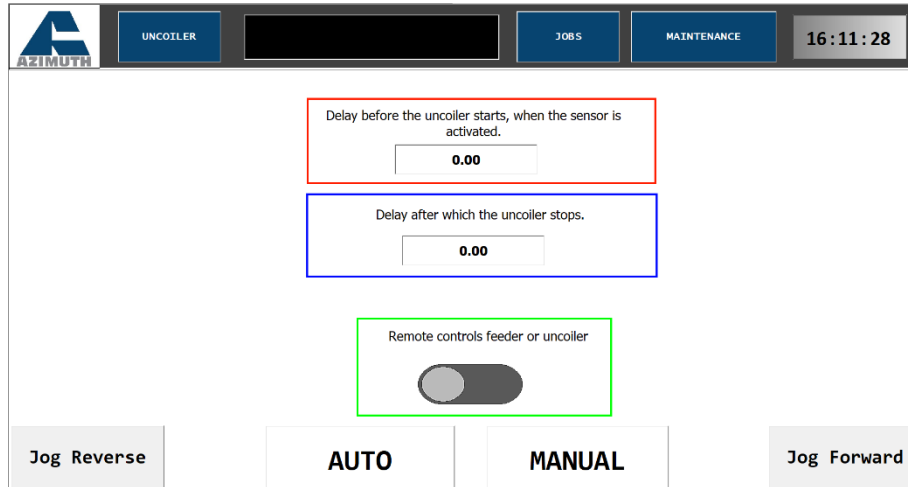


Figure 15: Uncoiler screen (Optional)

If your feeder comes with an uncoiler then you will be able to see this page. There are two delays that can be changed in order to modify how much the uncoiler uncoils the material and how quickly it starts. When the dancer bar below which the metal strip passes reaches a certain height then the uncoiler motor will start. This is controlled by a programmable sensor. The delay **before the uncoiler starts** when it has reached the sensor is the first parameter that can be set. The second is **how long the uncoiler motor will keep on going** after the sensor setpoint has been lost. There is an orange indicator light on the sensor itself.

You can choose whether the wireless remote controls **the feeder or the uncoiler** by toggling this switch.



3.8. Feeder Signals & Press Communication

Communication between the press and the feeder is done through six different signals. Four are sent from the press to the feeder, and two are sent from the feeder to the press.

The tables below explain the different signals that are exchanged between the feeder and the press.

Table 3: Signals from the press to the feeder

Feed	Initial signal that triggers a feed cycle from the feeder.
Reset	After a feed signal, the press must send a reset signal before the feeder can repeat.
Release	Releases the pressure on the material by operating a solenoid-controlled valve. This part of the sequence can be bypassed . Please visit section 2.3 for more detail .
Error	A fault condition has occurred in the press and therefore the feeder must stop. Please visit section 3.4 for more detail .

Table 4: Signals from the feeder to the press.

Complete Pulse	A pulse of programmable length given every time a feed is finished.
Error	A fault condition has occurred in the feeder and therefore the press must stop. Please visit section 3.4 for more detail .



4. Maintenance

4.1. Machine routine maintenance needs

- The condition in the air system (dryer/lubricator), daily oil checks should be made and the water must be emptied. Verify if there is a leak and the pressure is normal.
- Before working with the machine, operators must check all the working parts, should do the checks against the possibility of loosening and dismantling due to the vibrations occurring during feeding. Uncommon sounds are a good sign of malfunction.
- Periodically lubricate the bearings according to the maintenance chart. Most of them are sealed.
- Lubricate guidance rollers and screw shaft regularly.
- Rollers must be cleaned before feeding the sheet.
- General maintenance and checks on the machine are mainly focused on abrasion and moving parts. Verify the following parts according to the maintenance chart. For further details, go to Appendix I.
 - AZ-MF
 - AZ-MF-XXX-2001-00, AZ-MF-XXX-2007-00, AZ-MF-XXX-2104, AZ-MF-XXX-3001-00, AZ-MF-XXX-3004-00, AZ-MF-XXX-3005-00 & AZ-MF-XXX-6003-00.

Table 5: Routine maintenance needs

Parts	Daily	Weekly	Monthly	Biannual
Conditioning oil control	✓			
Lubrication of bearings		✓		
Rollers cleaning	✓			
General maintenance and checks of the machine				✓



AZIMUTH MACHINERY

T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6

4.2. Machine troubleshooting instructions

For any requests regarding troubleshooting or issues with the machine, call (450) 632-8080

The following general conditions must be followed.

- Check the machine and make sure that there is no damage when taking delivery of your machine. Please ask your dealer for replacement of shipping damage within 7 days starting the date of purchase, replacement requests are invalid after 7 days.
- Please check whether the accessories are missing while delivery of your machine. If there are any missing parts, please ask your dealer for the provision of the parts in question within 7 days from the date of purchase. Request you make after 7 days will not be considered.
- Make sure your machine is grounded and there are no voltage fluctuations on power supply.
- Failures caused by use of improper power connections are not covered by warranty of your machine. Repair of such failures will bring you financial burden.
- Do not try to attach external parts to each other's slots or their own slot the wrong way. Do all connections while the machine is off, do not try to attach or detach any parts while the machine is running.
- Do not interfere with software on the machine. Any modification to the software can be done if only Azimuth approves the request. Otherwise, it will cause your machine to be out of warranty.
- Make sure all connections to the machine are correctly made.
- Machine work surface must be flat, non-slip and solid.
- If our machine works with another machine than Azimuth ones, the manufacturer is not liable for any damage or work loss due to shock, moving around or vibrations in the event of overload of the other machine.
- Loading capacity of the machine must not be exceeded. Work overload will damage the machine and all components rotating.

- Make sure the machine is working as shown by the technical service during installation.
- Make sure there are no dust, slug or aluminum powder from sheet material sticking in the machine's rotating parts, every time you load a product roll.
- Only use our machines for sheet materials, our machines are designed for uncoiling, feeding and cutting sheet metals. They are not suitable for round or rectangle profiled materials.



Fault phenomenon	Failure cause	Elimination methods
There is a fixed direction feeding error	Feeding roller have not enough pressure	Increasing pressure
	Feeding length too long	Upper die strip material adverse puller phenomenon
	Feeding length not enough	Coil width and mold guide plate is appropriate? Or mold and feeder is straight line.
	Burrs or foreign bodies	Check the retaining plate and stripper for burrs or foreign bodies
Feed produced when unexpected errors	Feeder adjustment quantity of materials	Leveling machine and feeder whether match or leveling machine and feeder of middle distance and material arc height and appropriate punch turnover number
	Transmission gap is too large between roller and servo feeder	Will tighten gauge belt pulley
	Coil related conditions	Material thickness, width and length is in accordance with the standards?
Coil serpent	Coil thickness corresponding to the pressure	Adjust the pressure
	Coil width and keep-off wheel is not in proper place	Adjust the keep-off wheel
	On both sides of the roller and materials between high and low is not the same	Adjust on both sides of the roller to parallel
	Roller pressure is too large	The pressure drops
	Feeding roller and the material of sliding phenomenon	Check whether mold guide groove and feeder in line? The mold has waste that did not roll out? Materials have burrs and the phenomenon of card mode.



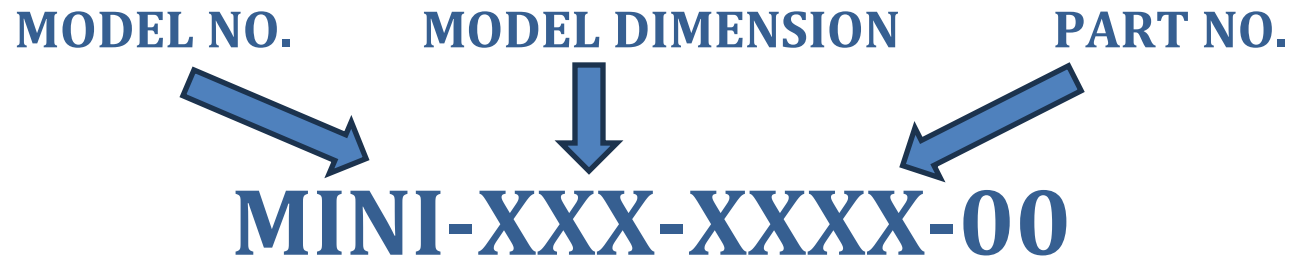
AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



APPENDIX

APPENDIX I: AZ-MF SERIES DRAWINGS

In this appendix, you will find the spare parts and dimensions for all the AZ-MF servo feeder models. Note that the part numbers when ordering use the following template.

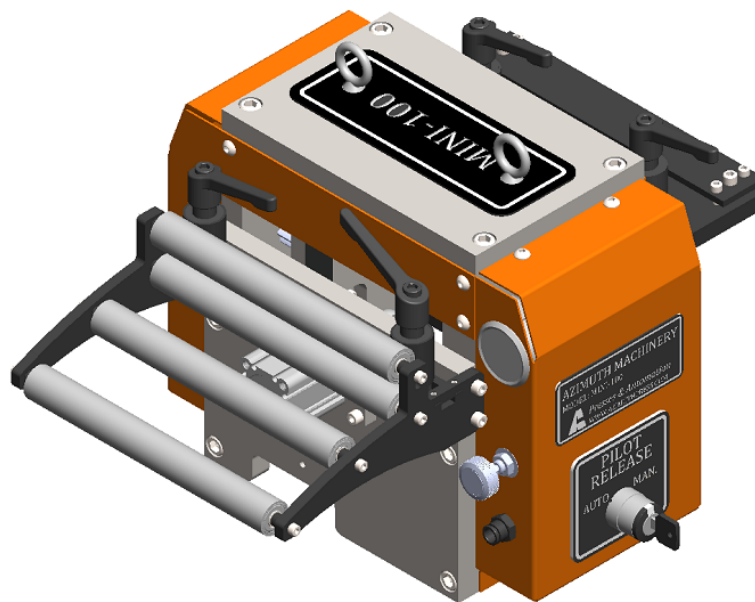




MINI-XXX

MINI-XXX SPARE PARTS:

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-1000-00	FRAME	1
2	MINI-100-2000-00	CRANKSHAFT ASSEMBLY	1
3	MINI-100-3000-00	COUPLING SHAFT	1
4	MINI-100-3100-00	SMALL GEAR ASSEMBLY	1
5	MINI-100-4000-00	ROLLER ASSEMBLY	1
6	MINI-100-5000-00	WIDTH LIMITER	4
7	MINI-100-6000-00	MOTOR	1
8	MINI-100-7000-00	TENSIONER	1
9	MINI-100-8000-00	ADJUSTING PLATE	1
10	MINI-100-10000-00	ADJUSTING CYLINDER FOR THICKNESS	1
11	MINI-100-11001-00	AIR CONNECTOR	1
12	MINI-100-11002-00	MINI HIGH PRECISION REGULATOR	1
13	MINI-100-11003-00	SINGLE SCALE PRESSURE GAUGE WITH STEEL CASE	1
14	MINI-100-11004-00	AIR DIRECTIONAL CONTROL VALVE	1
15	MINI-100-11005-00	KEY SWITCH 2 POSITIONS	1
16	MINI-100-12001-00	SPECIFICATIONS PLATE	1
17	MINI-100-12002-00	TOP DECO PLATE	1
18	MINI-100-12003-00	FEEDER SIDE DECO PLATE	1
19	MINI-100-12004-00	PILOT RELEASE PLATE	1
20	HHBOLT 0.5000-13x1.5x1-N		2
21	Preferred Narrow FW 0.5		2
22	HX-SHCS 0.19-24x0.625x0.625-N		2
23	HX-SHCS 0.25-28x0.625x0.625-N		4
24	HX-SHCS 0.164-32x0.5x0.5-N		4



DESCRIPTION	FEEDER AZ-MINI-100
PART NO	MINI-100-0000-00
DRW BY	SCALE 1:1
DATE	MATERIAL
RAW MATERIAL	QTY
TREATMENT	WEIGHT

NOTE: BREAK ALL SHARP EDGES



DIMENSIONS ARE IN INCHES

TOLERANCES :

ANGLES : ±1°

FRACTIONAL ±1/32

TWO PLACE DECIMAL ±0.1

THREE PLACE DECIMAL ±0.005

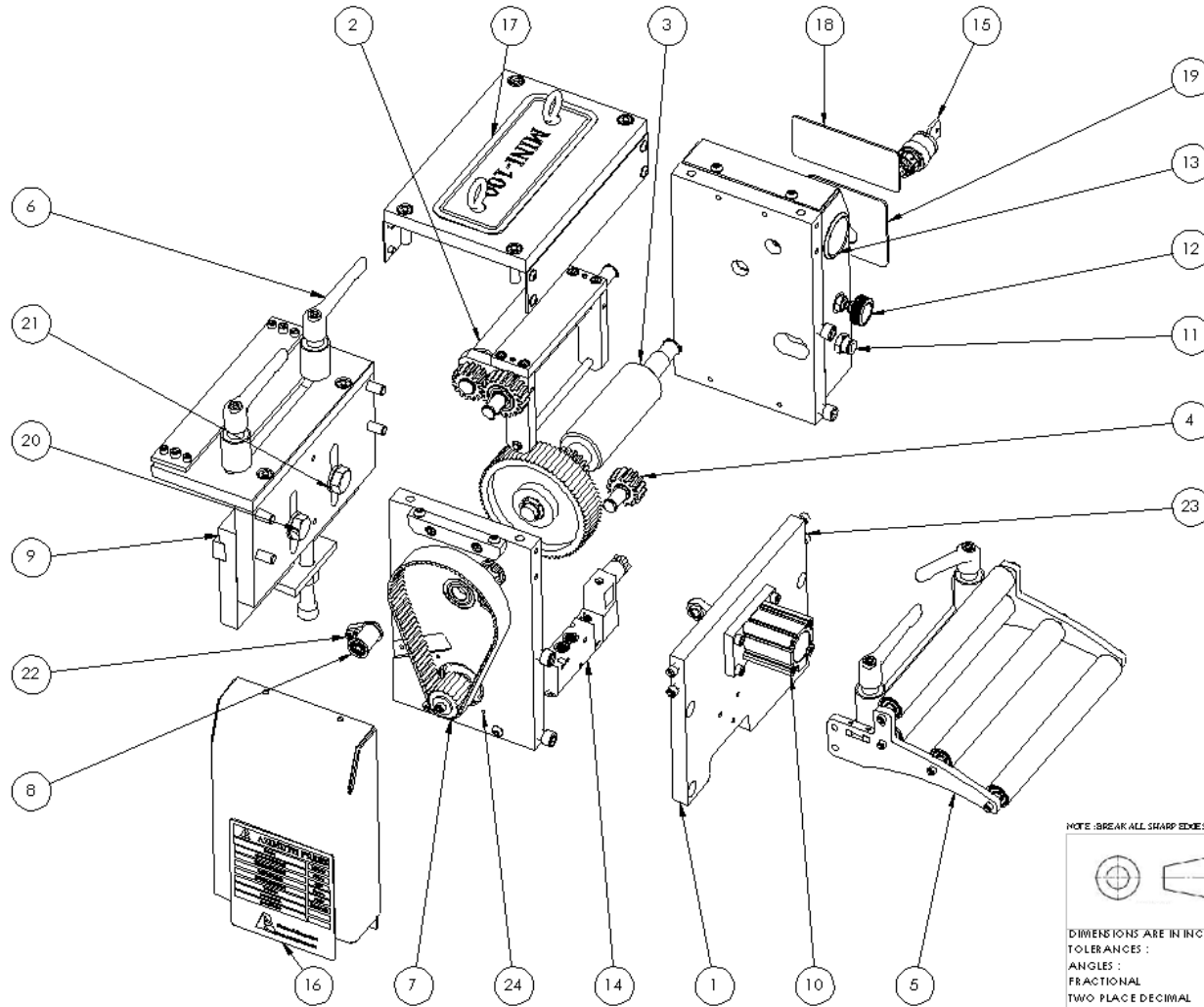
FOUR PLACE DECIMAL ±0.001

AZIMUTH

FROM ITY AND CONFIDENTIAL

THE INFORMATION CONTAINED BY THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.

Azimuth Machinery Ltd
 T 450 632 8380
 F 450 632 8081
 www.azimuthpress.com
 6040 Rte. 132, Ste-Catherine
 QC, Canada, J5C 1B6



NOTE: BREAK ALL SHARP EDGES



DIMENSIONS ARE IN INCHES
 TOLERANCES :
 ANGLES : $\pm 1^\circ$
 FRACTIONAL $\pm 1/32$
 TWO PLACE DECIMAL $\pm .01$
 THREE PLACE DECIMAL $\pm .005$
 FOUR PLACE DECIMAL $\pm .001$

DESCRIPTION	
FEEDER AZ-MINI-100	
PART NO	
MINI-100-0000-00	
DRAWN BY	SCALE 1:1
ADJCE DESIG	MATERIAL
DATE 2024-10-24	QTY
RAW MATERIAL	WEIGHT
TREATMENT	

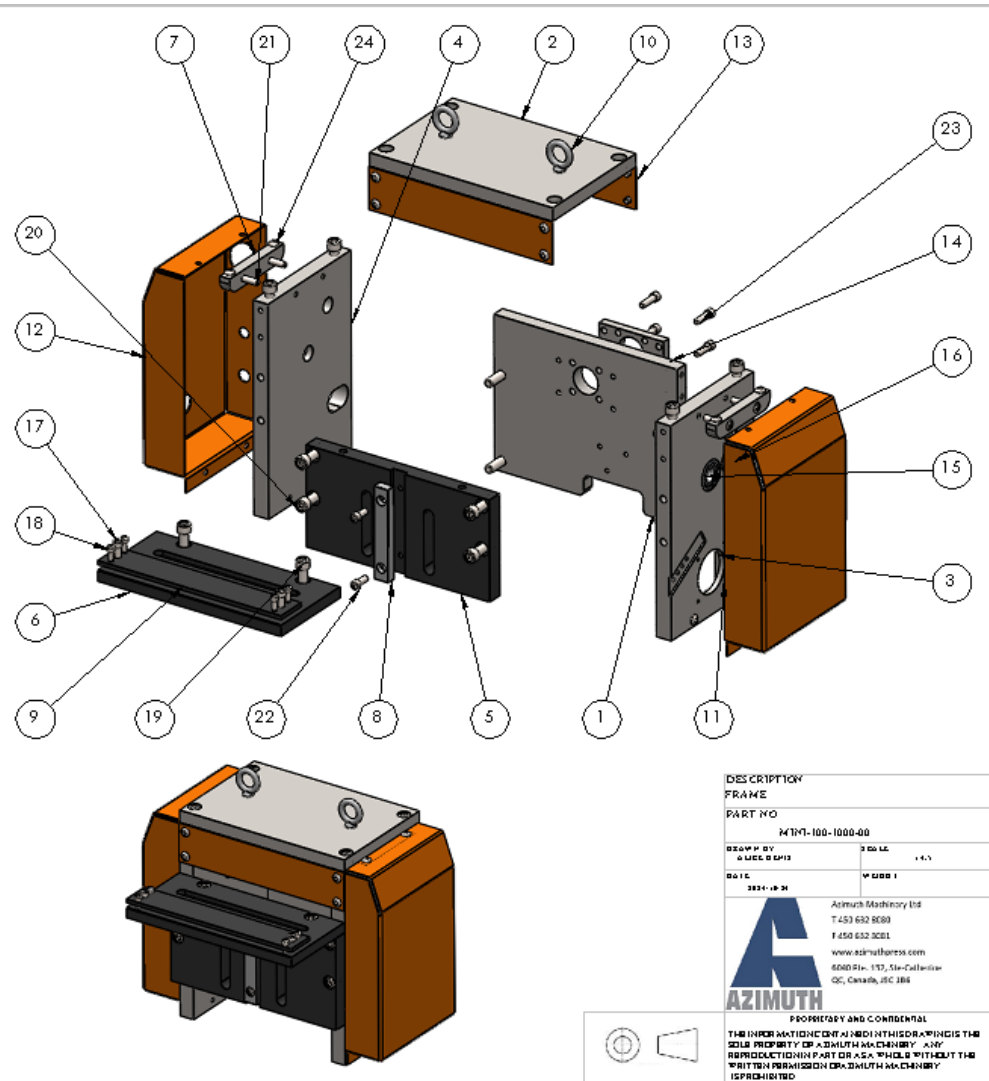


Azimuth Machinery Ltd
 T 450 632 8080
 F 450 632 8081
www.azimuthpress.com
 6040 Rte. 132, Ste-Catherine
 QC, Canada, J5C 1B6

PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE
 SOLE PROPERTY OF AZIMUTH MACHINERY. ANY
 REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE
 WRITTEN PERMISSION OF AZIMUTH MACHINERY
 IS PROHIBITED



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-1001-00	BACK PLATE	1
2	MINI-100-1002-00	TOP PLATE	1
3	MINI-100-1003-00	RIGHT SIDE PLATE	1
4	MINI-100-1004-00	LEFT SIDE PLATE	1
5	MINI-100-1005-00	ADJUSTING FRONT PLATE	1
6	MINI-100-1006-00	MATERIAL TABLE	1
7	MINI-100-1007-00	COVER SUPPORT	2
8	MINI-100-1008-00	MACHINE KEY	1
9	MINI-100-1009-00	CLAMPING PLATE	1
10	MINI-100-1010-00	STEEL EYEBOLT WITH SHOULDER	2
11	MINI-100-1011-00	COVER	1
12	MINI-100-1011-00	COVER	1
13	MINI-100-1012-00	LIMITING SUPPORT	2
14	MINI-100-1013-00	LEVELING PLATE	1
15	MINI-100-1014-00	HIGH-LOAD BALL BEARING	2
16	MINI-100-1015-00	PERMANENTLY LUBRICATED BALL BEARING	3
17	HX-SHCS 0.25-20x0.75x0.75-N		2
18	HX-SHCS 0.19-32x0.4375x0.4375-N		4
19	HX-SHCS 0.375-1.6x1.25x1.25-N		10
20	HX-SHCS 0.375-1.6x1.1x1-N		4
21	HX-SHCS 0.25-20x1x1-N		4
22	HX-SHCS 0.25-20x0.625x0.625-N		2
23	HX-SHCS 0.25-20x0.875x0.875-N		4
24	SBHC SCREW 0.25-20x0.25-HX-N		16



DESCRIPTION
FRAME
PART NO
MINI-100-1000-00
DESIGNED BY
DATE
REV
2024-03-20
W 0001
Azimuth Machinery Ltd
T 450 632 8080
F 450 632 3061
www.azimuthpress.com
6040 Ste. 132, Ste-Catherine
QC, Canada, J5C 1B6
AZIMUTH
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.

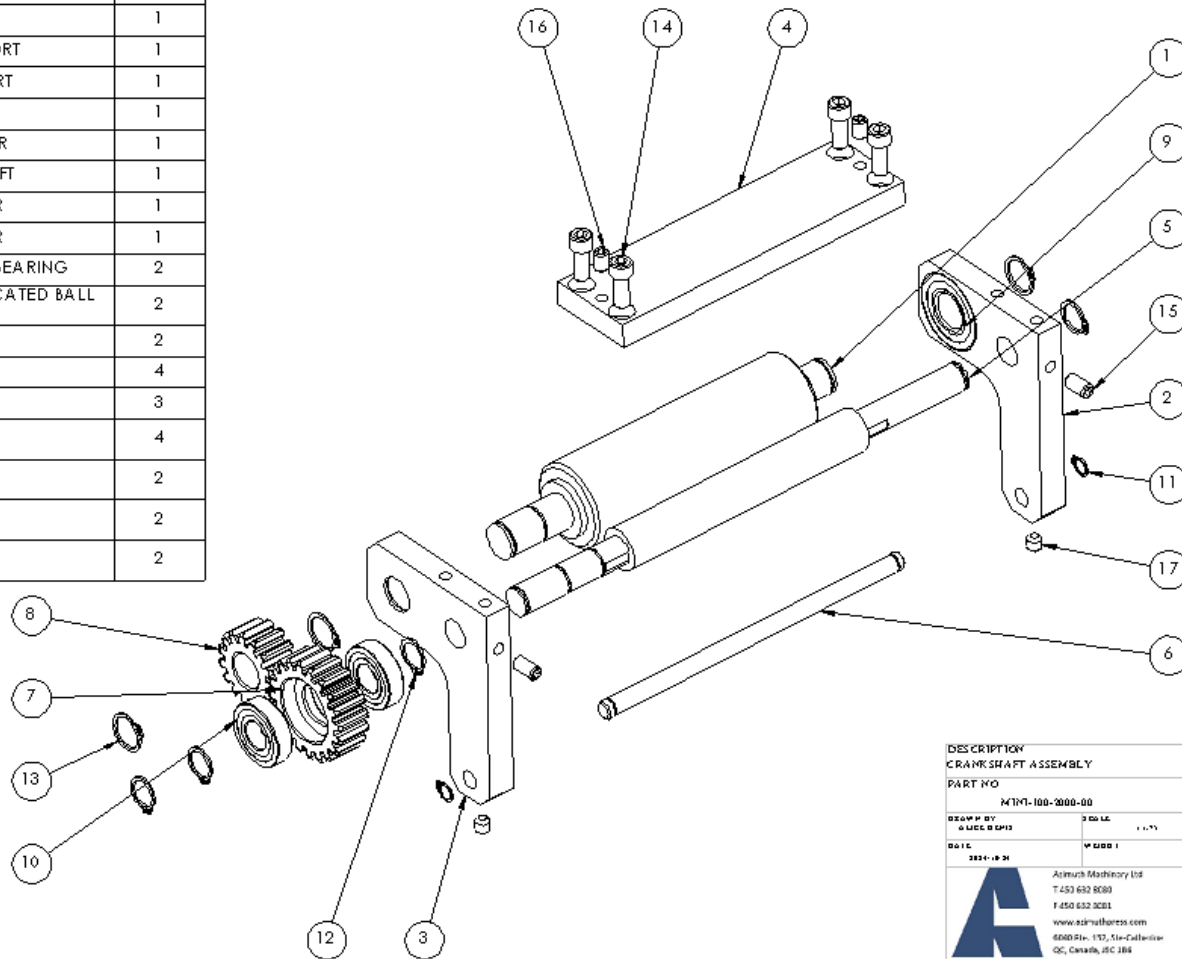
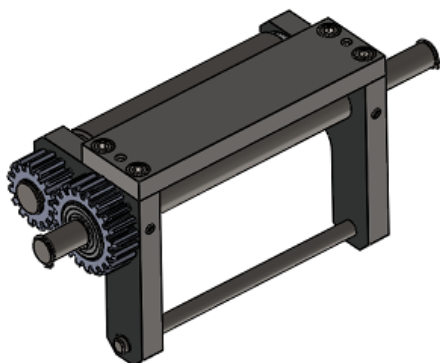


AZIMUTH MACHINERY

T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
 6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



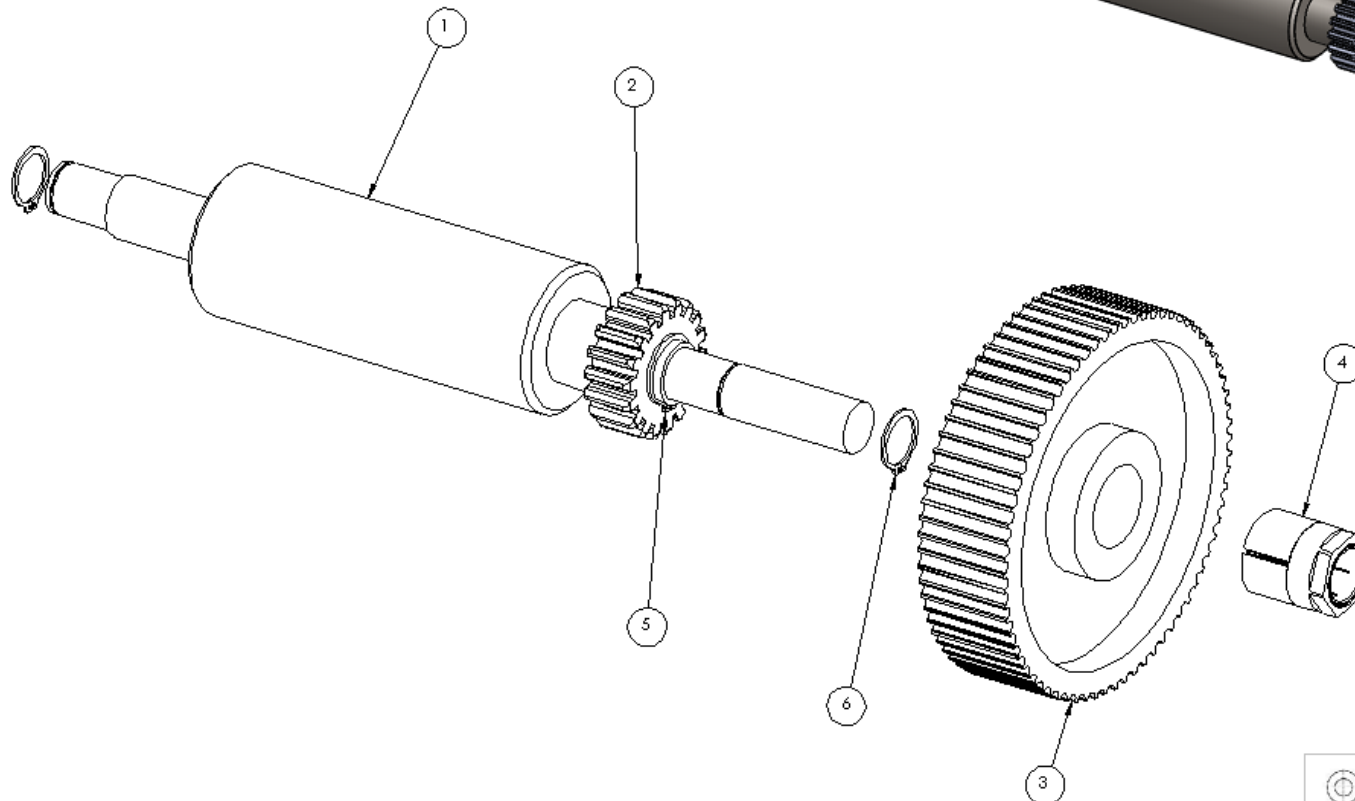
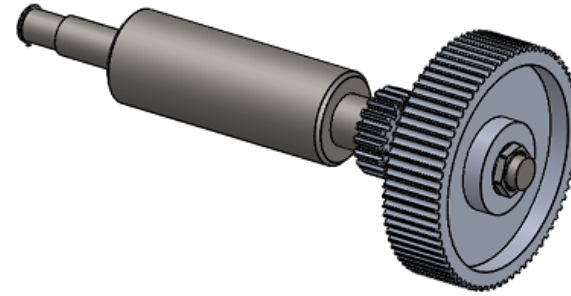
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-2001-00	ROLLER	1
2	MINI-100-2002-00	RIGHT SUPPORT	1
3	MINI-100-2003-00	LEFT SUPPORT	1
4	MINI-100-2004-00	TOP	1
5	MINI-100-2005-00	SHAFT GEAR	1
6	MINI-100-2006-00	SPRING SHAFT	1
7	MINI-100-2007-00	SPUR GEAR	1
8	MINI-100-2008-00	SPUR GEAR	1
9	MINI-100-1014-00	HIGH-LOAD BALL BEARING	2
10	MINI-100-1015-00	PERMANENTLY LUBRICATED BALL BEARING	2
11	B27.1 - NA1-28		2
12	B27.1 - NA1-50		4
13	B27.1 - NA1-59		3
14	HX-SHCS 0.25-20x0.625x0.625-N		4
15	SSFLATSKT 0.25-20x0.5-HX-N		2
16	SSFLATSKT 0.25-20x0.375-HX-N		2
17	SSFLATSKT 0.25-20x0.25-HX-N		2



DESCRIPTION	
CRANKSHAFT ASSEMBLY	
PART NO	
MINI-100-2000-00	
DESIGN BY	DATE
AUCB/CPH	3/20/14
DATE	W.0001
2014-10-24	
Azimuth Machinery Ltd T. 450 632 8080 F. 450 632 3081 www.azimuthpress.com 6040 Ste.-Catherine, Ste-Catherine QC, Canada, J5C 1B6	
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.	



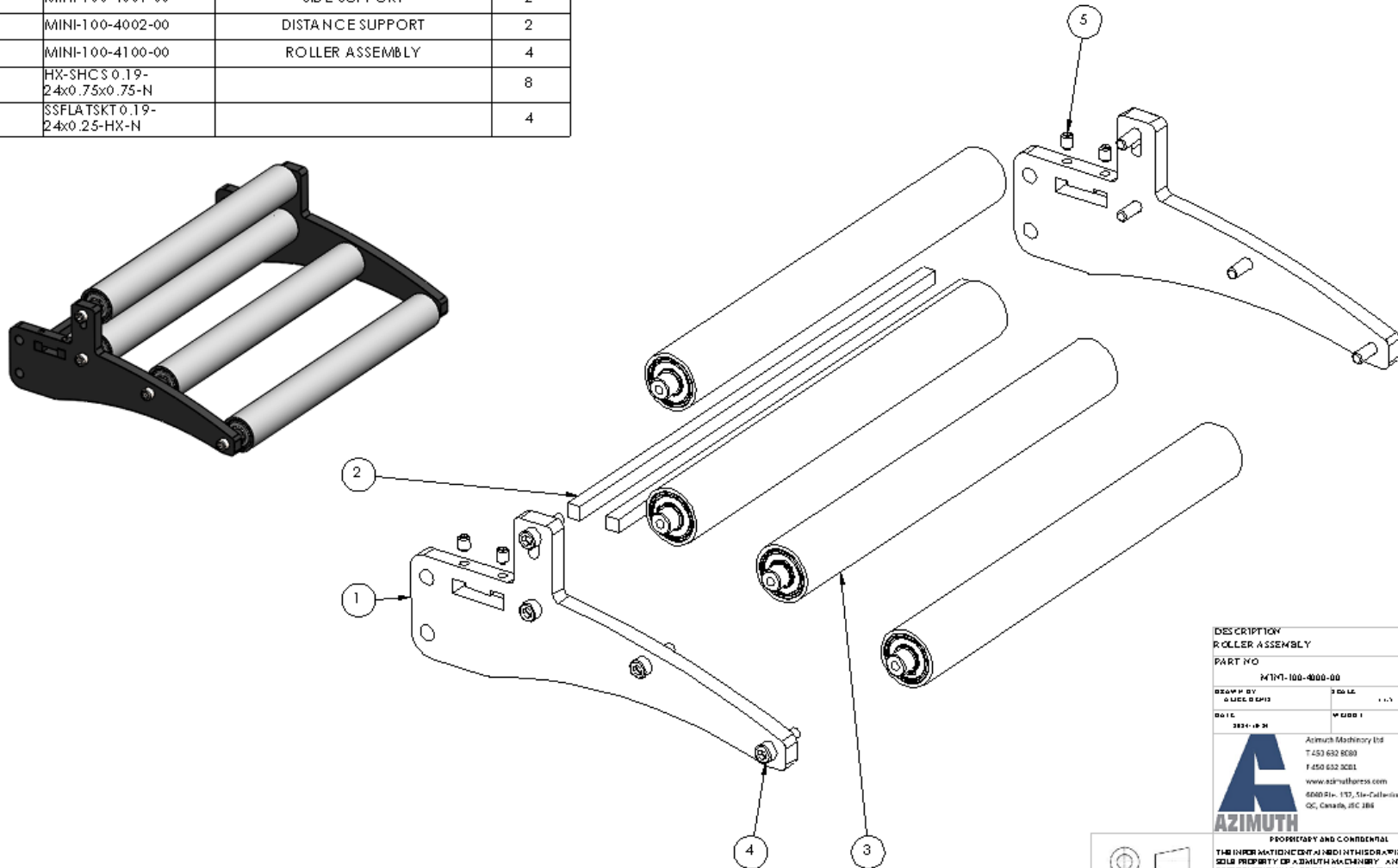
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-3001-00	ROLLER	1
2	MINI-100-3002-00	SPUR GEAR	1
3	MINI-100-3003-00	PULLEY HTD	1
4	MINI-100-3004-00	STEEL QUICK-GRIP SCREW-CLAMP BUSHING	1
5	B27.1 - NA1-75		1
6	B27.1 - NA1-62		2



DESCRIPTION	
COUPLING SHAFT	
PART NO	
MINI-100-3000-00	
DESIGN BY	DATE
0 LEE B 0 P 13	11-13
DATE	WEIGHT
2021-08-24	
 Azimuth Machinery Ltd T. 450 632 8080 F. 450 632 3081 www.azimuthpress.com 6040 Rte. 132, Ste-Catherine QC, Canada, J5C 1B6	
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE</small> <small>SOLE PROPERTY OF AZIMUTH MACHINERY. ANY</small> <small>REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE</small> <small>WRITTEN PERMISSION OF AZIMUTH MACHINERY</small> <small>IS PROHIBITED.</small>	



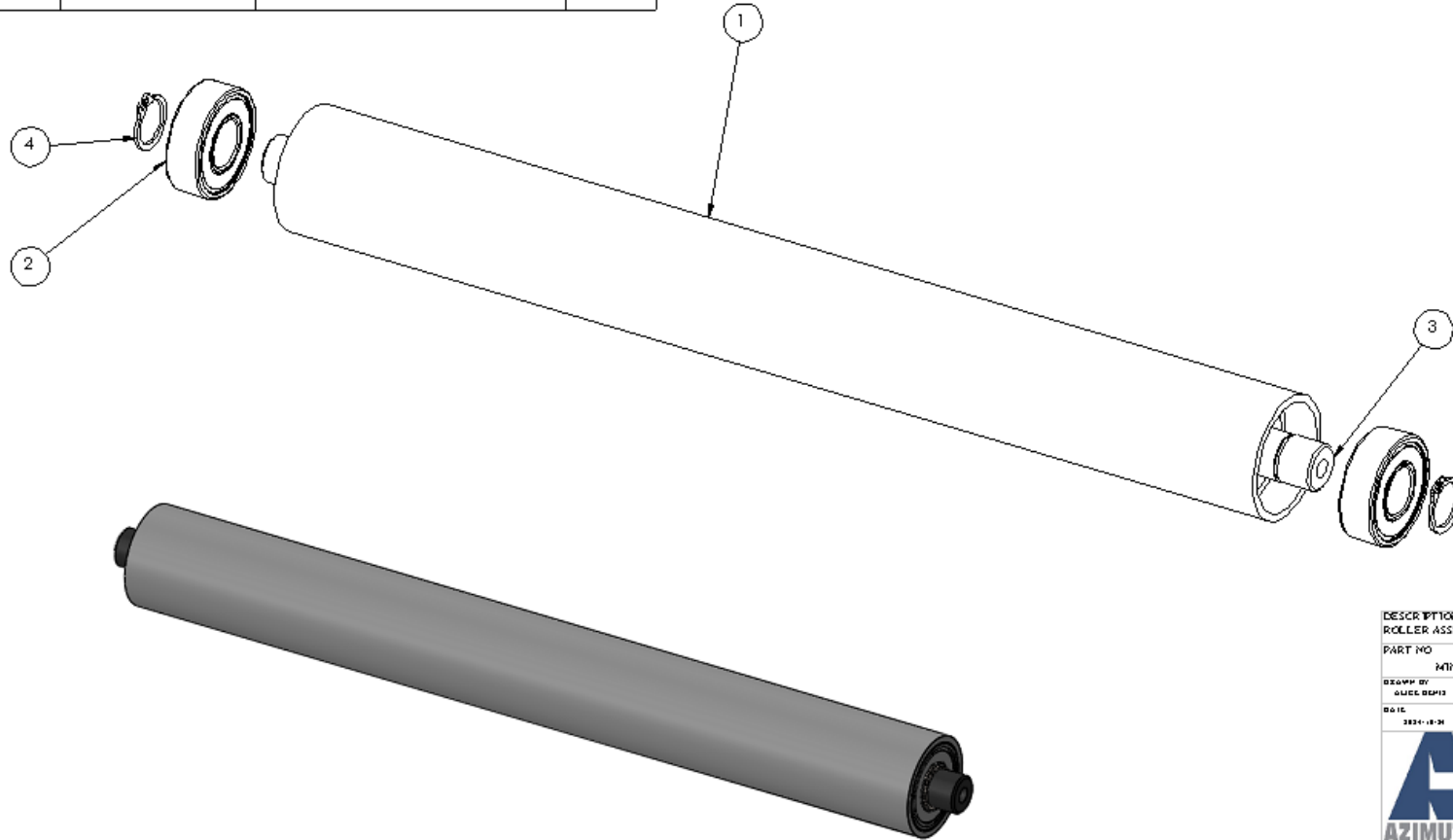
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-4001-00	SIDE SUPPORT	2
2	MINI-100-4002-00	DISTANCE SUPPORT	2
3	MINI-100-4100-00	ROLLER ASSEMBLY	4
4	HX-SHCS 0.19-24x0.75x0.75-N		8
5	SSFLATSKT 0.19-24x0.25-HX-N		4



DESCRIPTION	
ROLLER ASSEMBLY	
PART NO	
M1M-100-4000-00	
DESIGN BY	DATE
ALC/DPIS	11/11
DATE	WEIGHT
2024-08-28	
 Azimuth Machinery Ltd T. 450 632 8080 F. 450 632 8081 www.azimuthpress.com 6040 Rte. 132, Ste-Catherine QC, Canada, J5C 1B6	
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY AND IS NOT TO BE REPRODUCED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY CORPORATION.</small>	



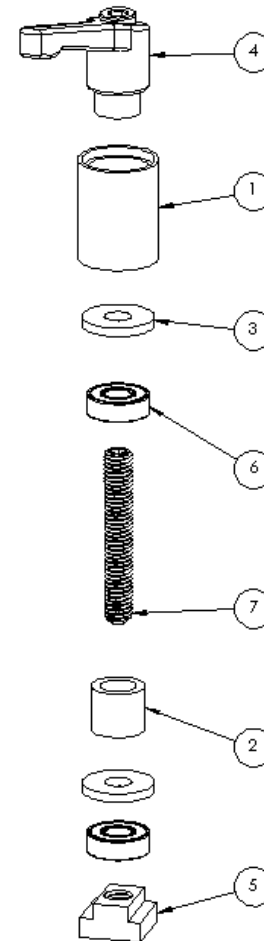
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-4101-00	ROLLER	1
2	MINI-100-4102-00	BALL BEARING	2
3	MINI-100-4103-00	ALIGNING ROD	1
4	B27.1 - NA1-37		2




DESCRIPTION	
ROLLER ASSEMBLY	
PART NO	
MINI-100-4100-00	
DESIGN BY	SCALE
DATE	REV
2024-10-31	
 Azimuth Machinery Ltd T: 450 632 8080 F: 450 632 8081 www.azimuthpress.com 6040 Pte. 132, Ste-Catherine QC, Canada, J5C 1B6	
<small>PROPRIETARY AND CONFIDENTIAL</small> THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.	



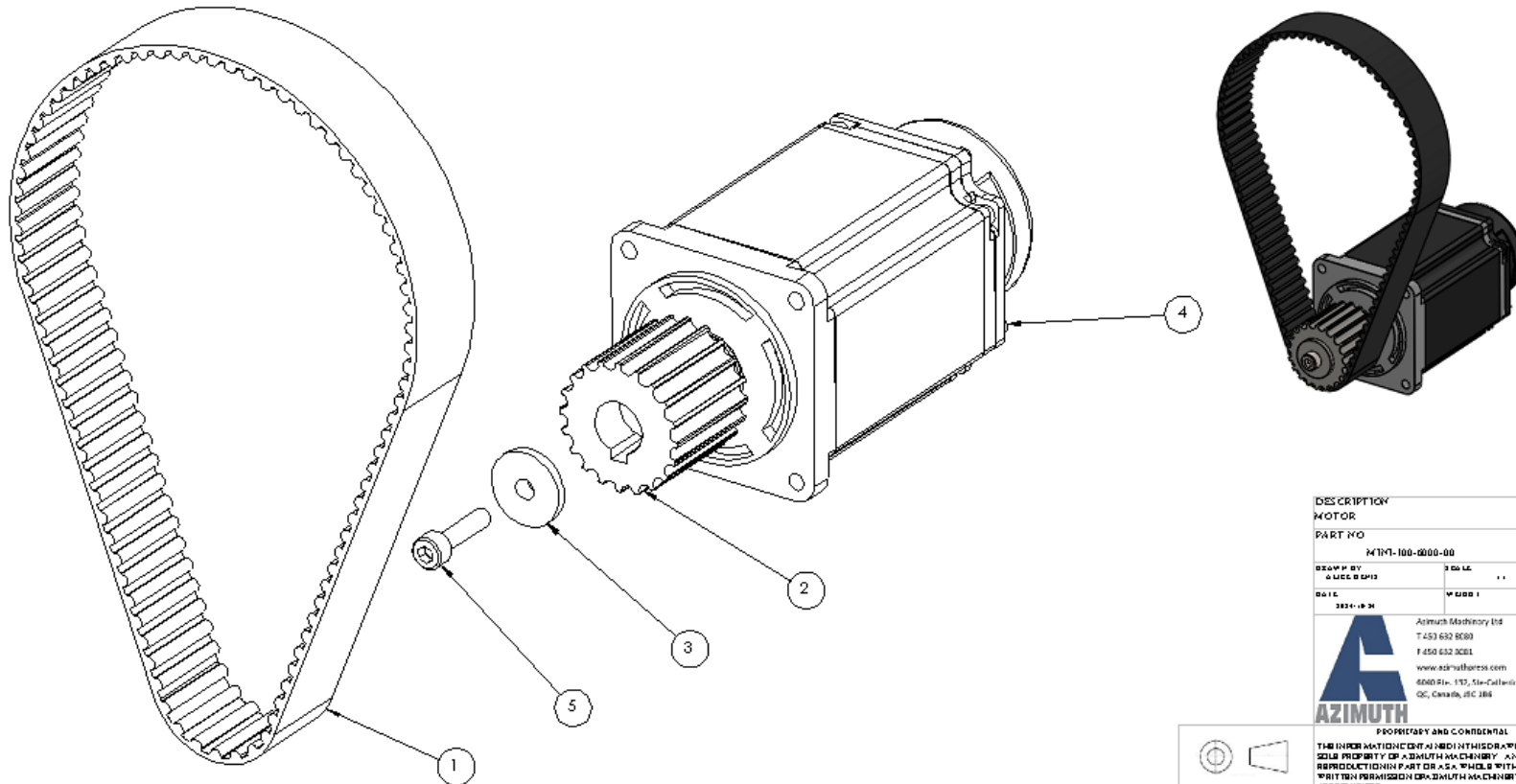
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-5001-00	BODY	1
2	MINI-100-5002-00	SPACER	1
3	MINI-100-5003-00	TOP/BOTTOM	2
4	MINI-100-5004-00	PLASTIC ADJUSTABLE-POSITION HANDLE	1
5	MINI-100-5005-00	FULLY THREADED BLACK-OXIDE STEEL T-SLOT NUT	1
6	MINI-100-5006-00	BALL BEARING	2
7	MINI-100-5007-00	ALLOY STEEL THREAD-LOCKING CUP-POINT SET SCREW	1



DESCRIPTION	
WIDTH LIMITER	
PART NO	
MINI-100-3000-00	
DESIGNED BY	DATE
DRAWN BY	REVISED
SCALE	QUANTITY
 Azimuth Machinery Ltd T. 450 632 8080 F. 450 632 8081 www.azimuthpress.com 6040 Rte. 132, Ste-Catherine QC, Canada, J5C 1B6	
<small>PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.</small>	



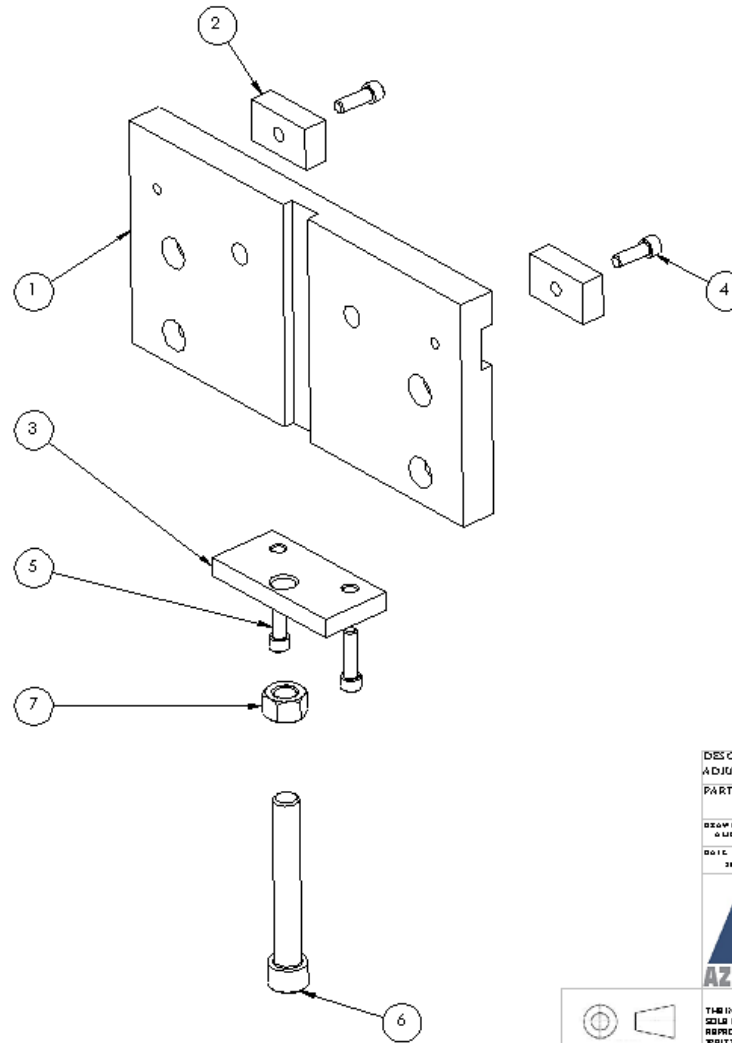
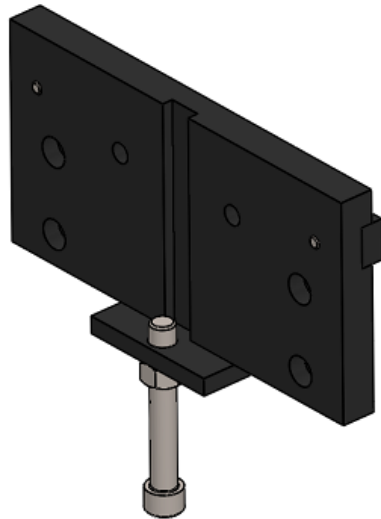
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-6001-00	BELT	1
2	MINI-100-6002-00	MOTOR PULLEY	1
3	MINI-100-6003-00	FLANGED WASHER	1
4	MINI-100-6004-00	SERVOMOTOR	1
5	B18.3.1M - 5 x 0.8 x 20 Hex SHCS -- 20NHX		1



DESCRIPTION	
MOTOR	
PART NO	
MINI-100-0000-00	
GROUP BY	DATE
SALES REP	...
DATE	VERSION
2024-0-24	1
 Azimuth Machinery Ltd T. 450 632 8080 F. 450 632 3061 www.azimuthpress.com 6040 Rte. 132, Ste-Catherine QC, Canada, J5C 1B6	
<small>PROPRIETARY AND CONFIDENTIAL</small> <small>THIS INFORMATION IS THE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.</small>	



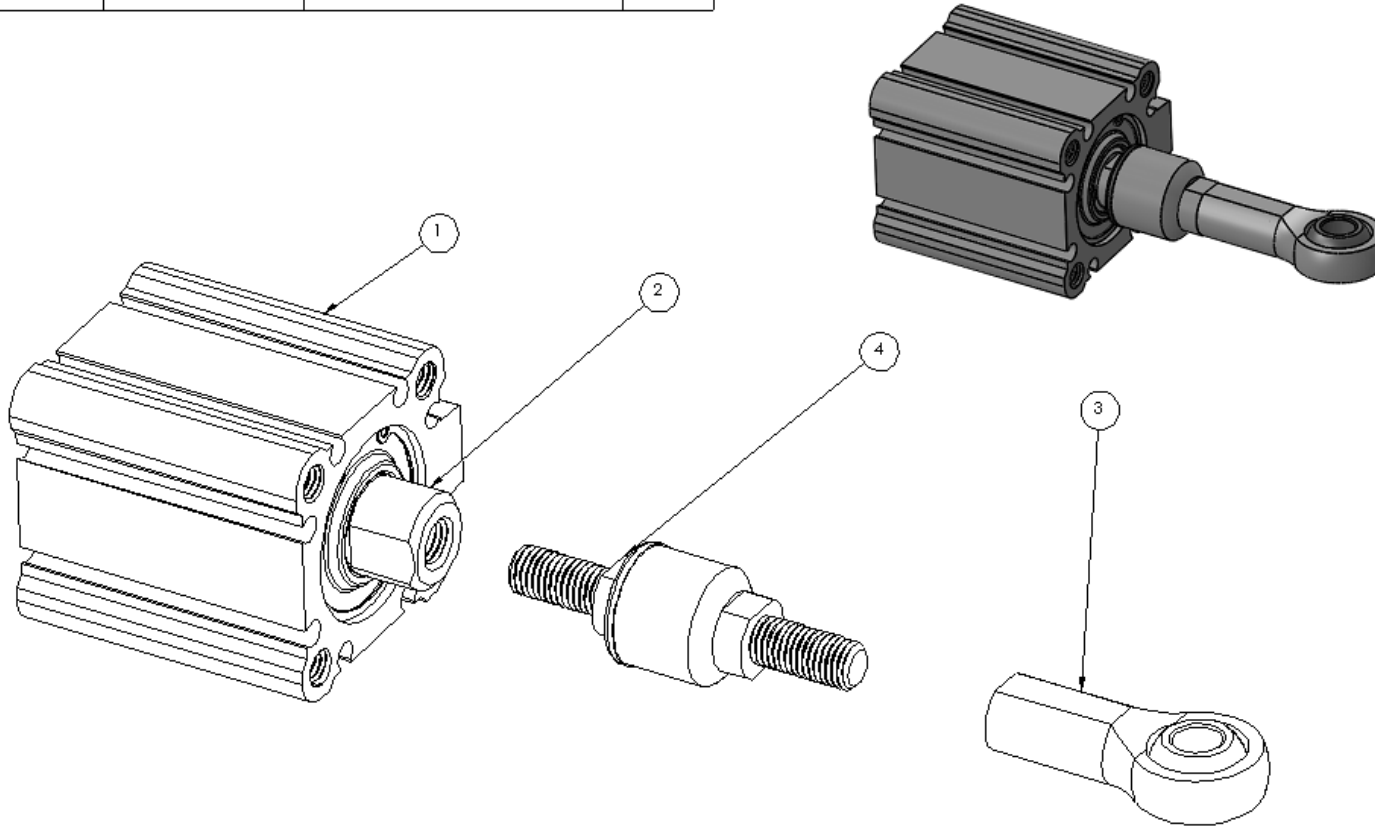
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-8001-00	BOLTED PLATE	1
2	MINI-100-8002-00	FEEDER SUPPORT	2
3	MINI-100-8003-00	HEIGHT ADJUSTMENT BLOCK	1
4	HX-SHCS 0.25-20x0.75x0.75-N		2
5	HX-SHCS 0.25-20x1x1-N		2
6	HX-SHCS 0.5-13x3.5x2-N		1
7	HNUT 0.5000-13-D-N		1



DESCRIPTION	
ADJUSTING PLATE	
PART NO	
MINI-100-8000-00	
DESIGNED BY	DATE
0.0000-13-D-N	13
DATE	W.0000-13-D-N
2024-10-24	
 Azimuth Machinery Ltd T. 450 632 8080 F. 450 632 3081 www.azimuthpress.com 6040 Rte. 132, Ste-Catherine QC, Canada, J5C 1B6	
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.	



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	MINI-100-10001-00	CYLINDER	1
2	MINI-100-10001-00	CYLINDER	1
3	MINI-100-10002-00	BALL JOINT ROD END	1
4	MINI-100-10100-00	LINK	1



DESCRIPTION	
ADJUSTING CYLINDER FOR THICKNESS	
PART NO	
AZP-600-11000-00	
DRAWN BY	300 LC
DATE	11/11
SCALE	1:1
 Azimuth Machinery Ltd T 450 632 8080 F 450 632 3081 www.azimuthpress.com 6040 Rte. 132, Ste-Catherine QC, Canada, J5C 1B6	
PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF AZIMUTH MACHINERY. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AZIMUTH MACHINERY IS PROHIBITED.	

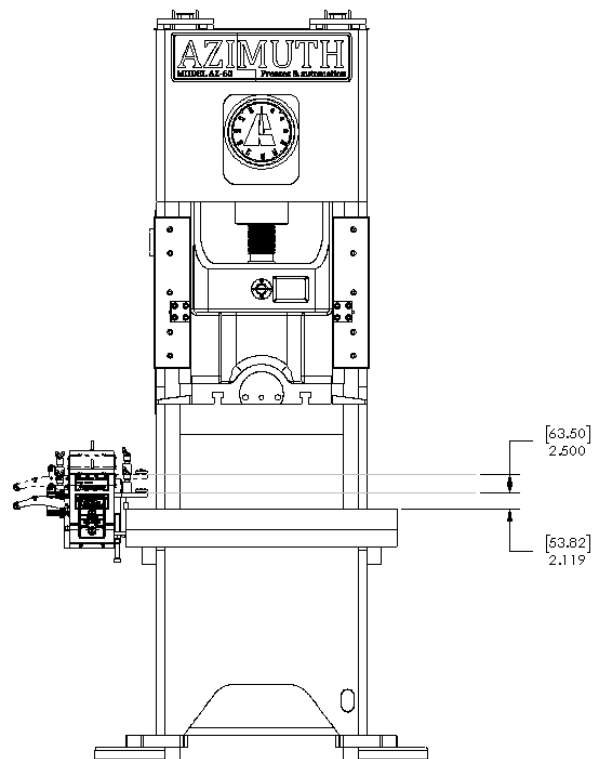


AZIMUTH MACHINERY
T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



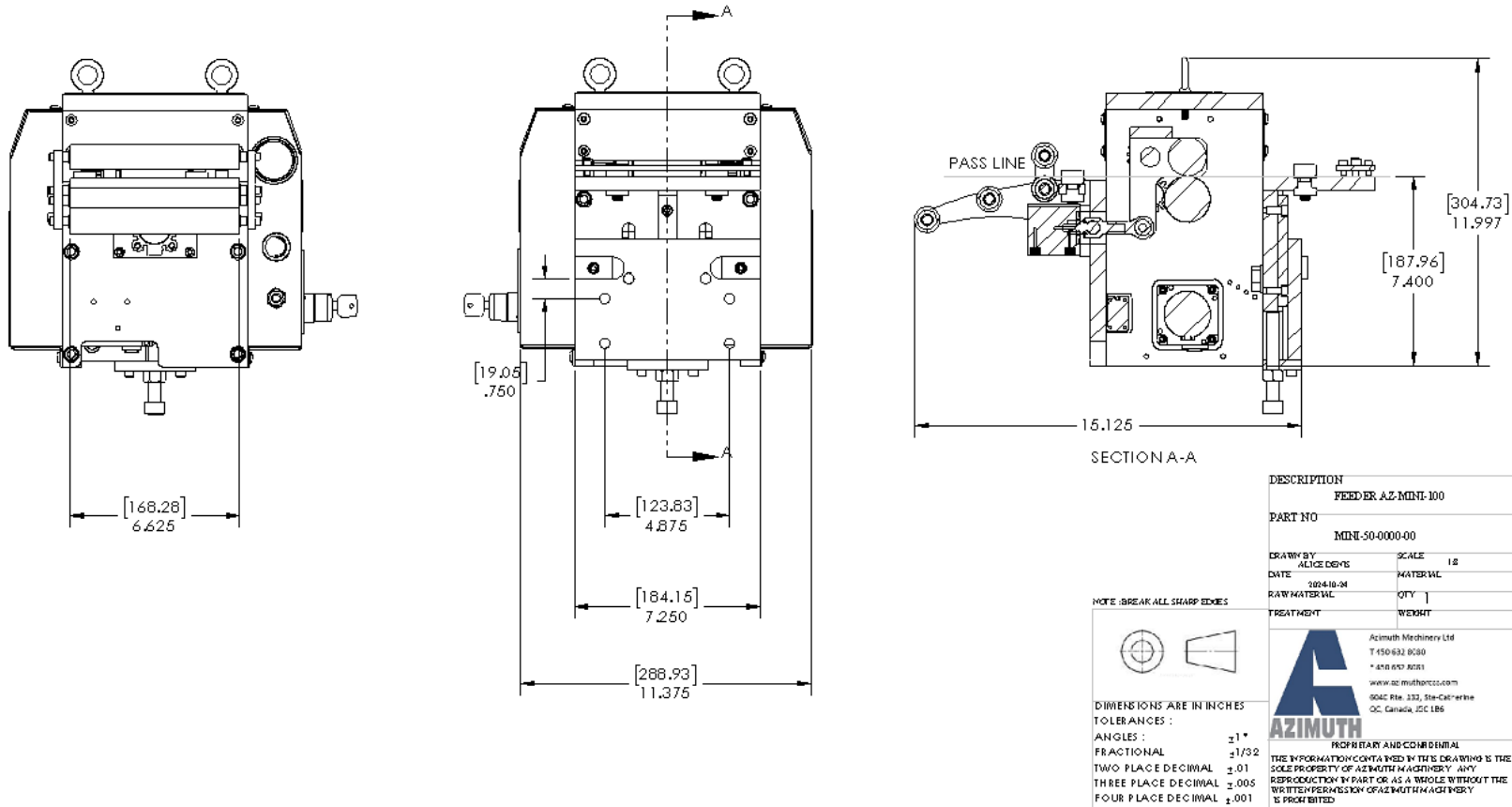
MINI-XXX DIMENSIONS:

PASS LINE MIN. AND MAX.



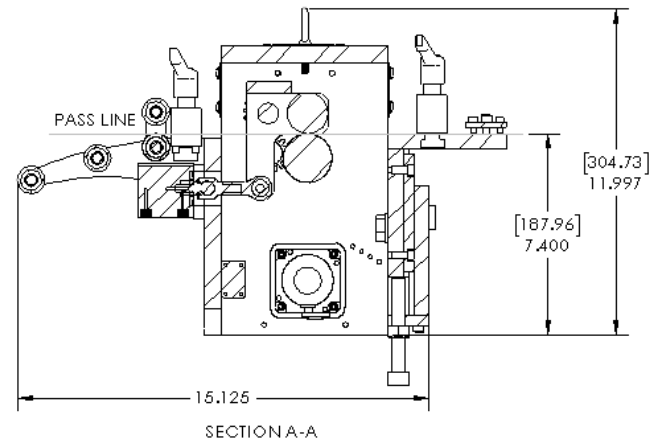
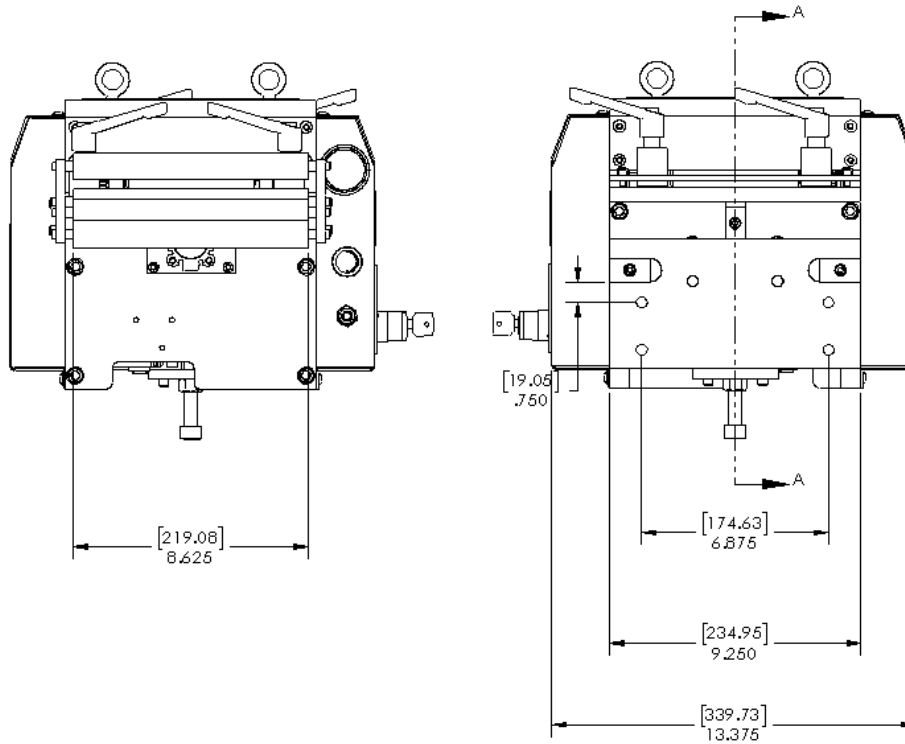


AZIMUTH MACHINERY
 T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
 6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6





AZIMUTH MACHINERY
 T. 450 632 8080 • sales@azimuthpress.com • www.azimuthpress.com
 6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6



SECTION A-A

DESCRIPTION	
FEEDER AZ-MINI-100	
PART NO	
MINI-100-0000-00	
DRAWN BY	SCALE 1:2
ADICE DESIG	MATERIAL
DATE 2024-10-24	QTY
RAW MATERIAL	WEIGHT
TREATMENT	

NOTE: BREAK ALL SHARP EDGES



DIMENSIONS ARE IN INCHES
 TOLERANCES :
 ANGLES : ±1°
 FRACTIONAL ±1/32
 TWO PLACE DECIMAL ±.01
 THREE PLACE DECIMAL ±.005
 FOUR PLACE DECIMAL ±.001



Azimuth Machinery Ltd
 T. 450 632 8080
 • 450 632 8081
www.azimuthpress.com
 6040 Rte. 132, Ste-Catherine
 QC, Canada, J5C 1B6

PROPRIETARY AND CONFIDENTIAL
 THE INFORMATION CONTAINED IN THIS DRAWING IS THE
 SOLE PROPERTY OF AZIMUTH MACHINERY. ANY
 REPRODUCTION BY PART OR AS A WHOLE WITHOUT THE
 WRITTEN PERMISSION OF AZIMUTH MACHINERY
 IS PROHIBITED



AZIMUTH MACHINERY
T. 450 632 8080 ◦ sales@azimuthpress.com ◦ www.azimuthpress.com
6040 Route 132, Ste-Catherine, Quebec, Canada, J5C 1B6

