

#### **METALX LLC**

Attn. Mr. Neal Rifkin 9910 Dupont Circle Dr. E Suite 200 46825 Fort Wayne, IN USA

# **Order confirmation 1**

**OFFER Nr.: A1120082 1** Fohnsdorf, 2023-09-27 von: Ortner

Dear Mr. Rifkin!

We thank you for your order and confirm your order as follows.

# 1 pc. Hydraulic Scrap Baling Press Type ArnoPress K 500-3

The scrap baling presses type ArnoPress K 500-3 are 3-cylinder-presses with a door output and an electro-hydraulic drive assembly.

The type ArnoPress K 500-3 is suitable for pressing bales from plate scrap up to a density of 45 % as they come up in car body works, punching and scrap processing works. In aluminium and remelting works for aluminium scrap as in copper and brass works these presses are in use (scrap up to 15mm in thickness).

For complete automatic pressing discharge with feeding equipment it is possible to add weighing and dosing equipments. The presses can be carried out in left and right output direction.



# 1) Technical Data

machine dimension:	length: breadth: height: <b>weight:</b>	approx. 7000 approx. 7400 approx. 4600 approx. 85	mm mm mm <b>t</b>	
forming box dimension:	length: breadth: height:	2650 1500 1100	mm mm mm	
fill-in opening:	length: breadth:	1940 1420	mm mm	
bale size:	400	variable		
cylinder – pressing force:	pre compression intermediate compression end compression	1847 2413 <b>5000</b>	kN kN <b>kN</b>	
specific surface pressure:	pre compression intermediate compression end compression	112 535 3.780	N/cm² N/cm² N/cm²	
throughput production:	bales/h: <b>cycle – time:</b>	120 - 130 <b>30</b>	bales/h <b>sec.</b>	
output:	aluminium: steel: copper: bale weight:	8 - 10 20 - 22 22 - 25 100 - 120	t/h t/h t/h kg	
required power:		4 x 55	kW	
total power:		250	kW	
pump output:		HD = 4 x 360	l/min	
	total output:	1440	l/min	
operating voltage:		230 – 460	Volt	
working pressure:		300	bar	
cooling:		oil / air		
tank volume: 4500				



# 2) Technical Description of scrap baling presses Type ArnoPress K 500-3

# **Structure of Construction**

In its ground structure the press consists of a weld- and screw construction of steel plates made for the occurring rough operating conditions.

In the sector of the bale finish pressure is an increasing safety and stability granted. This is possible through the additional installation of thread tie rods, which are at the same time used as a suspension of the last pressing cylinder.

The forward feeding head of the first compression, the pre compression, is constructed as follows: in the driven-up end position the whole length and breadth of the filling opening is covered. This guarantees that down falling scrap parts do not damage the piston rod of the cylinder and also that these parts cannot come behind the extended forward feeding head.

Further this grants the possibility to load the next scrap filling onto the forward feeding head, which is transported in the forming box with a stripping device. Bulky material standing out from the funnel will be sheared off through a knife on the upper boarder of the forward feeding head, lays on the cover plate and falls in the forming box when the cylinder is retreated.

Both forward feeding heads, pre and intermediate compression are equipped with mechanical stoppers that ensure an exact positioning of the forward feeding heads and for an exact parallelism of the forward feeding head – press-surfaces.

#### Wearing plates

All inside walls of the forming box and pressing hammer and all outside surfaces of the forward feeding heads are faced with changeable wearing plates and sliding blocks made of maximum wear resisting material (Hardox 450, round the bale Hardox 500).

In the whole area of the forming box and the pressing chamber the plates are profiled. This profiles are shaped similar to the thread cross section of the round thread and enables in the opposite to smoothed or rough trapezoid profiled wearing plates a pressing of smallest plate pieces such as punching.

In the above mentioned way of profiling the profile sides do not have any even surfaces, this guarantees that pieces of sheet metal cannot come between the one on top of another sliding running paths. The wearing plates inside of the boxes are as far as possible equipped with continuous screws. These screws are fastened and secured from outside. This enables a fast replacement of single wearing plates.

#### Bale opening

The bale door is integrated in the bale ejection wall of the pressing box in horizontal active opening direction. The door is big enough dimensioned so that also oversized bales that are produced because of over-charging can be ejected in manual operation.

#### Hydraulic - Cylinder

All cylinders are double acting and in both directions hydraulic controlled. The pistons of the 3 pressing cylinders are because of the high speed of the cylinders equipped with Teflon-axial face seals. In the contrast of the so far usual piston construction this system also takes the leading of the piston simultaneously to the sealing of the pistons. The high scuff resistance also at maximum straining guarantees a long durability. Hard-chrome plated and polish-grinded piston rods ensure less wastage and less susceptibility to corrodibility.

# Electro – hydraulic driving station

The oil tank including the necessary aggregates for the discharge, pressure safety device as pipe and flexible tube lines are assembled to a closed unit. The aggregates provided with vibration-elements are located below the oil tank on a ground frame that is built as an oil pan. They are connected with the oil tank with fuel shut-offs and rubber compensators on the induction side.

Near the press there is a logic control block for the hydraulic control system, which contains all necessary valves for the functional course of the cylinders. This logic control system guarantees in contrast to conventional spool valves soft-switching cylinder control systems with the required high pump capacity. The inserted logic elements are seat valves and guarantee a hermetic, hydraulic turn off of the cylinders that are under pressure. This ensures that pre compression and intermediate compression hold the started pressure positions while a bale is finished in the end compression.

#### **Electronic driving**

The electronic driving is worked out via three-phase A.C. motors.

operating voltage 400 or 500 V, star-delta connection motor speed 1500 rpm frequency 50 Hz types of protection IP 54

The required power of the individual motors is indicated under technical data.

# Electric control system Allen Bradley in connection with touch panel

The electric control system of the baling press is designed that all movements of the press can be executed full- and half automatic and also manual. The single working cycles are locked towards each other with limit switches. A key-operated circuit enables a repairing circuit that allows – when the locking is neutralized – an actuation of all movements of the press for repairing. All necessary switch and control gears to control a working cycle are completely mounted and wired among one another in a switch cabinet. On the for the operation necessary control desk are all control buttons and signal lamps that are needed for the start and monitoring clear arranged.

#### **Functioning**

The scrap to be baled has to be transported via the funnel tube into the filling box of the press. After reaching the requested filling level, determined through a weighing and dosing equipment or through the experimental value of the operator, the automatic process can be started via pressing a push button.



First the pre pressing head starts and limits the exact bale breadth. Manometric and a integrated way-measuring system determine the exact position of the pre pressing head. After this the pre pressing head of the intermediate compression goes down and limits the exact height of the bale also via manometric and the integrated way-measuring system.

The actuated manometric switches (working pressure) ensure the required supporting pressure, when the next operating process starts (pre pressing head of the end compression finishes the bale with the variable length).

After removal of the 3 compression cylinders the door opens and the finish pressure pushes out the bale. After that all equipment goes into the starting position again.

3) Commercial data					
Pos.	quantity	description	EUR / unit	EUR total	
1	1 pc.	Scrap baling press ArnoPress K 500-3			
		incl. feed-hopper			
2	1 pc.	oil pan below press			
3	1 pc.	weighing hopper			
4	1 pc.	Infeed conveyor			
5	1 pc.	Palletizer and strapping machine			
6	1 pc.	lubrication for wear plates			
7	1 pc.	Shipping Tool container			
8	1 pc.	assembling costs			
9	1 pc.	Duties & Taxes			
10	1 pc.	Shipping DDP Fort Wayne IN, USA			
11	1 pc.	Discount			
TOTAL AMOUNT					

The shipping will be charged according the real costs

This price is without rigging company for unloading and install

# **Delivery standard**

The plant is manufactured according to the European Safety regulations and will be delivered completely ready for working, without hydraulic oil filling. Energy supplies, means of transport for the unloading, special noise protection and foundation at the place of destination has to be provided from the customer. In the case of the assistance in the context of the loading the buyer regards the salesman regarding all requirements harming and complain less resulting from it. The documentation - operating and maintenance manual - will be executed in English once. Painting RAL-5005 blue



#### **Installation time for two balers:**

Approx. 16 weeks including training and acceptance protocol

#### **Price**

Has been established on base of actual prices of labour and materials and is to be understood DDP Fort Wayne, IN USA.

#### **Delivery time**

Ship from Fohnsdorf June 13. 2024 after placing written order and receipt of the down payment within 1 week.

# **Payment conditions**

- 30 % down payment after receipt of the order confirmation
- 60 % when the machine is ready for delivery
- 10 % net 30 days after installation and commissioning/performance test at place of destination of 2 weeks of consistent operation(baling 10-12 metric tons of aluminum scrap per hour for at least seven (7) hours during an eight (8) hour shift), to occur within 1.5 months after delivery. Buyer's acceptance deemed to occur upon successful commissioning/performance test.

Payments have to be carried through without discount to our account.

# Place of Jurisdiction

Austria

# **Reservation of Ownership**

Seller shall reserve the ownership in the object sold until Buyer has met all financial obligations.

# **Warranty**

Warranty period is for the lesser of two (2) years or 6,240 hours of operation. Except from warranty are wearing parts and sealing-material, as well as defects caused through inappropriate servicing of the plant, explosion and fire.



For all not included contractual parts our "General Terms of Delivery" are effective. Technical changes are reserved.

Modifications due to advancements of our plants we reserve ourselves expressly.

If you want to raise objects to this confirmation, please inform us immediately, otherwise we will practice the delivery according to above mentioned conditions.

We ask you for immediate return of this letter.

Again thank you for your order.

With kind regards

ATM Recyclingsystems GmbH

Alfred Ortner

Authorized Representative a.ortner@atm-recyclingsystems.com

**METALX LLC** 

Mr. Neal Rifkin

10/5/23