

# **Ergoflex MA**

# Ergolift is the perfect solution

Ergolift opens up many new opportunities for fast, convenient and safe handling of moderate loads. It relieves the operator of strenuous operations, such as gripping, lifting, holding and turning an object, and it does this quickly and with high precision.

When fitted with suitable lifting tools, the Ergolift is a versatile and economical aid that provides the perfect solutions to many handling problems.

The Ergolift is a manually controlled hydraulic lifting arm operated by means of a handle at the tool

attachment. The control handle can be used to regulate the lifting speed steplessly from rest up to the maximum speed. The handle is spring-loaded and reverts to the neutral position when automatically balanced. No resetting is necessary when the load is changed. The load can easily be moved manually at any time in all horizontal directions. When the control handle is in the neutral position, the load will always be maintained at a constant level. The vertical and horizontal movements can be coordinated, so that the load will always be moved in the required direction.

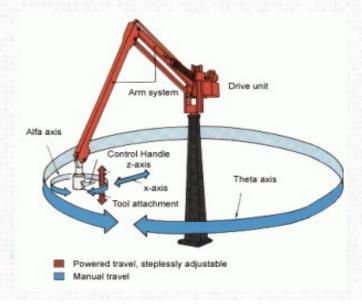


#### How it works

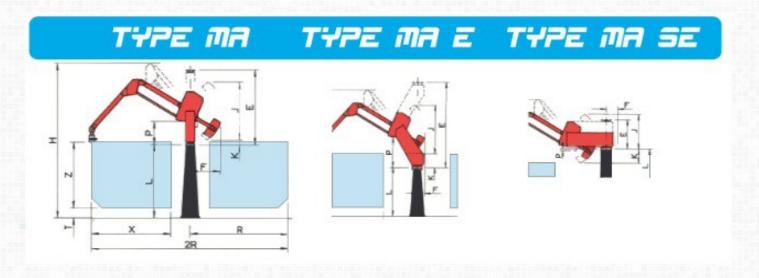
The design of the Ergolift Type MA is shown in the figure to the right. The lifting arm is usually supported by a floor-mounted pillar and can be slewed manually through 360° around the pillar. (Horizontal slewing is the theta axis). The CONTROL HANDLE and the TOOL ATTACHMENT are integrated into a single unit, which is manually movable along the X-axis (horizontally) and is hydraulically movable along the Z-axis (vertically).

This unit can also be rotated manually through 360° about its own center axis. (Horizontal rotation is the alpha axis.) The DRIVE UNIT consists of a silent hydraulic system powered by a three-phase electric motor. In the event of failure of the power supply, hose failure, etc a special valve will immediately lock the load in position. The ARM SYSTEM is a low-friction linkage with a tie rod designed to maintain the tool attachment horizontal at all times, regardless of the position of the arm.

The control handle is simple and logical to use. Turn the handle up to lift the load, and turn it down to lower it. The more the control lever is displaced from the neutral position, the higher will be the speed. The handle is of ergonomic design and provides perfect control of all movement of the lifting arm.



## **Technical Data**



Type	Max. Load (lbs)	Max. Off- Center Load (ft lbf)	R	Х	Z	Т	L	Н	Е	F*)	J	К	P	Max. Lifting Speed (inches/sec.)
MA60	130	144	106.5	85.4	74.8	4.5	83	172	67.3	23	-	-	19.8	12
MA80	175	180	86.4	69.3	59	9.6	69	148	67.3	23	-	-	19.8	10
MA75	165	216	118.3	95.1	84.6	1	90	186	67.3	34	63	1.6	19.8	11
MA75E	165	216	137.4	95.1	84.6	1.4	77	186	95.7	23	63	12.6	33.9	11
MA75SE	165	216	157.1	95.1	84.6	1.6	108	186	32.9	23	44	18.9	3.5	11
MA110	240	360	86.4	69.3	59	9.6	69	148	67.3	34	63	1.6	19.8	10
MA110E	240	360	105.5	69.3	59	12	57	150	95.7	23	63	12.6	33.9	10
MA110SE	240	360	125.2	69.3	59	6.3	83	145	32.9	23	44	18.9	3.5	10
MA150	330	580	118.3	95.1	84.6	1	90	186	67.3	34	63	1.6	19.8	11
MA150E	330	580	137.4	95.1	84.6	1.6	77	186	96	23	63	12.6	34	11
MA150SE	330	580	157.1	95.1	84.6	1.8	108	186	33.6	23	44	18.9	3.3	11
MA200	440	580	93.7	75.4	65	2.8	69	152	67.3	34	63	1.6	19.8	10
MA200E	440	580	112.8	75.4	65	5.3	57	154	96	23	63	12.6	34	10
MA200SE	440	580	132.5	75.4	65	7.5	90	156	33.6	23	44	18.9	3.3	10
MA260	575	580	74	59	49.2	9.6	57	130	67.3	34	63	1.6	19.8	8
MA260E	575	580	93.1	59	49.2	10.2	43	130	96	23	63	12.6	34	8
MA260SE	575	580	112.8	59	49.2	4.5	69	124	33.6	23	44	18.9	3.3	8

Dimensions in inces. \* Refers to necessary space. The specifications are subject to change without prior notice.

#### **Alternative versions**

- Unlimited rotation around the pillar (theta axis) by means of a slip-ring actuator.
- Unlimited rotation around the pillar (theta axis) by means of a slip-ring actuator and swivel coupling for supplying compressed air to the pneumatic balancing system or pneumatic lifting tool.
- Pneumatic balancing system for the weight of the arm. This feature which is standard for MA60 and MA80 makes the arm lighter and the necessary space behind the unit smaller (See "F" in table above).
- Explosion-proof electric motor for hydraulic system. For applications involving the risk of explosions.

### **Superlight models**

Ergolift types MA60 and MA80 have arms made of aluminum with pneumatic balancing system for the weight of the arm. This lightweight aluminum arm which is hydraulically powered and pneumatically balanced is especially well suited for light and quick handling applications.



#### **Off-Centre Loads**

Due to its robust design, the Ergolift can withstand high off-centre loads. The load can thus be held and transported at a large distance (a) from the tool attachment (see the adjacent figure).

This ability of the Ergolift to reach into and under objects makes it effective and useful for many tasks that ordinay lifting equipment cannot tackle, such as the handling of workpieces at presses, drilling machines, milling machines, furnaces, cabinets, conveyour systems, etc. One man using the Ergolift can thus handle and balance large loads. such as doors, wall elements, panels, long shafts, pipes etc., which earlier requires at least two men. And he can do it more quickly, conveniently and safely.



#### **Contact Us**

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