

SINGLE CYLINDER CAPACITIES TO OVER 43,000 LBS.

**Powerful  
Perfected  
Performance**  
*precisely.*

**High Capacity  
Low Pressure  
INDUSTRIAL**  
or any application

Single-Acting Hydraulic  
**Cylinders**  
for Custom Applications

**APPLICATIONS:**

Industrial

Material Handling

Dispersers/Mixers

Steel Mills

Lumber Mills

Rail Cars

and More

*Made in America*

Manitowoc Lifts and Manufacturing is a leading producer of both high capacity, large diameter single-acting hydraulic cylinders and custom fabricated steel products for various industries. With an engineering data bank that extends back to 1928, capabilities and design styles are vast. For your special fabrication needs and robust cylinders to get the job done, put the MLM team to work for you. Cylinders are available in many stroke lengths and four different diameters to suit your capacity or force requirements.

**SEMI-HYDRAULIC  
FULL-HYDRAULIC**



*Where "well made" and "low cost"  
can actually be used in the same sentence.*



**Specialty  
Fabrication**

*(see back for details)*



A Family-Owned Enterprise

**Manitowoc Lifts  
and Manufacturing LLC**

**800-543-8006**

815-748-9500 • fax: 815-748-9508

155 Harvestore Drive • DeKalb, IL 60115

[www.ManitowocLifts.com](http://www.ManitowocLifts.com)



# Single-Acting Hydraulic Cylinders for Custom Applications

## OPTIONS:

- Fiberglass Coated Casings for Below Grade or Wet Applications
- Industrial Hard Chrome Rod for Severe Duty and Pharmaceutical Applications
- Multi-Post Cylinder Configurations
- Rack and Pinion Equalization
- Single and Multi-Position Locks Legs with Manual, Air or Solenoid Operated Releases
- Non-Rotators
- A.S.M.E. Air/Oil Pressure Vessels
- Electric Hydraulic Power Units
- Raise and Lower Control Panels

## STANDARD COLOR FINISHES:



DUSL-style precision machined upper bearing with air bleeder. The wiper, seal and one glass filled nylon bearing are pictured in their respective cavities.



toll free  
**800-543-8006**

**Manitowoc cylinders are precision-manufactured** from special pressure-rated ASTM A-53 Grade B pipe. Each cylinder plunger/rod is turned and then polished to a 16 to 32 RMS finish for optimal function and sealing performance. The casing, or cylinder barrel, is welded together using thick end-head plate and special welding wire to ensure leak-free pressure rated performance. Once all the components are produced and final assembly is conducted, each cylinder is 100% hydraulically tested for smooth operation and proper performance before shipping.

DUSL-style cylinders feature two replaceable glass-filled nylon wear rings in the upper bearing housing that provide superior load bearing capabilities. The seal and wiper are made from a high performance thermoset polyurethane compound for long life and ozone and abrasion resistance.

SUSL-style cylinder is made using a cast-iron upper bearing housing that is easily replaceable and will perform ruggedly for many years. The seal and wiper are made from a highly abrasion-resistant buna N compound that has proven itself for decades.

All Manitowoc cylinders can be purchased with a choice of optional fiberglass coating or in your choice of five standard finish colors. Custom colors are available for an additional charge. For harsher applications, optional industrial hard chrome is available for the plunger surface to prolong life and prevent corrosion.

## 7-1/2" Full Hydraulic Single Upper, Single Lower Bearing Style

Cylinder #	Plunger Rod Size	Stroke*	Overall Length**	Capacity/Force at Pressure		
				Air/Oil 165 PSI	Elec/Hyd 250 PSI	Elec/Hyd 350 PSI
SUSL-75-12	7-1/2"	12"	27-5/8"	7,204	10,973	15,408
SUSL-75-18	7-1/2"	18"	33-5/8"	7,177	10,946	15,381
SUSL-75-24	7-1/2"	24"	39-5/8"	7,150	10,919	15,354
SUSL-75-36	7-1/2"	36"	51-5/8"	7,096	10,865	15,300
SUSL-75-48	7-1/2"	48"	63-5/8"	7,042	10,812	15,246
SUSL-75-60	7-1/2"	60"	75-5/8"	6,989	10,758	15,192
SUSL-75-72	7-1/2"	72"	87-5/8"	6,935	10,704	15,138
SUSL-75-84	7-1/2"	84"	99-5/8"	6,881	10,650	15,084

\* Stroke lengths indicated are suggestions and can be changed to meet a specific need.  
\*\* Overall length of cylinder can vary based on side load characteristics.

## 8-1/2" Full Hydraulic Dual Upper, Single Lower Bearing Style

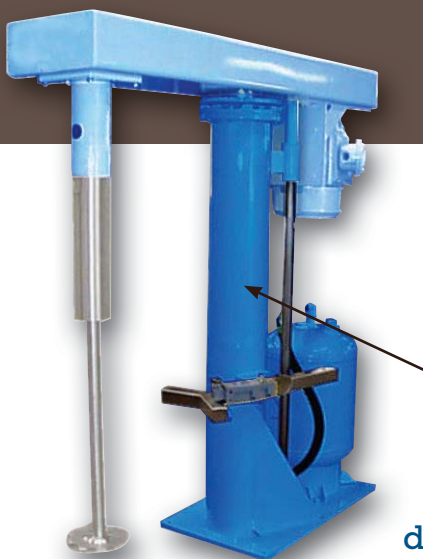
Cylinder Number	Plunger Rod Size	Stroke*	Overall Length**	Capacity/Force at Pressure		
				Air/Oil 165 PSI	Elec/Hyd 250 PSI	Elec/Hyd 350 PSI
DUSL-85-12	8-1/2"	12"	25"	9,239	14,068	19,749
DUSL-85-18	8-1/2"	18"	30"	9,207	14,036	19,717
DUSL-85-24	8-1/2"	24"	36"	9,175	14,004	19,685
DUSL-85-36	8-1/2"	36"	48"	9,111	13,940	19,621
DUSL-85-48	8-1/2"	48"	62-1/8"	9,041	13,870	19,551
DUSL-85-60	8-1/2"	60"	76-3/4"	8,963	13,792	19,473
DUSL-85-72	8-1/2"	72"	91-1/2"	8,885	13,714	19,395
DUSL-85-84	8-1/2"	84"	106-1/4"	8,806	13,635	19,317

\* Stroke lengths indicated are suggestions and can be changed to meet a specific need.  
\*\* Overall length of cylinder can vary based on side load characteristics.

◀ Dual Cylinder in Testing Facility



well made, low cost



New or replacement hydraulic base units for dispersers/mixers

For replacement disperser hydraulic base units, please call for specific details. Complete new base units can be produced from your sample to meet the original performance profile or be changed to accommodate a new need.

Simply remove the disperser/mixer unit from the cylinder top, drain the oil from the system and ship it to us for replication. We will either return your old unit with the new base unit or scrap the old base unit for you.

Replacement plungers/cylinder rods are also available and can be produced per your sample.

10-5/8" Full Hydraulic Dual Upper, Single Lower Bearing Style

Cylinder #	Plunger Rod Size	Stroke*	Overall Length**	Capacity/Force at Pressure		
				Air/Oil 165 PSI	Elec/Hyd 250 PSI	Elec/Hyd 350 PSI
DUSL-106-12	10-5/8"	12"	24-3/4"	14,394	21,910	30,751
DUSL-106-18	10-5/8"	18"	30-3/4"	14,348	21,863	30,705
DUSL-106-24	10-5/8"	24"	36-3/4"	14,302	21,817	30,658
DUSL-106-36	10-5/8"	36"	48-3/4"	14,209	21,724	30,565
DUSL-106-48	10-5/8"	48"	62-5/8"	14,101	21,616	30,458
DUSL-106-60	10-5/8"	60"	77-3/8"	13,988	21,503	30,344
DUSL-106-72	10-5/8"	72"	92"	13,874	21,389	30,231
DUSL-106-84	10-5/8"	84"	106-3/4"	13,761	21,276	30,117

\* Stroke lengths indicated are suggestions and can be changed to meet a specific need.  
\*\* Overall length of cylinder can vary based on side load characteristics.

10-5/8" Semi-Hydraulic (no tank required) Dual Upper, Single Lower Bearing Style

Cylinder #	Plunger Rod Size	Stroke*	Overall Length**	Capacity/Force at Pressure		
				Air/Oil 100 PSI	Air/Oil 125 PSI	Air/Oil 165 PSI
DUSL-106S-12	10-5/8"	12"	24-3/4"	8,717	10,927	14,463
DUSL-106S-18	10-5/8"	18"	30-3/4"	8,700	10,911	14,447
DUSL-106S-24	10-5/8"	24"	36-3/4"	8,684	10,894	14,431
DUSL-106S-36	10-5/8"	36"	48-3/4"	8,652	10,862	14,398
DUSL-106S-48	10-5/8"	48"	62-5/8"	8,614	10,824	14,361
DUSL-106S-60	10-5/8"	60"	77-3/8"	8,574	10,784	14,321
DUSL-106S-72	10-5/8"	72"	92"	8,534	10,745	14,281
DUSL-106S-84	10-5/8"	84"	106-3/4"	8,494	10,705	14,241

\* Stroke lengths indicated are suggestions and can be changed to meet a specific need.  
\*\* Overall length of cylinder can vary based on side load characteristics.

12-5/8" Full Hydraulic Dual Upper, Single Lower Bearing Style

Cylinder #	Plunger Rod Size	Stroke*	Overall Length**	Capacity/Force at Pressure		
				Air/Oil 165 PSI	Elec/Hyd 250 PSI	Elec/Hyd 350 PSI
DUSL-126-12	12-5/8"	12"	28-13/16"	20,290	30,931	43,449
DUSL-126-18	12-5/8"	18"	30-13/16"	20,218	30,859	43,378
DUSL-126-24	12-5/8"	24"	40-13/16"	20,147	30,788	43,306
DUSL-126-36	12-5/8"	36"	52-13/16"	20,004	30,645	43,163
DUSL-126-48	12-5/8"	48"	66-5/8"	19,839	30,480	42,999
DUSL-126-60	12-5/8"	60"	81-3/4"	19,660	30,300	42,819
DUSL-126-72	12-5/8"	72"	96-7/8"	19,480	30,120	42,639
DUSL-126-84	12-5/8"	84"	112"	19,299	29,940	42,459

\* Stroke lengths indicated are suggestions and can be changed to meet a specific need.  
\*\* Overall length of cylinder can vary based on side load characteristics.

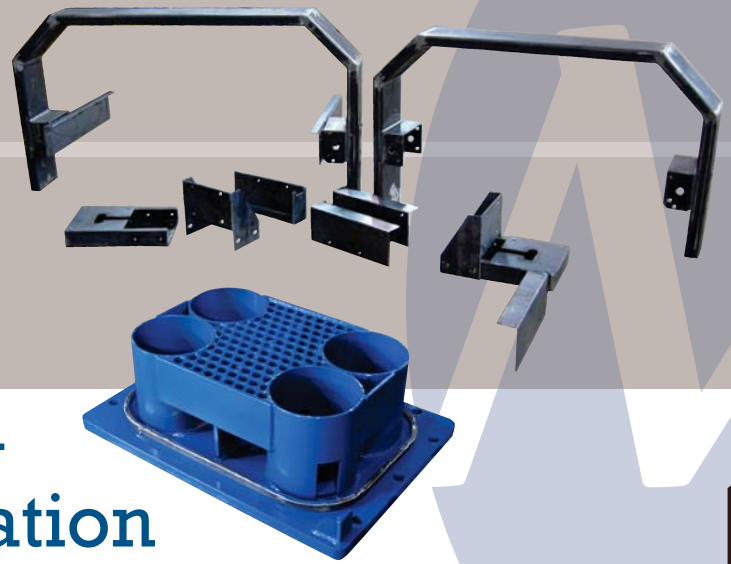
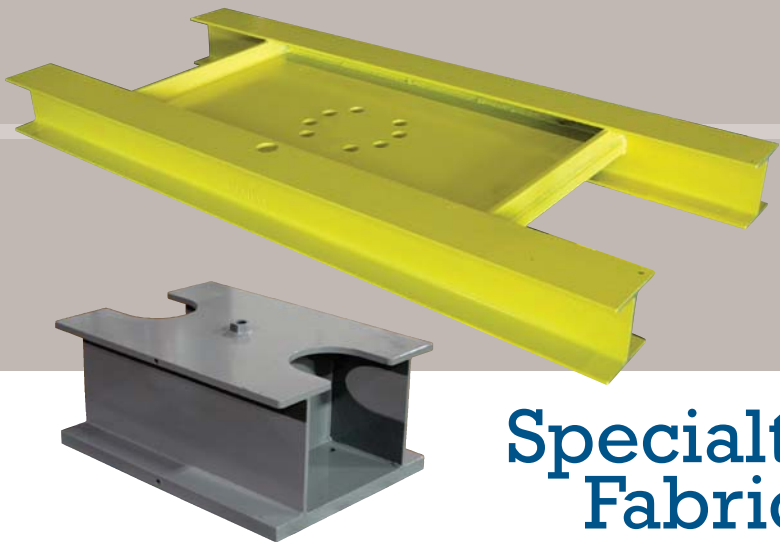
A.S.M.E. Pressure vessels are equipped with safety plug to prevent accidental removal under pressure.



Standard Air and Oil Control Valves for Full and Semi-Hydraulic Cylinder Units

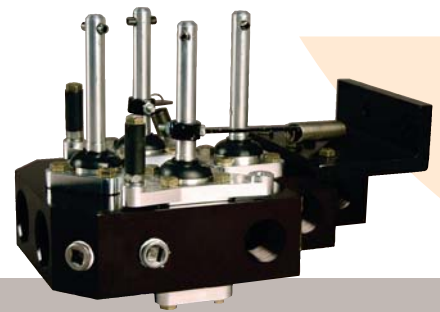
Optional controls are available or can be specified in the system. When ordering new replacement cylinder base units for existing equipment valves can be omitted so existing controls can be reused.





## Specialty Fabrication

Manitowoc's fabrication shop is well-suited to handle your one off, two off or more requirements. Beyond ones and twos, short-to-medium-size jobs are also a perfect fit for the shop. Companies depend on us regularly for specialty and custom-fabricated items as well as repeat jobs. Put the MLM team to work for you the next time you need fabricated steel products. Quick turnaround time on pricing and reasonable lead times help to fit the busy schedule of today's fast pace.



### OUR SPECIALITY:

- Ones and Twos
- Short Runs
- Medium Runs
- Repeat Jobs

### DISTRIBUTION MARKETS SERVED:

- Agricultural
- Fluid Power
- Material Handling
- Industrial
- and more!



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A Family-Owned Enterprise

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