



SWANSON
INDUSTRIES

**Morgantown Machine
& Hydraulics, Inc.**

Specifications
MR40-100 Anchor Plate
5 ft. square, 2 in. thick steel plate;
weighs approx. 2250 lb

MR20-200 Anchor Post
Heavy-wall steel tubing w/angle
brace; radial base & spherical top
plate; weighs 75 lb./ft. of length

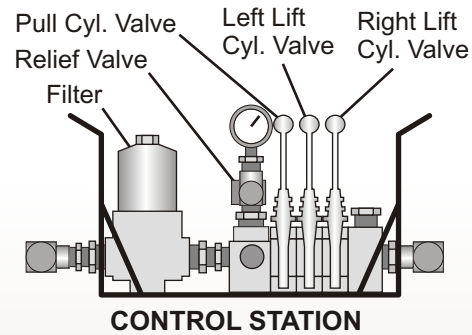
MR40-400 Connecting Link Assembly
Fabricated from 1.5 x 6 in. flat steel;
w/shackles each link weighs 226 lb.

MR40-900 Pull Cylinder
14 in. I.D. x 16 in. O.D., 6 ft. stroke,
2000 psi. operating pressure,
2500 psi max. pressure;
weighs 2250 lb. dry, 2600 lb. w/oil

DERON

EQUIPMENT RETRIEVER

A powerful hydraulic system for recovering trapped mining equipment

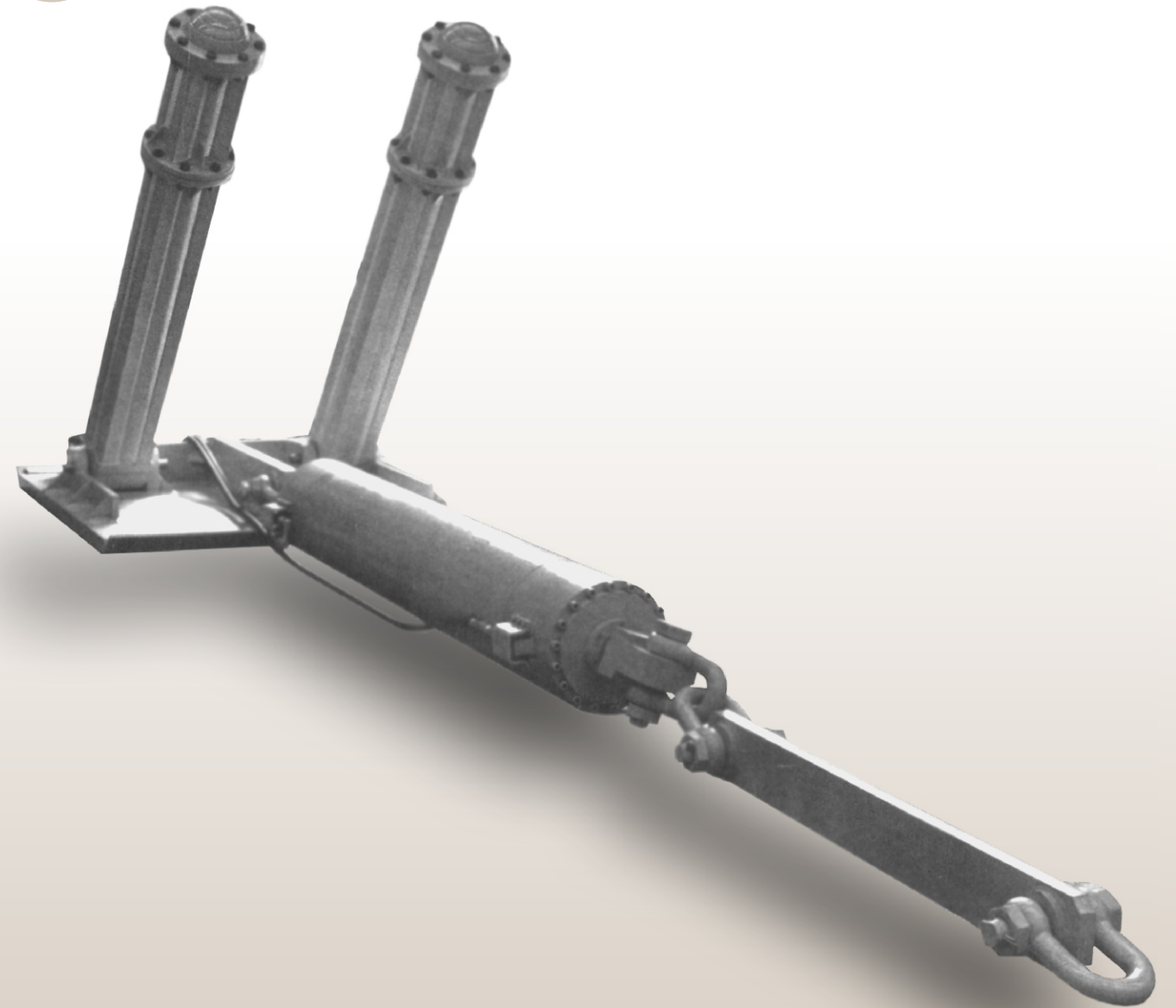
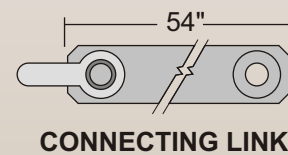
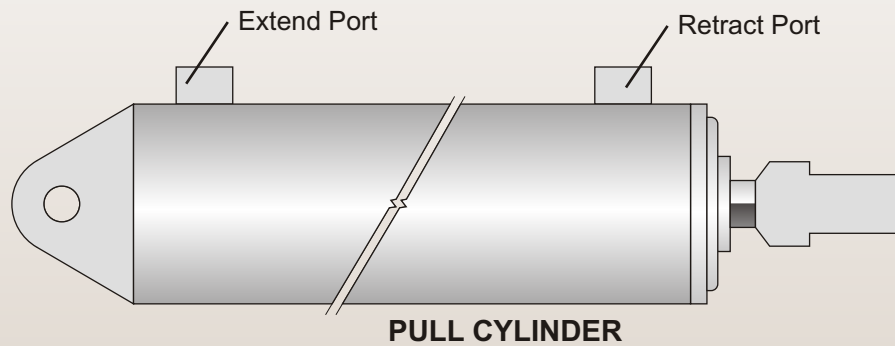
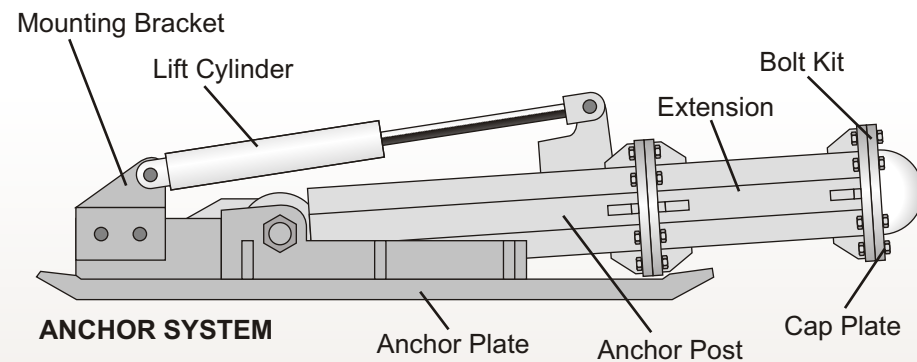
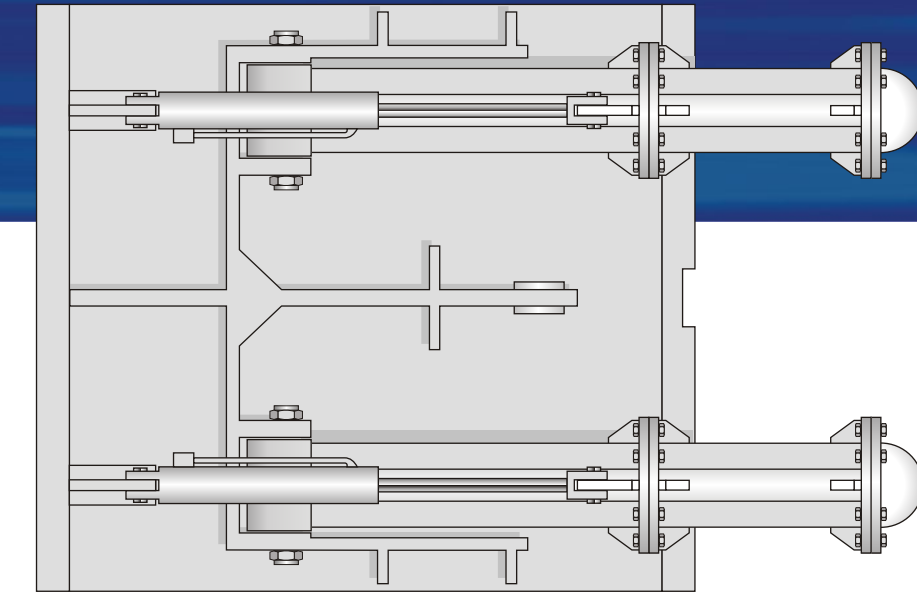


System Components

A complete MR40 Equipment Retriever is comprised of the following components, which are factory-assembled into major systems

Typical System

MR40-100 Anchor Plate	1
MR20-150 Anchor Pin	2
MR20-272 Anchor Post	2
MR20-312 Anchor Extension	2
MR20-324 Anchor Extension	2
MR40-400 Connecting Link Ass'y	10
MR40-402 Shackle Ass'y	3
MR20-410 Anchor Cap	2
MR20-415 Bolt Kit	1
MR20-500 Anchor Raise Kit	1
MR20-600 Control Station	1
MR20-675 Hosing Kit	1
MR40-900 Pull Cylinder	1





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MR40

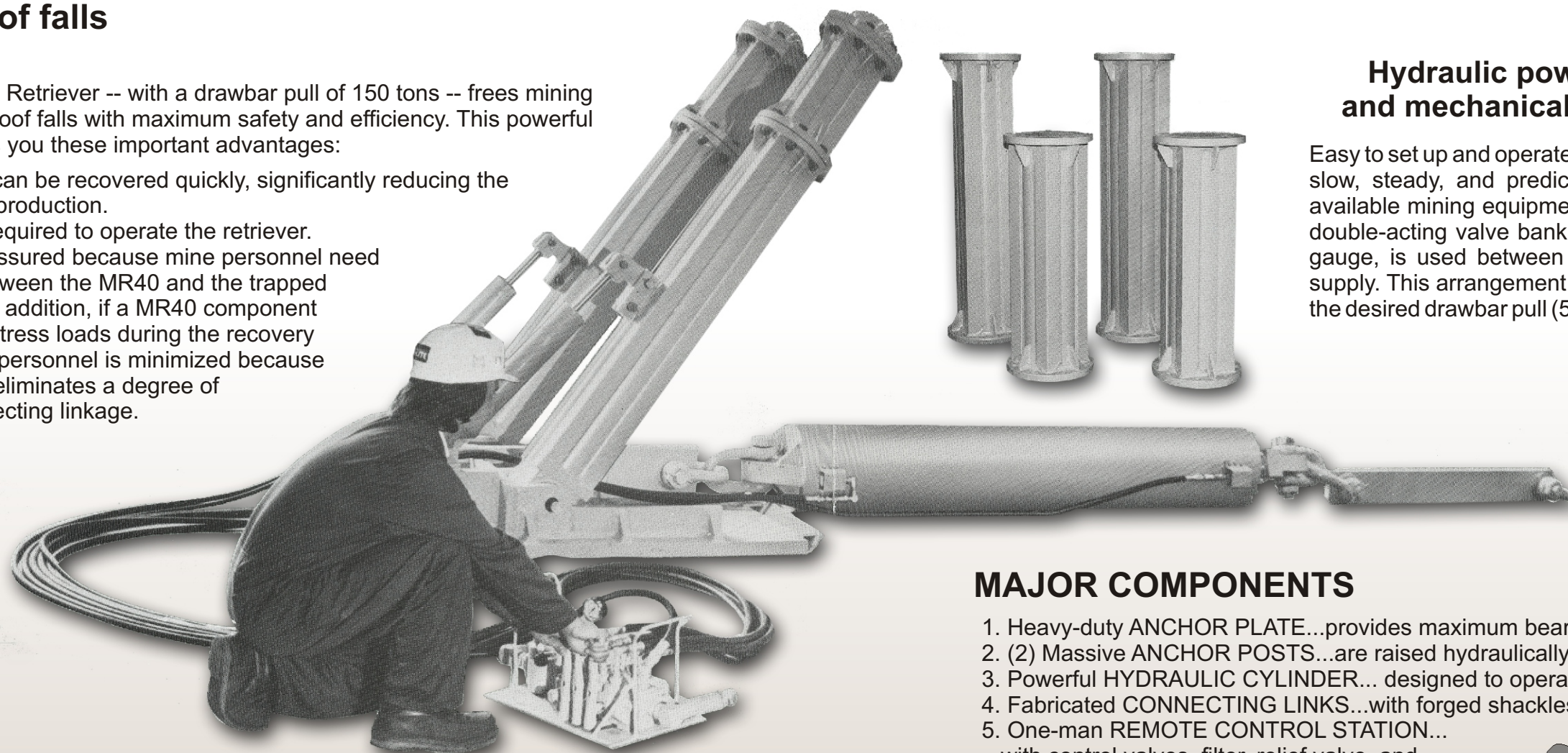
EQUIPMENT RETRIEVER

DERON

This is the safer, faster, more economical way to recover mining equipment trapped by roof falls

The MR40 Equipment Retriever -- with a drawbar pull of 150 tons -- frees mining equipment buried by roof falls with maximum safety and efficiency. This powerful recovery device offers you these important advantages:

- Trapped equipment can be recovered quickly, significantly reducing the time they are out of production.
- A minimum crew is required to operate the retriever.
- Maximum safety is assured because mine personnel need not be positioned between the MR40 and the trapped mining equipment. In addition, if a MR40 component should break under stress loads during the recovery operation, danger to personnel is minimized because the system's design eliminates a degree of elasticity in the connecting linkage.

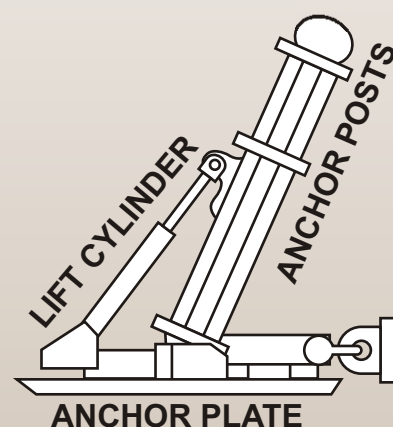
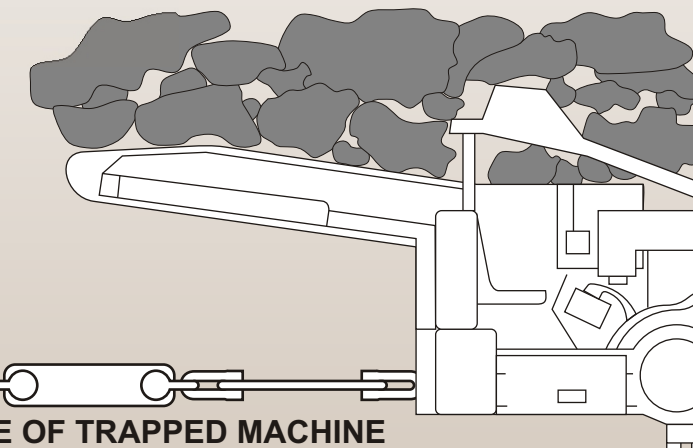


Hydraulic power plus anchoring design and mechanical linkage recover equipment

Easy to set up and operate, the MR40 Equipment Retriever provides a slow, steady, and predictable pull. It takes hydraulic power from available mining equipment, such as shuttle cars and scoop cars. A double-acting valve bank, with adjustable relief valve and pressure gauge, is used between the pull cylinder and the auxiliary power supply. This arrangement allows the operator to calculate accurately the desired drawbar pull (500 psi = 35 tons of pull).

MAJOR COMPONENTS

1. Heavy-duty ANCHOR PLATE...provides maximum bearing surface for posts.
2. (2) Massive ANCHOR POSTS...are raised hydraulically to contact the mine roof.
3. Powerful HYDRAULIC CYLINDER... designed to operate at 2,500 Max. psi.
4. Fabricated CONNECTING LINKS...with forged shackles.
5. One-man REMOTE CONTROL STATION... with control valves, filter, relief valve, and pressure gauge.
6. Modular ANCHOR POST EXTENSIONS (shown above)...adapt the MR40 Equipment Retriever to mine roof heights ranging from 3.5 ft. up to 12 ft.



In service, the anchor base and post are wedged firmly between the mine roof and floor. The pull cylinder is then actuated to pull the trapped machine free. As many connecting links as required are used for each application.

CONNECTING LINKS W/SHACKLES

CONNECTS TO FRAME OF TRAPPED MACHINE

MR40