

New Extruder Gearboxes Are Available for All Reciprocating Screw Blow Molding Machines!!

This web posting presents our new and improved reducer gearbox replacement for the following Uniloy Reciprocating Screw Blow Molding machines:

| Machine Models | New Reducer Gearbox Part Number |
|----------------------------|---------------------------------|
| 2010,2011,2014 | 10984591* |
| 2015,2016,250R1 | 10984588 |
| 5700 | 10984567** |
| 5800,350R1 | 10984586*** |
| 350R2,3,4 and 400R11,20,25 | 10984586 |

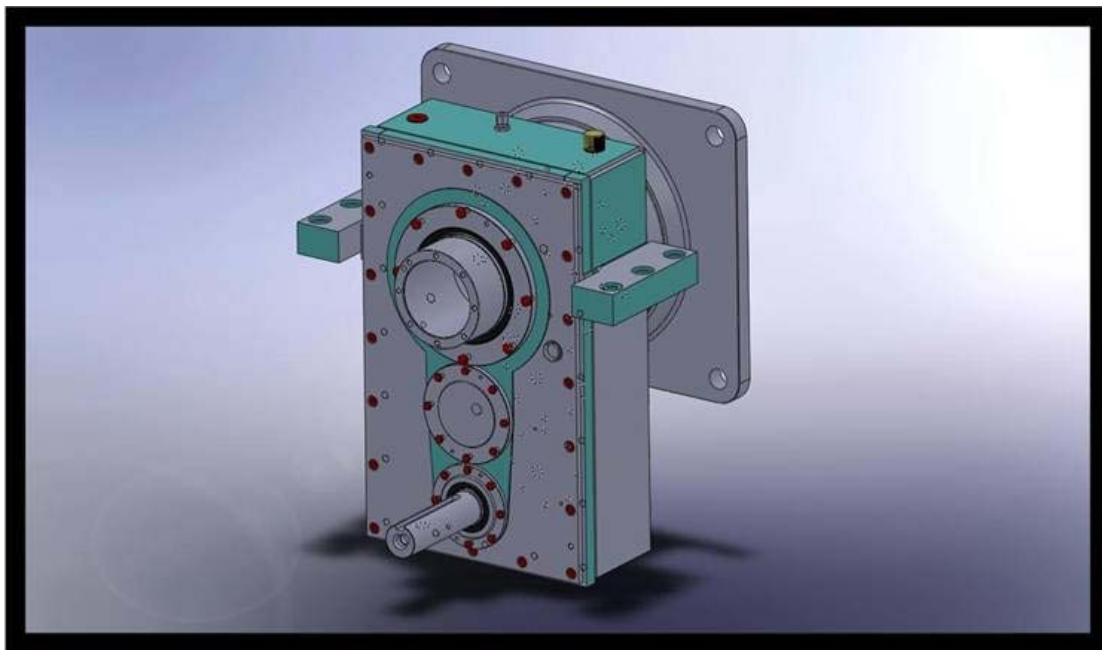
Note:

*This gearbox is made by installing 2 quill bushings 10984594 to gearbox 10984588.

**This gearbox is made by installing mounting flange 10986410 to gearbox 10984586.

***This gearbox requires 2 risers 10411176.

These new gearboxes are direct replacements for the original gearboxes in these machines (except for input shaft size and reduction ratio in some cases).



Gearbox 10984586 with mounting flange 10986410.

Original Extruder Gearboxes

The following table lists the part numbers for reducer gearboxes supplied as original equipment on these machines. The gearboxes listed for 5700, 350R, and 400R are still available; however, the original gearboxes labeled obsolete are no longer available.

| Machine Models | Original Reducer Gearbox Part Number |
|----------------------------|--------------------------------------|
| 2010,2011 | 830501 obsolete |
| 2014 | 844391 obsolete |
| 2015,2016 | 847309 obsolete |
| 250R1 | 425247 obsolete |
| 5700 | 10410763* |
| 5800,350R1 | 10410763** (replaced 832024) |
| 350R2,3,4 and 400R11,20,25 | 10410763 (replaced 840459) |

Note:

*This gearbox may be used in a 5700 by adding mounting flange 10505102.

**This gearbox may be used in a 5800 or 350R1 by installing 2 risers 10411176

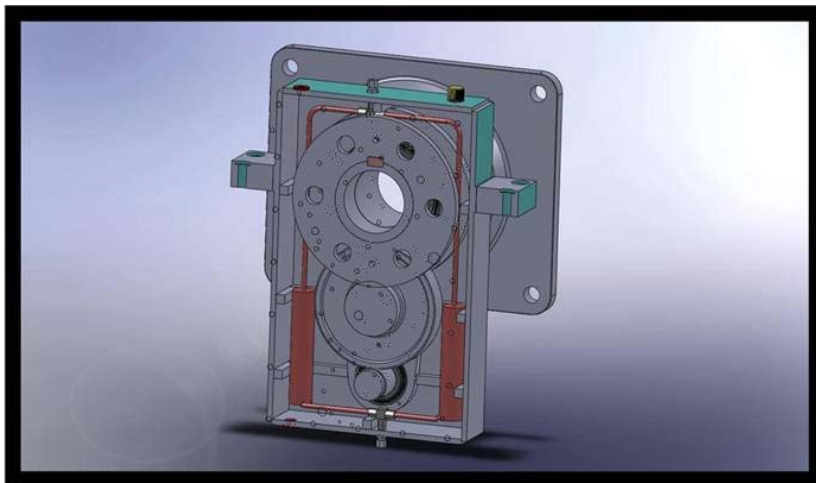
The New Reducer Gearbox Features:

- Internal Cooling Coils **New Feature!!**
- Machine Mounting Flange or Ears
- Oil Level Dip Stick
- 13.979:1 Gear Ratio

The internal cooling coil is a feature which permits cooling water to be circulated inside the gearbox for the purpose of maintaining optimum operating temperature. This feature eliminates the need for a separate reducer cooling pump and motor which circulates the gearbox lubrication oil thru a heat exchanger. The cooling coil is supplied with chilled water which is regulated by a water modulating valve. Switching over to this system is as simple as rerouting the water lines from the existing heat exchanger and hooking them up to the cooling coil in the gearbox and installing a water modulating valve.

The cooling water requirement in terms of temperature and flow are the same for the internal cooling coil as they were for the heat exchanger in the old reducer cooling assembly. There is an energy and cost of maintenance savings by simply eliminating the reducer cooling pump, motor, and heat exchanger.

The parts required to plumb cooling water to the new internal coil are; a water modulating valve, a bulb well, and hose and fittings. Your Uniloy Parts Sales Representative would be happy to provide a quotation for this kit.



Input Shaft Bushings

The following tables include part numbers and sizes of sheave bushings which match the input shafts of the new and original gearboxes. When these sizes are different, a new QD Bushing should be ordered along with the new gearbox.

| Machine Model | New Reducer Gearbox Part Number | Input Shaft Dia. (Inches) | QD Bushing Part Number |
|-------------------|---------------------------------|---------------------------|------------------------|
| 2010, 2011, 2014 | 10984591 | 1.937 | 10780435 |
| 2015, 2016, 250R1 | 10984588 | 1.937 | 10780435 |
| 5700 | 10984567 | 2.374 | 10410682 |
| 5800, 350R, 400R | 10984586 | 2.374 | 10410682 |

| Machine Model | Original Reducer Gearbox Part Number | Input Shaft Dia. (Inches) | QD Bushing Part Number |
|---------------|--------------------------------------|---------------------------|------------------------|
| 2010, 2011 | 830501 | 2.374 | 10410682 |
| 2014 | 844391 | 2.374 | 10410682 |
| 2015, 2016 | 847309 | 2.436 | 11075472 |
| 250R1 | 425247 | 1.937 | 10780435 |
| 5800 | 832024 | 2.937 | 10848472 |
| 350R, 400R | 840459 | 2.750 | 10410685 |
| 350R, 400R | 425262 | 2.374 | 10410682 |

Sheave Combinations and Screw Speed

As stated above, the new reducer gearboxes all have a reduction ratio of 13.979:1. This matches the original reduction ratio in all of the 3.5 and 4.0 inch gearboxes. The original gearboxes for 2.5" extruders however, had 15:1 reductions. To provide the desired thruput, the sheaves listed in the table below, used along with a new gearbox, will provide the listed screw rpm.

| Extruder Size | Motor Sheave | Sheave Part No. | Gearbox Sheave | Sheave Part No. | Screw RPM |
|---------------|--------------|-----------------|----------------|-----------------|-----------|
| 2.5 | 3CQ120 | 11075464 | 3CQ105 | 10410679 | 144 |
| 2.5 | 3CQ130 | 10410677 | 3CQ105 | 10410679 | 155 |
| 3.5 | 4CQ100 | 10410678 | 4CQ130 | 10410674 | 99 |
| 3.5 | 4CQ130 | 10410674 | 4CQ120 | 10410676 | 135 |
| 3.5 | 4CQ130 | 10410674 | 4CQ110 | 10410675 | 152 |
| 4.0 | 4CQ120 | 10410676 | 4CQ130 | 10410674 | 116 |
| 4.0 | 4CQ130 | 10410674 | 4CQ130 | 10410674 | 128 |

Checklist of New Components Required

As described above, depending on your application, the following components are required.

- Reducer Gear Box
- Quill Bushings (2)
- Mounting Flange
- Risers (2)
- Water Modulating Valve
- Bulb Well
- Hose and Fittings
- Input Shaft Bushing
- Input Shaft Sheave

Sales and Service and Engineering

For more information including pricing on a new reducer gearbox or any other machine upgrade, please contact your local Uniloy Parts Sales Representative. Trained Uniloy Service Representatives are available to assist in the installation of these packages at your facility. All Uniloy retrofit packages are engineered to suit your individual machine specifications. Complete engineering documentation including assembly drawings, parts lists, and schematics are always included.