
# REEVES TECHNICAL NOTES

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## TORQUEING A BLANKET

## THE ADVANTAGES OF USING TORQUE WRENCHES

Today, it's more important than ever to use torque wrenches in the blanket mounting process.

### Eliminates Guesswork

With frequent changes in pressroom personnel, it's difficult to train press crews on the proper procedures and techniques of blanket installation. The fact is, the simpler the procedure, the easier it is to teach. By using torque wrenches, you can eliminate the guesswork. Your press operators will know exactly how tight their blankets are when they're mounted.

### Simplifies Blanket Installation

Today's average pressroom is staffed by four press shifts with an average of five people on each crew. That means as many as 20 people are putting blankets on any given press. Some pressrooms have as many as 15 presses running four shifts, which equals 60 press crews and 300 people installing blankets. By using torque wrenches that are all set to the same specifications, the process becomes much simpler and more consistent.

### Lets You Print Closer to the Gap

Another important reason to torque your blanket is to improve its ability to give you more print area at the gap.

Today, most new presses are considered short-gap presses and are designed to save paper. Because of their small gap area, it's more important than ever to be able to print as far into the gap as possible.

In many cases, the difference between getting a full bleed area on a printed sheet is as little as one-sixteenth of an inch. If you over-torque your blanket, it can take away the sixteenth of an inch that you need to maximize your print image.

### Eliminates Register Problems

Have you ever been in the middle of a run, had problems with the register, and had to stop your press to retighten your blanket? Did you retighten your blanket to equalize the print area?

On presses that have blanket tightening devices on both sides of the cylinder, you could tighten one side tighter than the other. This makes your blanket loose on one side and tight on the other, which can create a misregister problem.

By using a torque wrench, you'll always apply equal force to your blankets. Equal force = better register.

### Improves Smash Resistance

If you stretch a blanket far enough around the cylinder, it will compress the compressible layer, which is designed to take a smash. That's why over-tightening your blanket can reduce its ability to rebound from a smash.

In one pressroom, Reeves discovered that one of four sheetfed presses used many more blankets than the other three. After learning that a two-foot extension bar was used to tighten the blankets, Reeves recommended using torque wrenches and the problem was solved.

## WHAT IS THE PROPER TORQUE SETTING

Because blanket lock-up devices differ on each press, torque settings will vary from press to press. For example, the torque required on a Heidelberg M-1000BE web press is 170 in. lbs. A Heidelberg M-110 only requires 25 in. lbs. See the chart on the back for a short list of torque settings for some commonly used presses.

## CALIBRATING TORQUE-SETTING GAUGES

In order to be consistent, it's very important to have your torque wrenches checked on a regular basis. This will ensure that they are calibrated properly.

Purchase a torque-checking gauge at any industrial supply company, such as McMaster-Car or Grainger. This will show you the exact torque that is being delivered.

Check the wrench on a monthly basis. By doing so, you will see they have a tendency to get weaker as time goes on. Reset your torque wrench from time to time to keep it consistent.

For more information on the proper procedures and techniques of torqueing a blanket, contact your authorized Reeves' Vulcan Blanket distributor.

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# Torque Tensioning Chart

The following is a short list of torque settings for some commonly used presses.

| PRESS MANUFACTURER | MODEL | TORQUE |
|---|---|---|
| Baker Perkins | G-12 | 55 ft. lbs. |
| Baker Perkins | G-14 | 62-65 ft. lbs. |
| Baker Perkins | G-16 | 62-65 ft. lbs. |
| Goss | Community | 45-55 in. lbs. |
| Goss | Suburban | 45-55 in. lbs. |
| Goss | Urbanite | 45-55 in. lbs. |
| Goss | Cosmo | 45-55 in. lbs. |
| Goss | Metro | 45-55 in. lbs. |
| Goss | Headliner | 45-55 in. lbs. |
| Goss | Colorliner | 45-55 in. lbs. |
| Goss | C-500 | 35 ft. lbs. |
| Goss | C-700 | 80 ft. lbs. |
| Hantscho | Mark VI | 50 ft. lbs. |
| Hantscho | Mark VII | 50 ft. lbs. |
| Heidelberg | M-80, M-90 | 25 in. lbs. |
| Heidelberg | M-110, M-120 | 25-30 in. lbs. |
| Heidelberg | M-300 | 35-40 in. lbs. |
| Heidelberg | M-600 | |
| Heidelberg | M-1000 | 160-180 in. lbs. |
| Heidelberg | Web 8 | 25 ft. lbs. |
| Heidelberg | Web 16 | 45 ft. lbs. |
| Heidelberg | Speedmaster | 40-45 ft. lbs. |
| Komori | L50 | 50 ft. lbs |
| Man Roland | Rotoman | 45 ft. lbs. |
| Man Roland | Lithoman | 45 ft. lbs. |
| Man Roland | Colorman | 50-55 ft. lbs. |
| Man Roland | Uniman 4/2 | 45 in. lbs. |
| Man Roland | 300 | |
| Man Roland | 600 | 33 ft. lbs. |
| Man Roland | 700 | |
| Mitsubishi | L750C | 55 ft. lbs. |
| Solna | 420 | 31 ft. lbs. |
| Toshiba Web | - | 80-100 in. lbs. |

Note: Values listed are nominal and may vary depending upon age and condition of press. Values are recommended by press manufacturer.