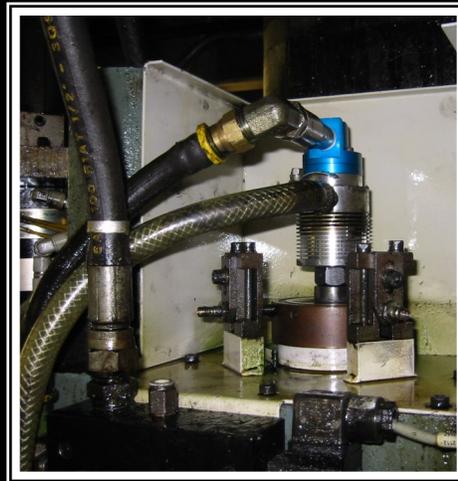


**Need a Union?
We have a solution for you!**



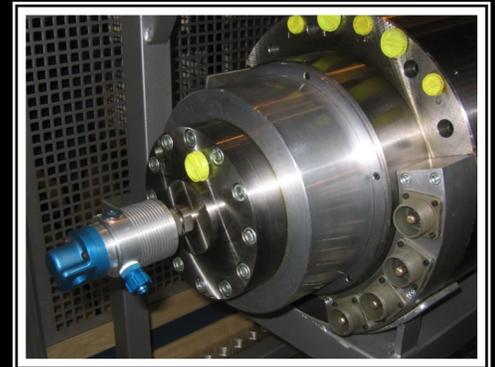
Types Of Unions:

- Pop-Off
- Single Passage
- Multi-Passage
- Bearing Supported
- Bearingless
- Through-Spindle



OEM Replacements:

- Makino
- Mazak
- Mori-Seiki
- Okuma



Why choose Deublin?

- Made in the USA
- Quick lead times
- Direct drop in for **RIX, OTT-JACOB, GAT, & ROTOFLUX**

Red Hot Service

2240 Elmhurst Rd.
Elk Grove Village, IL 60007
888-337-3719
FAX 847-258-5790

www.mtbainc.com

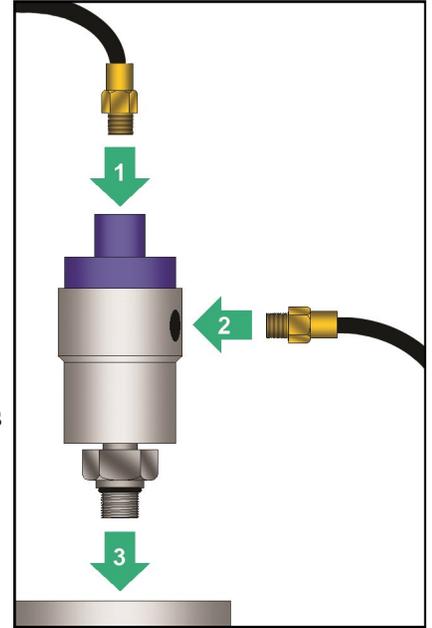
—Specializing in Machine Tools, Machining Centers, & Transfer Lines—

INSTALLATION TECHNIQUES

Installing a *DEUBLIN* Rotating Union is as easy as 1-2-3. For maximum life and reliability, maintenance engineers and service technicians need only to follow a few simple rules.

1. For bearing-supported, rotor-mounted unions, connect both supply and drain hoses to the union before mounting the union on the spindle. Otherwise, bearings in the union may become brinnelled or galled when the hose connections are tightened.
2. Clean thoroughly the mounting surfaces of the spindle before mounting the union. The spindle pilot must be clean, with no chips, no burrs, and no dents. Otherwise, the union may exhibit runout and vibrate during rotation.
3. Make sure the drain hose runs downward continuously, with no “roller coaster” rises that could prevent proper drainage. If the spindle is horizontal, make sure that the union’s drain hole is at 6 o’clock, pointing directly down. Deublin unions can do many things, but they can’t break the law of gravity!

Following are examples of correct and incorrect installations, with an explanation of what is correct or incorrect about each example.



EXAMPLES OF CORRECT INSTALLATIONS



WHAT'S RIGHT: Elbow fitting is used to avoid a tight bend in supply hose. Drain hose slopes downward.



WHAT'S RIGHT: Flexible hose between rigid supply pipe and union. Drain hose runs straight down.



WHAT'S RIGHT: Flexible hose between rigid supply pipe and union. Drain hose runs straight down.



WHAT'S RIGHT: Elbow prevents excessive side load on bearings when supply hose is pressurized.

EXAMPLES OF INCORRECT INSTALLATIONS



WHAT'S WRONG: Drain line points up, which can flood the union’s bearings.



WHAT'S WRONG: Union points up. Coolant contaminants will collect at the bottom and interfere with proper sealing.



WHAT'S WRONG: Union housing is rigidly attached to the spindle. Without 100% perfect alignment, this creates a side load leading to early bearing failure.



WHAT'S WRONG: Bend in supply hose is too tight. When pressurized, the supply hose may create a large side load on the union’s bearings.