

When tightening High Torque Retention Knobs the torque values shown below are recommended:

If excessive harmonics or vibration are present use Loctite.

Start with 80% of recommended feed rate and depth of cut, increase as desired.

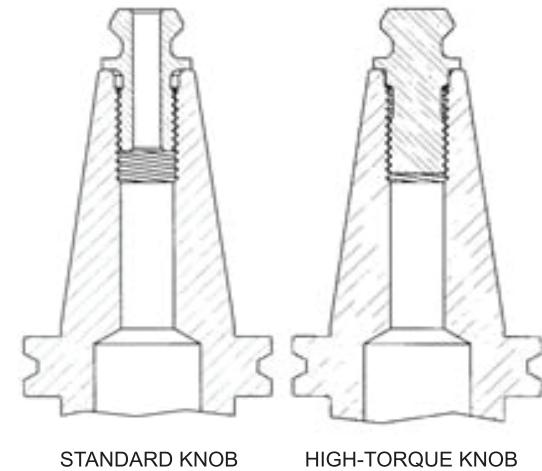
If draw bar force is less than 80% of machine specifications - replace washers.

Used Holders - retap threads. Knob flange must seat on face of toolholder.

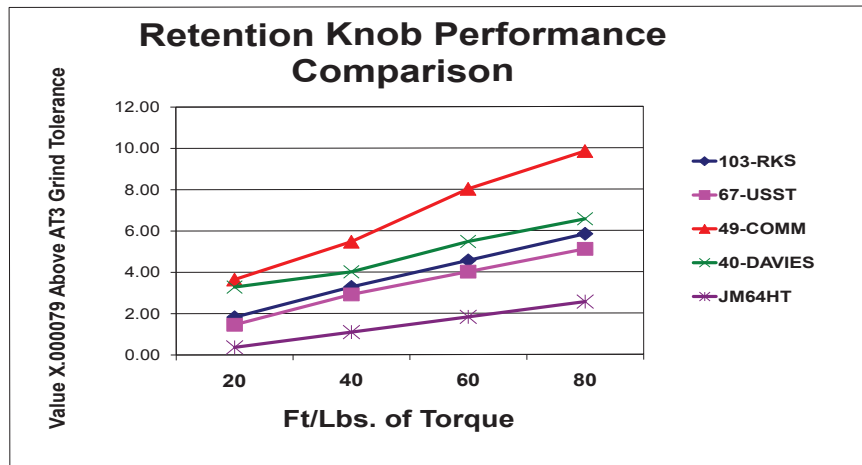
Retention Knob Tightening Specifications

30 V-Flange		40 V-Flange		50 V-Flange		60 V-Flange	
Drawbar	Torque	Drawbar	Torque	Drawbar	Torque	Drawbar	Torque
Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs	Force/Lbs	Ft/lbs
800	8.0	1600	20.0	3200	64.0	4000	100.0
900	9.0	1800	22.5	3400	68.0	4500	112.5
1000	10.0	2000	25.0	3600	72.0	5000	125.0
1100	11.0	2200	27.5	3800	76.0	5500	137.5
1200	12.0	2400	30.0	4000	80.0	6000	150.0
1300	13.0	2600	32.5	4200	84.0	6500	162.5
1400	14.0	2800	35.0	4400	88.0	7000	175.0
1500	15.0	3000	37.5	4600	92.0	7500	187.5
1600	16.0	3200	40.0	4800	96.0	8000	200.0
1700	17.0	3400	42.5	5000	100.0	8500	212.5
1800	18.0	3600	45.0	5500	110.0	9000	225.0
1900	19.0	3800	47.5	6000	120.0	9500	237.5
2000	20.0	4000	50.0	6500	130.0	10000	250.0
2200	22.0	4200	52.5	7000	140.0	11000	275.0

- ✓ 2X to 10X less expansion of the toolholder shank
- ✓ Laser-marked with month/year of purchase to help determine life span
- ✓ Laser-marked with part number, serial number for traceability



All The Qualities You Should Look For In A High Torque Retention Knob



- ✓ **REDUCES TOOLHOLDER EXPANSION**
- ✓ **REDUCES COSTS**
- ✓ **INCREASES PROFIT**
- ✓ **INCREASES PRODUCTION**
- ✓ **INCREASES TOOL LIFE**
- ✓ **INCREASES FEED RATES**
- ✓ **INCREASES RIGIDITY**
- ✓ **IMPROVES TOOLHOLDER BALANCE**

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