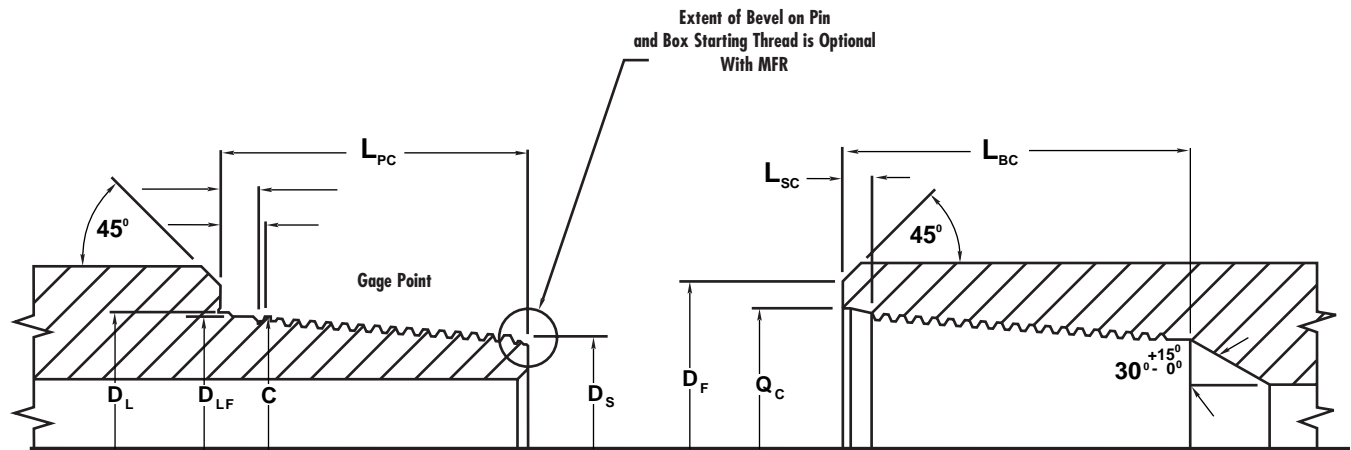


# Tool Joint Dimensional Data



- |  |  |
|--|--|
| D - OD   | D <sub>S</sub> - Small Diameter of Pin         |
| d - ID   | Q <sub>C</sub> - Box Counterbore Diameter      |
| D <sub>L</sub> - Major Cone Diameter at Shoulder | L <sub>PC</sub> - Length of Pin                |
| D <sub>LF</sub> - Diameter of Cylinder Section   | L <sub>BC</sub> - Depth of Box                 |
| C - Pitch Diameter at Gage Point                 | L <sub>SC</sub> - Box Smooth Counterbore Depth |
| D <sub>F</sub> - Bevel Diameter                  |  |

**Dimensional Data Rotary Shouldered Connections**

Size	Type	OD	ID	Pitch Diameter	Threads per in.	Thread Taper	Thread Form	Bevel Diameter	Box Counter-bore Diameter	Box Counter-bore Depth	Depth of Box	Pin Length	Pin Major Cone Diameter	Pin Cylinder Diameter	Pin Small Diameter
		D	d	C					D <sub>F</sub>	Q <sub>C</sub>	L <sub>SC</sub>		L <sub>BC</sub>	D <sub>L</sub>	D <sub>LF</sub>
in.		in.	in.	in.				in.	in.	in.	in.	in.	in.	in.	in.
2 3/8	PAC	2 7/8	1 3/8	2.203	4	1 1/2	V .076	2 45/64	2 13/32	3/8	3 1/8	2 3/8	2.359	2.312	2.063
	SH	2 7/8	1 1/4	2.230	4	2	V .065	2 25/32	2 1/2	5/8	3 1/2	2 7/8	2.438	2.328	1.968
	NC23	3 1/8	1 1/4	2.355	4	2	V .038R	3	2 5/8	5/8	3 5/8	3	2.563	2.437	2.063
	A.P.I. REG.	3 1/8	1	2.365	5	3	V .040	3 1/64	2 1/16	5/8	3 5/8	3	2.625	—	1.875
	SLH90	3 1/4	1 13/16	2.578	3	1 1/4	90 V .084	3 1/8	2 49/64	3/8	3 1/16	2 3/4	2.725	2.672	2.439
	OH LW	3 1/8	2	2.588	4	1 1/2	V .076	3	2 51/64	5/8	3	2 3/8	2.750	2.656	2.453
	OH SW	3 1/4	1 3/4	2.588	4	1 1/2	V .076	3 9/64	2 51/64	5/8	3	2 3/8	2.750	2.656	2.453
	WO	3 1/8	2	2.605	4	2	V .065	3 1/16	2 55/64	5/8	3	2 3/8	2.818	2.688	2.422
	NC26	3 3/8	1 3/4	2.668	4	2	V .038R	3 17/64	2 15/16	5/8	3 5/8	3	2.876	2.750	2.376
	2 7/8	PAC	3 1/8	1 1/2	2.369	4	1 1/2	V .076	3	2 37/64	3/8	3	2 3/8	2.531	2.437
SH		3 3/8	1 3/4	2.668	4	2	V .065	3 17/64	2 15/16	5/8	3 5/8	3	2.876	2.750	2.376
API REG.		3 3/4	1 1/4	2.740	5	3	V .040	3 37/64	3 1/16	5/8	4 1/8	3 1/2	3.000	—	2.125
OH LW		3 3/4	2 7/16	2.984	4	1 1/2	V .076	3 39/64	3 13/64	5/8	3 1/2	2 1/2	3.156	3.046	2.844
OH SW		3 7/8	2 5/32	2.984	4	1 1/2	V .076	3 39/64	3 13/64	5/8	3 1/2	2 7/8	3.156	3.046	2.797
SLH90		4 1/8	2 5/32	3.049	3	1 1/4	90 V .084	3 29/32	3 15/64	3/8	3 3/8	2 7/8	3.196	3.157	2.897
XH		4 1/4	1 7/8	3.119	4	2	V .065	4 1/32	3 23/64	5/8	4 5/8	4	3.327	3.203	2.656
WO		4 1/8	2 7/16	3.121	4	2	V .065	3 5/8	3 3/8	5/8	3 5/8	3	3.328	3.203	2.828
NC31		4 1/8	2 1/8	3.183	4	2	V .038R	3 61/64	3 29/64	5/8	4 1/8	3 1/2	3.391	3.266	2.812
FH		4 1/4	2 1/8	3.364	5	3	V .040	4 7/64	3 11/16	5/8	3 9/16	3 1/2	3.625	3.453	2.750
3 1/2	PAC	3 3/4	2	2.884	4	1 1/2	V .076	3 19/32	3 7/64	3/8	3 7/8	3 1/4	3.047	3.000	2.641
	SH	4 1/8	2 1/8	3.183	4	2	V .065	3 61/64	3 29/64	5/8	4 1/8	3 1/2	3.391	3.266	2.812
	API REG.	4 1/4	1 1/2	3.240	5	3	V .040	4 5/64	3 9/16	5/8	4 3/8	3 3/4	3.500	—	2.562
	XH	4 3/4	2 7/16	3.604	4	2	V .065	4 17/32	3 7/8	5/8	4 1/8	3 1/2	3.812	3.688	2.250
	SLH90	4 3/4	2 11/16	3.688	3	1 1/4	90 V .084	4 7/16	3 7/8	3/8	3 3/8	3 1/8	3.835	3.780	3.509
	OH LW	4 1/2	3	3.728	4	1 1/2	V .076	4 23/64	3 15/16	5/8	3 7/8	3 1/4	3.891	3.796	3.484
	OH SW	4 3/4	2 11/16	3.728	4	1 1/2	V .076	4 23/64	3 15/16	5/8	3 7/8	3 1/4	3.891	3.796	3.484

While every effort has been made to insure the accuracy of the tables herein, this material is presented as a reference guide only. The technical information contained herein should not be construed as a recommendation. Grant Prideco cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended.

## Tool Joint Dimensional Data

Dimensional Data Rotary Shouldered Connections

Size	Type	Pitch Diameter			Threads per in.	Thread Taper	Thread Form	Bevel Diameter	Box Counter-bore Diameter	Box Counter-bore Depth	Depth of Box	Pin Length	Pin Major Cone Diameter	Pin Cylinder Diameter	Pin Small Diameter
		OD	ID	C											
in.		D	d	C			D <sub>F</sub>	Q <sub>C</sub>	L <sub>SC</sub>	L <sub>BC</sub>	L <sub>PC</sub>	D <sub>I</sub>	D <sub>IF</sub>	D <sub>S</sub>	
		in.	in.	in.	in./ft		in.	in.	in.	in.	in.	in.	in.	in.	
3 1/2	FH	4 5/8	2 7/16	3.734	5	3	V .040	4 31/64	4 3/64	5/8	4 3/8	3 3/4	3.994	—	3.062
	NC38	4 3/4	2 11/16	3.808	4	2	V .038R	4 37/64	4 5/64	5/8	4 5/8	4	4.016	3.891	3.343
	WO	4 3/4	3	3.808	4	2	V .065	4 37/64	4 5/64	5/8	4 5/8	3 1/2	4.016	3.891	3.437
	H90	5 1/4	2 3/4	3.929	3 1/2	2	90 V .050	4 63/64	4 3/16	5/8	4 1/4	3 7/8	4.125	4.000	3.479
	NC35	4 3/4	2 11/16	3.531	4	2	V .038	4 33/64	3 13/16	5/8	4 3/8	3 3/4	3.739	3.625	3.109
4	SH	4 5/8	2 9/16	3.604	4	2	V .065	4 17/32	3 7/8	5/8	4 1/8	3 1/2	3.812	3.688	3.234
	NC40	5 1/4	2 13/16	4.072	4	2	V .038R	5 1/64	4 11/32	5/8	5 1/8	4 1/2	4.280	4.156	3.531
	H90	5 1/2	2 13/16	4.304	3 1/2	2	90 V .050	5 17/64	4 9/16	5/8	4 1/2	4 1/8	4.500	4.375	3.813
	OH LW	5 1/4	3 15/32	4.416	4	1 1/2	V .076	5 3/16	4 5/8	5/8	4 5/8	3 1/2	4.578	4.484	4.140
	OH SW	5 1/2	3 1/4	4.416	4	1 1/2	V .076	5 9/32	4 5/8	5/8	4 5/8	4	4.578	4.484	4.078
	NC44	6	2 1/4	4.417	4	2	V .038R	5 11/16	4 11/16	5/8	5 1/8	4 1/2	4.625	4.500	3.875
	NC46	6	3 1/4	4.626	4	2	V .038R	5 17/32	4 29/32	5/8	5 1/8	4 1/2	4.834	4.718	4.093
	WO	5 3/4	3 7/16	4.626	4	2	V .065	5 17/32	4 29/32	5/8	5 1/8	4 1/2	4.828	4.718	4.093
4 1/2	SH	5	2 11/16	3.808	4	2	V .065	4 37/64	4 5/64	5/8	4 5/8	4	4.016	3.875	3.343
	API REG.	5 1/2	2 1/4	4.365	5	3	V .040	5 19/64	4 11/16	5/8	4 7/8	4 1/4	4.625	—	3.562
	FH	6	3	4.532	5	3	V .040	5 17/32	4 7/8	5/8	4 5/8	4	4.792	—	3.796
	NC46	6 1/4	3 1/4	4.626	4	2	V .038R	5 23/32	4 29/32	5/8	5 1/8	4 1/2	4.834	4.718	4.093
	H90	6	3 1/4	4.638	3 1/2	2	90 V .050	5 23/32	4 29/32	5/8	4 3/4	4 3/8	4.834	4.709	4.105
	OH LW	5 3/8	3 31/32	4.752	4	1 1/2	V .076	5 1/2	4 31/32	5/8	4 3/8	3 3/4	4.922	4.828	4.453
	OH SW	5 7/8	3 3/4	4.752	4	1 1/2	V .076	5 9/64	4 31/32	5/8	4 3/8	3 3/4	4.922	4.828	4.453
	NC50	6 5/8	3 3/4	5.042	4	2	V .038R	6 1/16	5 5/16	5/8	5 1/8	4 1/2	5.250	5.125	4.500
	WO	6 1/8	3 7/8	5.042	4	2	V .065	5 19/64	5 5/16	5/8	5 1/8	4 1/2	5.250	5.125	4.500
	5	H90	—	—	4.908	3 1/2	2	90 V .050	—	5 11/64	5/8	5 3/16	4 5/8	5.104	4.922
XH		6 3/8	3 3/4	5.042	4	2	V .065	5 59/64	5 5/16	5/8	5 1/8	4 1/2	5.250	5.125	4.500
5 1/2	H90	—	—	5.179	3 1/2	2	90 V .050	—	5 7/16	5/8	5 7/16	4 5/8	5.375	5.188	4.604
	API REG.	6 3/4	2 3/4	5.234	4	3	V .050	6 15/32	5 37/64	5/8	5 3/8	4 3/4	5.520	—	4.328
	FH	7	4	5.591	4	2	V .050	6 23/32	5 29/32	5/8	5 3/8	5	5.825	—	5.000
	NC56	7	3 3/4	5.616	4	3	V .038R	6 47/64	5 15/16	5/8	5 3/8	5	5.876	5.703	4.626
	IF	7 3/8	4 13/16	6.189	4	2	V .065	7 9/64	6 29/64	5/8	5 3/8	5	6.397	—	5.562
6 5/8	API REG.	7 3/4	3 1/2	5.758	4	2	V .050	7 21/64	6 1/16	5/8	5 3/8	5	5.992	—	5.156
	H90	—	—	5.804	3 1/2	2	90 V .050	—	6 1/4	5/8	5 11/16	4 7/8	6.000	5.813	5.188
	NC61	8 1/4	3	6.178	4	3	V .038R	7 13/16	6 1/2	5/8	6 1/8	5 1/2	6.438	6.266	5.063
	FH	8	5	6.520	4	2	V .050	7 45/64	6 27/32	5/8	5 3/8	5	6.753	—	5.921
	IF	8 1/2	5 29/32	7.251	4	2	V .065	8 1/4	7 33/64	5/8	5 3/8	5	7.458	7.343	6.626
	H90	—	—	6.252	3 1/2	3	90 V .050	—	7 1/8	13/32	5 13/16	5 3/8	6.500	6.375	5.156
7 5/8	API REG.	8 7/8	4	6.715	4	3	V .050	8 7/16	7 3/32	5/8	5 7/8	5 1/4	7.000	—	5.688
	NC70	9 1/2	3	7.053	4	3	V .038R	8 31/32	7 3/8	5/8	6 5/8	6	7.313	7.141	5.813
	H90	—	—	7.141	3 1/2	3	90 V .050	—	8	13/32	6 9/16	6	7.389	7.264	5.889
8 5/8	API REG.	10	4 3/4	7.666	4	3	V .050	9 33/64	8 3/64	5/8	6	5 3/8	7.951	—	6.609
	NC77	10	3	7.741	4	3	V .038R	9 11/32	8 1/16	5/8	7 1/8	6 1/2	8.000	7.828	6.376
	H90	—	—	8.016	3 1/2	3	90 V .050	—	9 3/8	13/32	7 1/16	6 1/2	8.264	8.139	6.639

While every effort has been made to insure the accuracy of the tables herein, this material is presented as a reference guide only. The technical information contained herein should not be construed as a recommendation. Grant Prideco cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended.