

4445 Standard
Shank Design

4345 Close Guide
Shank Design

Material:
 Tungsten Carbide Standard
 Cermet Tip Optional
 (Specify "-BK CER" in part no.)

Specify: Series/Wire Feed Angle - Hole Size/Bond Length - Length - Options

Example:

4445-2020-S

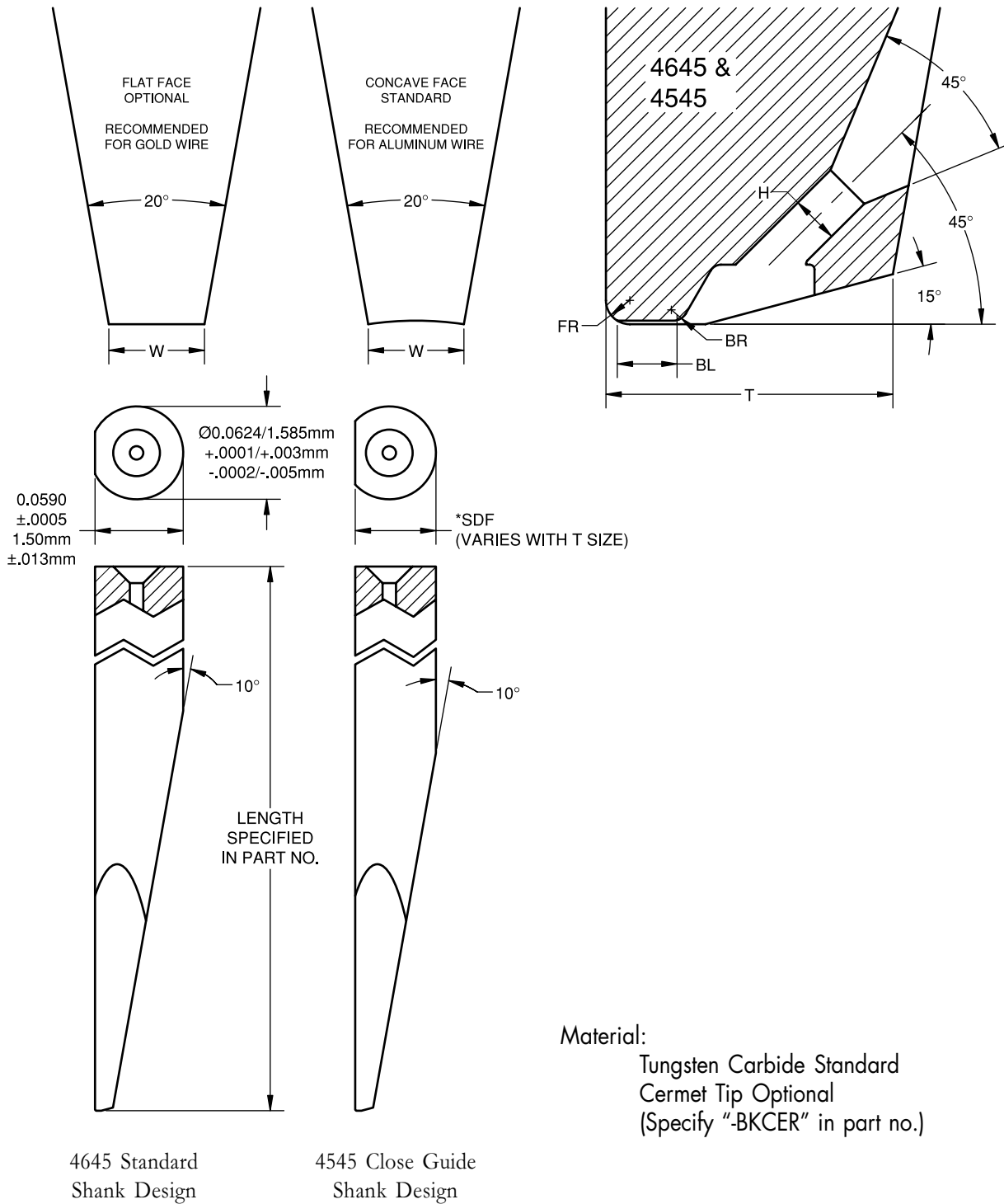
4345-1510-3/4-F-V-BKCER

*Specify "-V" when ordering with Cermet tip

+DASH NUMBER	H in./ μ m \pm .0002/5	BL in./ μ m \pm .0002/5	W in./ μ m \pm .0002/5	FR in./ μ m \pm .0002/5	BR in./ μ m \pm .0002/5	T in./ μ m \pm .0005/13	SUGGESTED WIRE DIAMETER in./ μ m	
*1305	.0013/33	.0005/13	.0025/64	.0005/13	.0005/13	.0080/203	.0007/18 to .0008/20	
*1307	.0013/33	.0007/18	.0025/64	.0005/13	.0005/13	.0080/203		
1315	.0013/33	.0015/38	.0030/76	.0010/25	.0006/15	.0080/203		
*1305A	.0013/33	.0005/13	.0025/64	.0005/13	.0000/0	.0080/203		
*1307A	.0013/33	.0007/18	.0025/64	.0005/13	.0000/0	.0080/203		
1310A	.0013/33	.0010/25	.0030/76	.0010/25	.0000/0	.0080/203		
1315A	.0013/33	.0015/38	.0030/76	.0010/25	.0000/0	.0090/229		
1320A	.0013/33	.0020/51	.0030/76	.0010/25	.0000/0	.0090/229		
*1505	.0015/38	.0005/13	.0025/64	.0005/13	.0005/13	.0120/305		
*1507	.0015/38	.0007/18	.0025/64	.0005/13	.0005/13	.0120/305		
*1510	.0015/38	.0010/25	.0030/76	.0010/25	.0006/15	.0120/305		
*1513	.0015/38	.0013/33	.0030/76	.0010/25	.0006/15	.0120/305		
1515	.0015/38	.0015/38	.0030/76	.0010/25	.0006/15	.0120/305		
1520	.0015/38	.0020/51	.0030/76	.0010/25	.0006/15	.0120/305		
1525	.0015/38	.0025/64	.0030/76	.0010/25	.0006/15	.0120/305		
1540	.0015/38	.0040/102	.0030/76	.0010/25	.0006/15	.0120/305		
*1505A	.0015/38	.0005/13	.0025/64	.0005/13	.0000/0	.0120/305		
*1507A	.0015/38	.0007/18	.0025/64	.0005/13	.0000/0	.0120/305		
*1510A	.0015/38	.0010/25	.0030/76	.0010/25	.0000/0	.0120/305		
1515A	.0015/38	.0015/38	.0030/76	.0010/25	.0000/0	.0120/305		
1519A	.0015/38	.0019/48	.0030/76	.0010/25	.0000/0	.0120/305		
1520A	.0015/38	.0020/51	.0030/76	.0010/25	.0000/0	.0120/305		
*1510B	.0015/38	.0010/25	.0030/76	.0004/10	.0004/10	.0080/203		
*2010	.0020/51	.0010/25	.0040/102	.0010/25	.0006/15	.0120/305		.0010/25
2015	.0020/51	.0015/38	.0040/102	.0010/25	.0006/15	.0120/305		
2020	.0020/51	.0020/51	.0040/102	.0010/25	.0006/15	.0120/305		
2025	.0020/51	.0025/64	.0040/102	.0010/25	.0006/15	.0120/305		
2030	.0020/51	.0030/76	.0040/102	.0010/25	.0006/15	.0120/305		
2015A	.0020/51	.0015/38	.0040/102	.0010/25	.0000/0	.0120/305		
2020A	.0020/51	.0020/51	.0040/102	.0010/25	.0000/0	.0120/305		
2025A	.0020/51	.0025/64	.0040/102	.0010/25	.0000/0	.0120/305		
2520	.0025/64	.0020/51	.0040/102	.0010/25	.0006/15	.0130/330	.0010/25 to .0013/33	
2525	.0025/64	.0025/64	.0040/102	.0010/25	.0006/15	.0130/330		
2530	.0025/64	.0030/76	.0040/102	.0015/38	.0006/15	.0140/356		
2540	.0025/64	.0040/102	.0040/102	.0015/38	.0006/15	.0150/381		
2525A	.0025/64	.0025/64	.0040/102	.0010/25	.0000/0	.0130/330		
3025	.0030/76	.0025/64	.0050/127	.0015/38	.0010/25	.0160/406	.0015/38 to .0018/46	
3030	.0030/76	.0030/76	.0050/127	.0015/38	.0010/25	.0160/406		
3035	.0030/76	.0035/89	.0050/127	.0015/38	.0010/25	.0170/432		
3040	.0030/76	.0040/102	.0050/127	.0015/38	.0010/25	.0170/432		
3045	.0030/76	.0045/114	.0050/127	.0015/38	.0010/25	.0180/457		
3050	.0030/76	.0050/127	.0050/127	.0015/38	.0010/25	.0180/457		
3035A	.0030/76	.0035/89	.0050/127	.0015/38	.0000/0	.0170/432		
3045A	.0030/76	.0045/114	.0050/127	.0015/38	.0000/0	.0180/457		
3535	.0035/89	.0035/89	.0060/152	.0015/38	.0010/25	.0180/457		.0020/51
3540	.0035/89	.0040/102	.0060/152	.0015/38	.0010/25	.0190/483		
3535A	.0035/89	.0035/89	.0060/152	.0015/38	.0000/0	.0180/457		
4035	.0040/102	.0035/89	.0060/152	.0015/38	.0010/25	.0190/483	.0020/51 to .0025/64	
4045	.0040/102	.0045/114	.0060/152	.0015/38	.0010/25	.0200/508		
4040A	.0040/102	.0040/102	.0060/152	.0015/38	.0000/0	.0200/508		
4540	.0045/114	.0040/102	.0070/178	.0020/51	.0010/25	.0220/559	.0030/76	
4550	.0045/114	.0050/127	.0070/178	.0020/51	.0000/0	.0230/584		
4555	.0045/114	.0055/140	.0070/178	.0020/51	.0010/25	.0230/584		
4560	.0045/114	.0060/152	.0070/178	.0020/51	.0010/25	.0240/610		
4545A	.0045/114	.0045/114	.0070/178	.0020/51	.0000/0	.0220/559		

*Flat Face Only

Other part numbers are available. *Dimensions in inches unless otherwise specified*



Material:
 Tungsten Carbide Standard
 Cermet Tip Optional
 (Specify "-BKCER" in part no.)

Specify: Series/Wire Feed Angle - Hole Size/Bond Length - Length - Options

Example:

4645-2020-S

4545-1510-3/4-F-V-BKCER

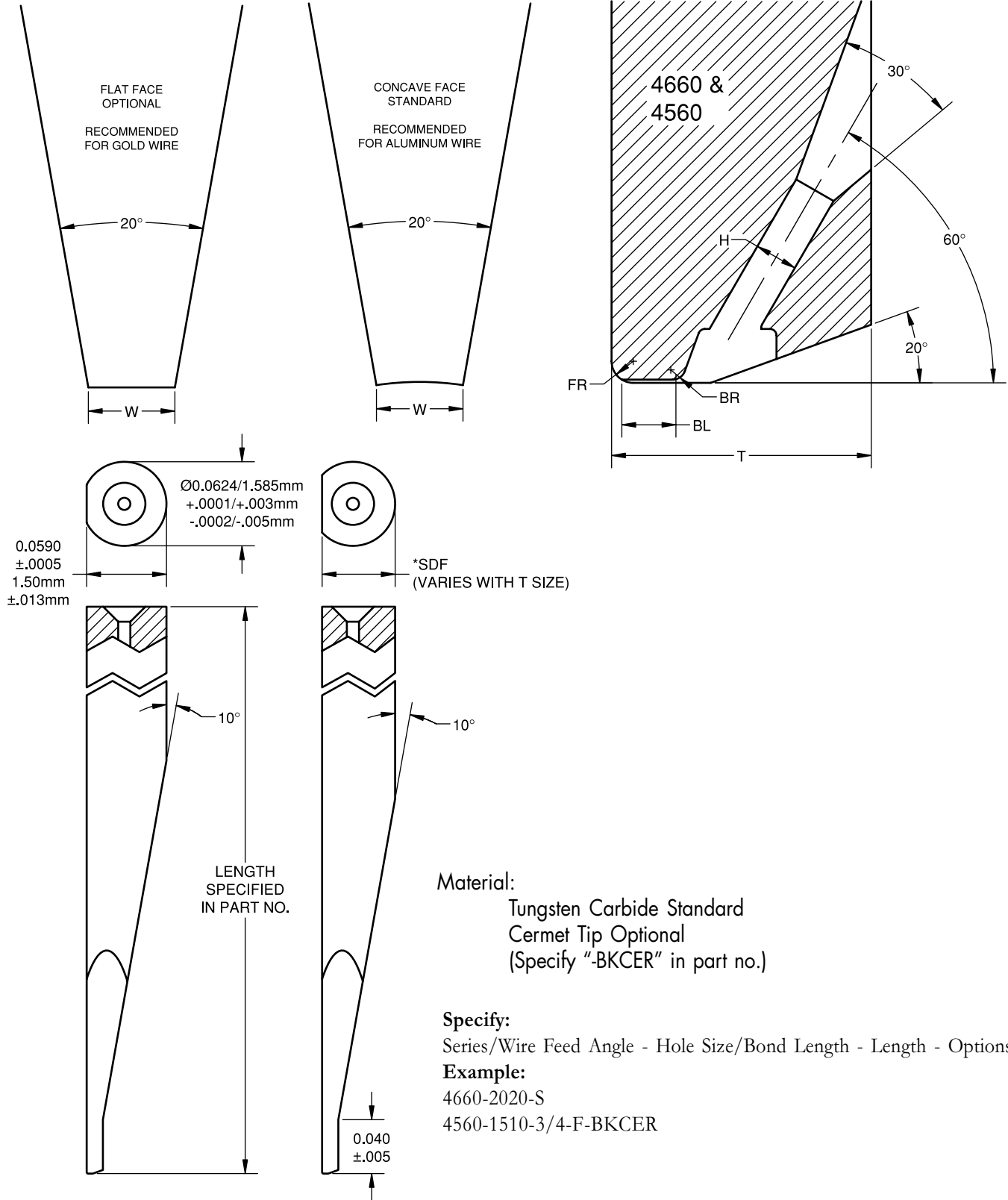
*Specify "-V" when ordering with Cermet tip

DASH NUMBER	H in./ μ m \pm .0002/5	BL in./ μ m \pm .0002/5	W in./ μ m \pm .0002/5	FR in./ μ m \pm .0002/5	BR in./ μ m \pm .0002/5	T in./ μ m \pm .0005/13	SUGGESTED WIRE DIAMETER in./ μ m
0.0013 hole uses the same specifications as the 0.0015 hole except for the hole dimension							.0007/18 to .0008/20
0.0014 hole uses the same specifications as the 0.0015 hole except for the hole dimension							
*1505	.0015/38	.0005/13	.0025/64	.0005/13	.0005/13	.0080/203	
*1507	.0015/38	.0007/18	.0025/64	.0005/13	.0005/13	.0080/203	
*1510	.0015/38	.0010/25	.0030/76	.0010/25	.0006/15	.0090/229	
*1513	.0015/38	.0013/33	.0030/76	.0010/25	.0006/15	.0090/229	
1515	.0015/38	.0015/38	.0030/76	.0010/25	.0006/15	.0090/229	
1520	.0015/38	.0020/51	.0030/76	.0010/25	.0006/15	.0100/254	
1525	.0015/38	.0025/64	.0030/76	.0010/25	.0006/15	.0100/254	
*1510A	.0015/38	.0010/25	.0030/76	.0010/25	.0000/0	.0090/229	
1515A	.0015/38	.0015/38	.0030/76	.0010/25	.0000/0	.0090/229	
0.0018 hole uses the same specifications as the 0.0020 hole except for the hole dimension							.0008/20 to .0010/25
*2007	.0020/51	.0007/18	.0040/102	.0005/13	.0005/13	.0100/254	.0010/25
*2010	.0020/51	.0010/25	.0040/102	.0010/25	.0006/15	.0100/254	
2015	.0020/51	.0015/38	.0040/102	.0010/25	.0006/15	.0110/279	
2020	.0020/51	.0020/51	.0040/102	.0010/25	.0006/15	.0110/279	
2025	.0020/51	.0025/64	.0040/102	.0010/25	.0006/15	.0120/305	
2030	.0020/51	.0030/76	.0040/102	.0010/25	.0006/15	.0120/305	
2035	.0020/51	.0035/89	.0040/102	.0010/25	.0006/15	.0130/330	
2040	.0020/51	.0040/102	.0040/102	.0010/25	.0006/15	.0130/330	
2050	.0020/51	.0050/127	.0040/102	.0010/25	.0006/15	.0140/356	
0.0022 hole uses the same specifications as the 0.0025 hole except for the hole dimension							.0010/25 to .0013/33
2520	.0025/64	.0020/51	.0040/102	.0010/25	.0006/15	.0130/330	
2525	.0025/64	.0025/64	.0040/102	.0010/25	.0006/15	.0140/356	
2530	.0025/64	.0030/76	.0040/102	.0010/25	.0006/15	.0140/356	
2535	.0025/64	.0035/89	.0040/102	.0015/38	.0006/15	.0150/381	
2540	.0025/64	.0040/102	.0040/102	.0015/38	.0006/15	.0150/381	
2525A	.0025/64	.0025/64	.0040/102	.0010/25	.0000/0	.0130/330	.0015/38 to .0018/46
3020	.0030/76	.0020/51	.0050/127	.0015/38	.0010/25	.0170/432	
3025	.0030/76	.0025/64	.0050/127	.0015/38	.0010/25	.0180/457	
3030	.0030/76	.0030/76	.0050/127	.0015/38	.0010/25	.0180/457	
3035	.0030/76	.0035/89	.0050/127	.0015/38	.0010/25	.0190/483	
3040	.0030/76	.0040/102	.0050/127	.0015/38	.0010/25	.0190/483	
3050	.0030/76	.0050/127	.0050/127	.0015/38	.0010/25	.0200/508	.0030/76
4545	.0045/114	.0045/114	.0070/178	.0020/51	.0010/25	.0240/610	
4560	.0045/114	.0060/152	.0070/178	.0020/51	.0010/25	.0270/686	

*Flat Face Only

Other part numbers are available.

Dimensions in inches unless otherwise specified



Material:
 Tungsten Carbide Standard
 Cermet Tip Optional
 (Specify "BK CER" in part no.)

Specify:
 Series/Wire Feed Angle - Hole Size/Bond Length - Length - Options

Example:
 4660-2020-S
 4560-1510-3/4-F-BK CER

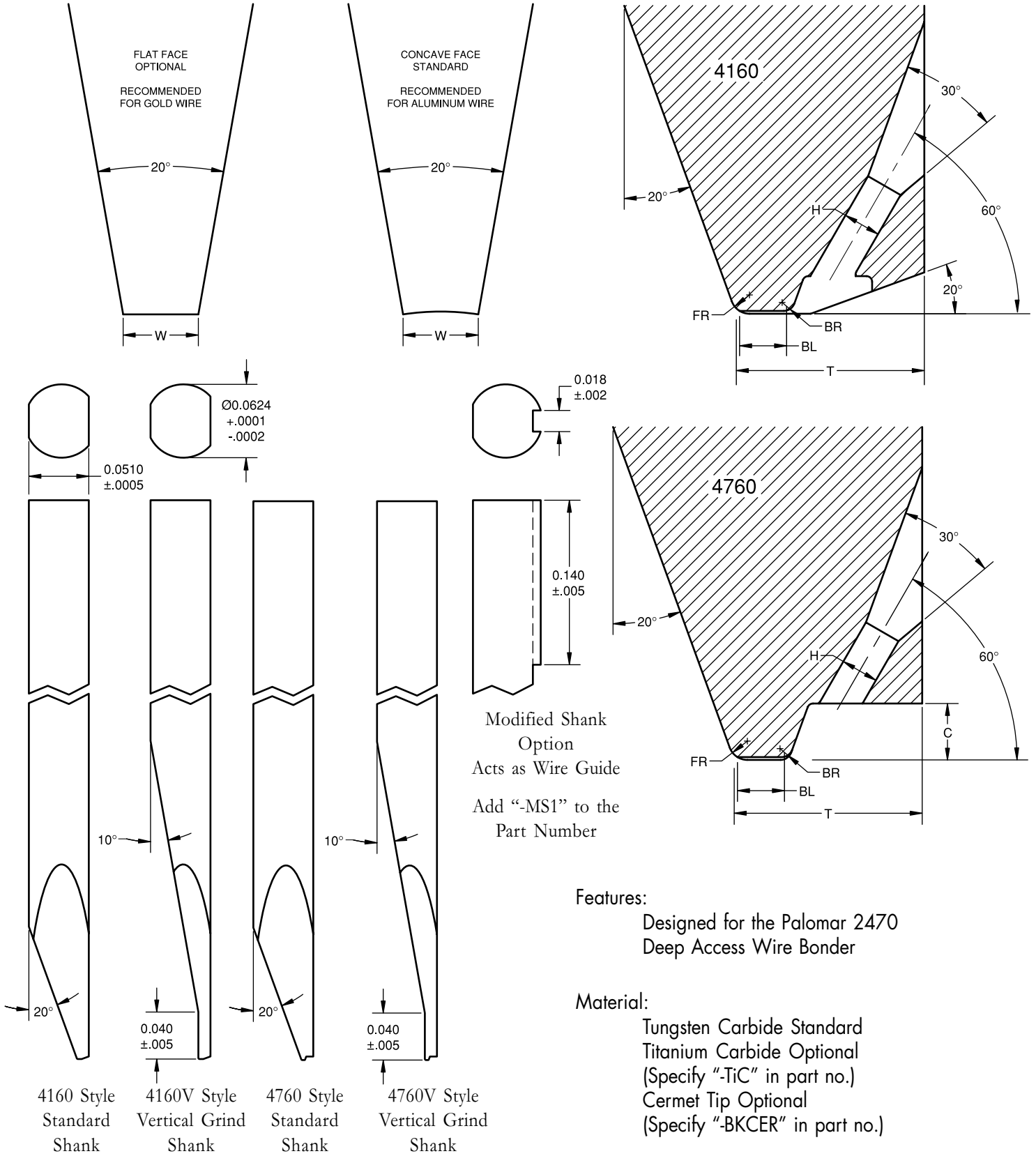
4660 Standard
 Shank Design

4560 Close Guide
 Shank Design

DASH NUMBER	H in./ μ m \pm .0002/5	BL in./ μ m \pm .0002/5	W in./ μ m \pm .0002/5	FR in./ μ m \pm .0002/5	BR in./ μ m \pm .0002/5	T in./ μ m \pm .0005/13	SUGGESTED WIRE DIAMETER in./ μ m
0.0013 hole uses the same specifications as the 0.0015 Hole except for the hole dimension							.0007/18 to .0008/20
*1505	.0015/38	.0005/13	.0025/64	.0005/13	.0005/13	.0090/229	
*1507	.0015/38	.0007/18	.0025/64	.0005/13	.0005/13	.0090/229	
*1508	.0015/38	.0008/20	.0025/64	.0010/25	.0006/15	.0090/229	
*1510	.0015/38	.0010/25	.0030/76	.0010/25	.0006/15	.0090/229	
*1513	.0015/38	.0013/33	.0030/76	.0010/25	.0006/15	.0100/254	
1515	.0015/38	.0015/38	.0030/76	.0010/25	.0006/15	.0100/254	
1518	.0015/38	.0018/46	.0030/76	.0010/25	.0006/15	.0100/254	
1520	.0015/38	.0020/51	.0030/76	.0010/25	.0006/15	.0100/254	
1525	.0015/38	.0025/64	.0030/76	.0010/25	.0006/15	.0110/279	
1530	.0015/38	.0030/76	.0030/76	.0010/25	.0006/15	.0110/279	
1535	.0015/38	.0035/89	.0030/76	.0010/25	.0006/15	.0120/305	
*1508A	.0015/38	.0008/20	.0025/64	.0010/25	.0000/0	.0090/229	
*1510A	.0015/38	.0010/25	.0030/76	.0010/25	.0000/0	.0090/229	
1515A	.0015/38	.0015/38	.0030/76	.0010/25	.0000/0	.0100/254	
0.0017 hole uses the same specifications as the 0.0015 hole except for the hole dimension							.0008/20 to .0010/25
0.0018 hole uses the same specifications as the 0.0020 hole except for the hole dimension							
*2005	.0020/51	.0005/13	.0040/102	.0010/25	.0006/15	.0120/305	.0010/25
*2007	.0020/51	.0007/18	.0040/102	.0010/25	.0006/15	.0120/305	
*2010	.0020/51	.0010/25	.0040/102	.0010/25	.0006/15	.0120/305	
*2012	.0020/51	.0012/30	.0040/102	.0010/25	.0006/15	.0120/305	
2015	.0020/51	.0015/38	.0040/102	.0010/25	.0006/15	.0120/305	
2020	.0020/51	.0020/51	.0040/102	.0010/25	.0006/15	.0120/305	
2025	.0020/51	.0025/64	.0040/102	.0010/25	.0006/15	.0120/305	
2030	.0020/51	.0030/76	.0040/102	.0010/25	.0006/15	.0120/305	
2515	.0025/64	.0015/38	.0040/102	.0010/25	.0006/15	.0110/279	
2520	.0025/64	.0020/51	.0040/102	.0010/25	.0006/15	.0120/305	
2525	.0025/64	.0025/64	.0040/102	.0010/25	.0006/15	.0120/305	.0010/25 to .0013/33
2530	.0025/64	.0030/76	.0040/102	.0015/38	.0006/15	.0120/305	
2520A	.0025/64	.0020/51	.0040/102	.0010/25	.0000/0	.0110/279	
2525A	.0025/64	.0025/64	.0040/102	.0010/25	.0000/0	.0120/305	
0.0027 hole uses the same specifications as the 0.0025 hole except for the hole dimension							.0013/33 to .0015/38
*3010	.0030/76	.0010/25	.0050/127	.0015/38	.0010/25	.0130/330	.0015/38 to .0018/46
3015	.0030/76	.0015/38	.0050/127	.0015/38	.0010/25	.0130/330	
3020	.0030/76	.0020/51	.0050/127	.0015/38	.0010/25	.0140/356	
3025	.0030/76	.0025/64	.0050/127	.0015/38	.0010/25	.0140/356	
3030	.0030/76	.0030/76	.0050/127	.0015/38	.0010/25	.0150/381	
3035	.0030/76	.0035/89	.0050/127	.0015/38	.0010/25	.0150/381	
3040	.0030/76	.0040/102	.0050/127	.0015/38	.0010/25	.0150/381	
3525	.0035/89	.0025/64	.0050/127	.0015/38	.0010/25	.0150/381	.0020/51
3530	.0035/89	.0030/76	.0050/127	.0015/38	.0010/25	.0150/381	
3535	.0035/89	.0035/89	.0050/127	.0015/38	.0010/25	.0160/406	
3540	.0035/89	.0040/102	.0050/127	.0015/38	.0010/25	.0160/406	
3550	.0035/89	.0050/127	.0050/127	.0015/38	.0010/25	.0170/432	
4030	.0040/102	.0030/76	.0060/152	.0015/38	.0010/25	.0170/432	.0020/51 to .0025/64
4040	.0040/102	.0040/102	.0060/152	.0015/38	.0010/25	.0180/457	
4540	.0045/114	.0040/102	.0070/178	.0020/51	.0010/25	.0200/508	.0030/76
4545	.0045/114	.0045/114	.0070/178	.0020/51	.0010/25	.0200/508	

*Flat Face Only

Other part numbers are available. *Dimensions in inches unless otherwise specified*



Features:
 Designed for the Palomar 2470
 Deep Access Wire Bonder

Material:
 Tungsten Carbide Standard
 Titanium Carbide Optional
 (Specify "-TiC" in part no.)
 Cermet Tip Optional
 (Specify "-BK CER" in part no.)

Specify: Series/Wire Feed Angle - Hole Size/Bond Length - Length - Options

Example:

4160-2020-S

4760V-1510-3/4-F-BK CER

DASH NUMBER	H in./ μ m \pm .0002/5	BL in./ μ m \pm .0002/5	W in./ μ m \pm .0002/5	FR in./ μ m \pm .0002/5	BR in./ μ m \pm .0002/5	T in./ μ m \pm .0005/13	C in./ μ m (ref) (4760 only)	SUGGESTED WIRE DIAMETER in./ μ m
0.0013 hole uses the same specifications as the 0.0013 hole except for the hole dimension								.0005/13 to .0008/20
*1505	.0015/38	.0005/13	.0025/64	.0005/13	.0005/13	.0080/203	.002/51	
*1507	.0015/38	.0007/18	.0025/64	.0005/13	.0005/13	.0080/203	.002/51	
*1510	.0015/38	.0010/25	.0030/76	.0010/25	.0006/15	.0080/203	.002/51	
1515	.0015/38	.0015/38	.0030/76	.0010/25	.0006/15	.0080/203	.002/51	
1520	.0015/38	.0020/51	.0030/76	.0010/25	.0006/15	.0080/203	.002/51	
1525	.0015/38	.0025/64	.0030/76	.0010/25	.0006/15	.0090/229	.002/51	.0008/20 to .0010/25
0.0017 hole uses the same specifications as the 0.0015 hole except for the hole dimension								
0.0018 hole uses the same specifications as the 0.0020 hole except for the hole dimension								.0010/25 to .0015/38
*2005	.0020/51	.0005/13	.0040/102	.0010/25	.0006/15	.0080/203	.003/76	
*2010	.0020/51	.0010/25	.0040/102	.0010/25	.0006/15	.0090/229	.003/76	
2015	.0020/51	.0015/38	.0040/102	.0010/25	.0006/15	.0090/229	.003/76	
2020	.0020/51	.0020/51	.0040/102	.0010/25	.0006/15	.0100/254	.003/76	
2025	.0020/51	.0025/64	.0040/102	.0010/25	.0006/15	.0100/254	.003/76	
2030	.0020/51	.0030/76	.0040/102	.0010/25	.0006/15	.0110/279	.003/76	
2035	.0020/51	.0035/89	.0040/102	.0010/25	.0006/15	.0110/279	.003/76	
*2510	.0025/64	.0010/25	.0040/102	.0010/25	.0006/15	.0100/254	.003/76	
2515	.0025/64	.0015/38	.0040/102	.0010/25	.0006/15	.0100/254	.003/76	
2520	.0025/64	.0020/51	.0040/102	.0010/25	.0006/15	.0110/279	.003/76	
2525	.0025/64	.0025/64	.0040/102	.0010/25	.0006/15	.0110/279	.003/76	
2530	.0025/64	.0030/76	.0040/102	.0015/38	.0006/15	.0120/305	.003/76	.0015/38 to .0020/51
2535	.0025/64	.0035/89	.0040/102	.0015/38	.0006/15	.0130/330	.003/76	
2540	.0025/64	.0040/102	.0040/102	.0015/38	.0006/15	.0130/330	.003/76	
3020	.0030/76	.0020/51	.0050/127	.0015/38	.0010/25	.0130/330	.004/102	
3025	.0030/76	.0025/64	.0050/127	.0015/38	.0010/25	.0140/356	.004/102	
3030	.0030/76	.0030/76	.0050/127	.0015/38	.0010/25	.0140/356	.004/102	
3035	.0030/76	.0035/89	.0050/127	.0015/38	.0010/25	.0150/381	.004/102	
3040	.0030/76	.0040/102	.0050/127	.0015/38	.0010/25	.0150/381	.004/102	
3045	.0030/76	.0045/114	.0050/127	.0015/38	.0010/25	.0160/406	.004/102	
3050	.0030/76	.0050/127	.0050/127	.0015/38	.0010/25	.0160/406	.004/102	

*Flat Face Only

Other part numbers are available.

Dimensions in inches unless otherwise specified