



DIAMONDSPARK SEAMLESS CORED WIRES

brilliance established
in 1967



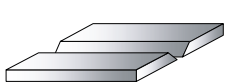
Curious? See the full video
OPERATION: DIAMONDSPARK
online on our website!

voestalpine Böhler Welding
www.voestalpine.com/welding

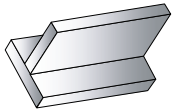
voestalpine

ONE STEP AHEAD.

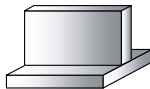
EN and AWS Welding Positions / butt & fillet welds



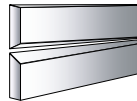
PA/1G



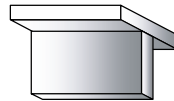
PA/1F



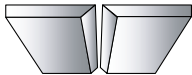
PB/2F



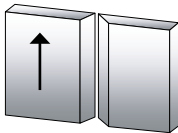
PC/2G



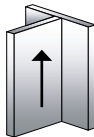
PD/4F



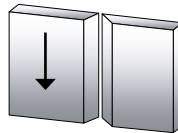
PE/4G



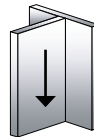
PF/3G



PF/3F



PG/3G



PG/3F

Overview – All-Positional Rutile

Product name	EN ISO classification	AWS / SFA classification
diamondspark 42 RC	17632-A: T 46 2 R M21 3 H5	A5.20/SFA-5.20: E70T-1M/T-9M-H4 / E70T-1C/T-9C-H4
diamondspark 44 RC-SR (C1)	17632-A: T42 4 P C1 1 H5	A5.20/SFA-5.20: E71T-1C/T-9C/T-12C JH4
diamondspark 46 RC	17632-A: T 46 3 P M21 1 H5	A5.20/SFA-5.20: E71T-1M/T-9M-H4 / E71T-1C/T-9C-H4
diamondspark 46 RC (C1)	17632-A: T46 3 P C1 1 H5	A5.20/SFA-5.20: E71T-1C-H4 / E71T-9C-H4
diamondspark 52 RC	17632-A: T46 4 P M21 1 H5	A5.20/SFA-5.20: E71T-1M/T-9M/T-12M JDH4 / E71T-1C/T-9C/T-12C DH4
diamondspark 53 RC	17632-A: T46 5 P M21 1 H5	A5.20/SFA-5.20: E71T-1M/T-9M/T-12M JH4 / E71T-1C/T-9C/T-12C H4
diamondspark 550 RC	18276-A: T 55 6 Z P M21 1 H5	A5.29/SFA-5.29: E91T1-GM-JH4
diamondspark 620 RC	18276-A: T62 4 Mn1.5Ni P M21 1 H5	A5.29/SFA-5.29: E101T1-K2M-JH4

Overview – All-Positional Rutile

Product name	EN ISO classification	AWS / SFA classification
diamondspark 700 RC	18276-A: T69 6 Z P M21 1 H5	A5.29/SFA-5.29: E111T1-GM-JH4
diamondspark 700 RC (C1)	18276-A: T69 4 Z P C1 1 H5	A5.29/SFA-5.29: E111T1-GC-JH4
diamondspark 700 RC-SR	18276-A: T 69 6 Mn2NiMo P M21 1 H5	A5.29/SFA-5.29: E111T1-GM-JH4
diamondspark CM2 RC	17634-A: T CrMo2 P M21 1 H5	A5.29/SFA-5.29: E91T1-B3MH4
diamondspark DCMS RC	17634-A: T Cr Mo1 P M21 1 H5	A5.29/SFA-5.29: E81T1-B2MH4
diamondspark DCMV RC	17634-A: T Z P M21 1 H5	-
diamondspark DMO RC	17632-A: T 46 0 Mo P M21 1 H5	A5.29/SFA-5.29: E81T1-A1MH4
diamondspark Ni1 RC	17632-A: T50 6 1Ni P M21 1 H5	A5.29/SFA-5.29: E81T1-Ni1M-JH4
diamondspark Ni1 RC (C1)	17632-A: T46 6 1Ni P C1 1 H5	A5.29/SFA-5.29: E81T1-Ni1C-JH4
diamondspark Ni1 RC-SR	17632-A: T50 6 1Ni P M21 1 H5	A5.29/SFA-5.29: E81T1-Ni1M-JH4

Overview – All-Positional Rutile

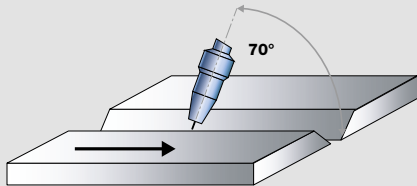
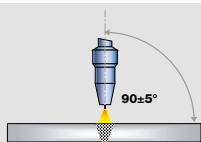
Product name	EN ISO classification	AWS / SFA classification
diamondspark Ni1.5 RC (C1)	17632-A: T50 6 1,5Ni P C1 1 H5	A5.29/SFA-5.29: E81T1-K2C-JH4
diamondspark Ni2 RC	17632-A: T50 6 2Ni P M21 1 H5	A5.29/SFA-5.29: E81T1-Ni2M-JH4
diamondspark NiCu1 RC	17632-A: T46 4 Z P M21 1 H5	A5.29/SFA-5.29: E81T1-WGM H4

Overview – All-Positional Rutile

Product name	Application	CVN toughness	Steel grades
diamondspark 42 RC	Multi-purpose up to 460 MPa YS. Mixed gas and CO ₂ .	70J at -20°C	S235JR - S460N
diamondspark 44 RC-SR (C1)	Multi-purpose up to 420 MPa YS. CTOD. PWHT. 100 % CO ₂ .	85J at -50°C	S235JR - S460N
diamondspark 46 RC	Multi-purpose up to 460 MPa YS. Mixed gas and CO ₂ .	90J at -20°C	S235JR - S460N
diamondspark 46 RC (C1)	Multi-purpose up to 460 MPa YS. 100 % CO ₂ .	70J at -30°C	S235JR - S460N
diamondspark 52 RC	Multi-purpose up to 460 MPa YS. Mixed gas and CO ₂ .	50J at -46°C	S235JR - S460N
diamondspark 53 RC	Highest toughness demands up to 460 MPa YS. Mixed gas and CO ₂ .	80J at -50°C	S235JR - S460N
diamondspark 550 RC	High strength steels up to 550 Mpa YS. Mix gas	60J at -60°C	S460N - S550Q
diamondspark 620 RC	High strength steels up to 620 MPa. Mixed gas.	90J at -40°C	S500Q - S620Q
diamondspark 700 RC	High strength steels up to 690 MPa. Mixed gas.	60J at -60°C	S620Q - S690Q
diamondspark 700 RC (C1)	High strength steels up to 690 MPa. 100% CO ₂	70J at -40°C	S620Q - S690Q
diamondspark 700 RC-SR	High strength steels up to 690 MPa. PWHT. Mixed gas.	55J at -60°C	S620Q - S690Q

Overview – All-Positional Rutile

Product name	Application	CVN toughness	Steel grades
diamondspark CM2 RC	2.25 % Cr-0.5 % Mo type creep resistant steels. PWHT. Mixed gas.	110J at +20°C	10CrMo9 - G19CrMo9-10
diamondspark DCMS RC	1% Cr-0.5 % Mo type creep resistant steels. PWHT. Mixed gas.	65J at +20°C	13CrMo4 - G17CrMo5-5
diamondspark DCMV RC	Cr-Mo-V- alloyed creep resistant steels (G17CrMoV5-10). Mixed gas.	50J at +20°C	G17CrMoV5-10
diamondspark DMO RC	0.5 % Mo type creep resistant steels. PWHT. Mixed gas.	100J at 0°C	16Mo3 - L450QB
diamondspark Ni1 RC	Low temperature steels up to 500 MPa. <1 % Ni. CTOD. Mixed gas.	75J at -60°C	S355JR - S500Q
diamondspark Ni1 RC (C1)	Low temperature steels up to 460 MPa. <1 % Ni. CTOD. 100 % CO ₂ .	85 J at -60°C	S355JR - S460N
diamondspark Ni1 RC-SR	Low temperature steels up to 500 MPa. <1 % Ni. PWHT. CTOD. Mixed gas.	90 J at -60 °C	S355JR - S500Q
diamondspark Ni1.5 RC (C1)	Low temperature steels up to 500 MPa. 100 % CO ₂ .	90J at -60°C	S355JR - S500Q
diamondspark Ni2 RC	Low temperature steels up to 500 MPa. 2 % Ni. CTOD. Mixed gas.	80 J at -60 °C	S275N - S460N
diamondspark NiCu1 RC	Weathering steels. Mixed gas.	70 J at -40 °C	S235JRW - S355K2W

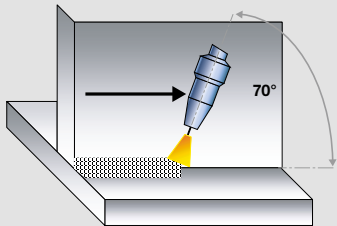
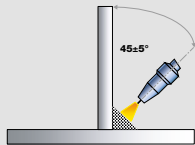


Downhand
PA/1G/1F

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø		Stick-out		Welding current	Arc voltage	Run
mm	inch	mm	inch	A PA/1G/1F	V PA/1G/1F	
1.0	0.039	15	0.6	120-150	18-20	Root
				200-240	23-25	Fill
1.2	0.045	15	0.6	150-180	19-20	Root
				240-300	25-28	Fill
1.4	0.052	20	0.8	160-200	20-25	Root
				250-340	24-32	Fill
1.6	1/16	Not recommended				Root
		20	0.8	250-360	26-33	Fill

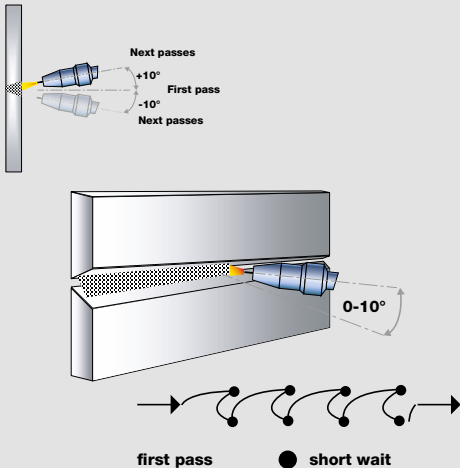


**Flat Fillet
PB/2F**

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø		Stick-out		Welding current	Arc voltage	Run
mm	inch	mm	inch	A PB/2F	V PB/2F	
1.0	0.039	15	0.6	210-250	20-24	Fill
1.2	0.045	15	0.6	200-320	24-31	Fill
1.4	0.052	20	0.8	220-360	24-32	Fill
1.6	1/16	20	0.8	230-400	25-33	Fill

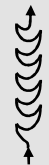
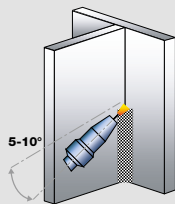
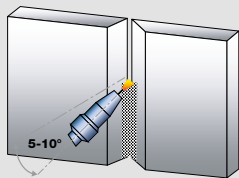


Horizontal-vertical
PC/2G

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø	Stick-out		Welding current	Arc voltage	Run
mm inch	mm inch		A PC/2G	V PC/2G	
1.0 0.039	15 0.6		140-190	18-20	Root
			200-230	20-22	Fill
1.2 0.045	15 0.6		150-190	19-21	Root
			200-250	21-25	Fill
1.4 0.052	20 0.8		160-210	20-25	Root
			220-300	23-29	Fill
1.6 1/16	Not recommended				Root
	20 0.8		230-310	24-30	Fill



First pass



Next passes

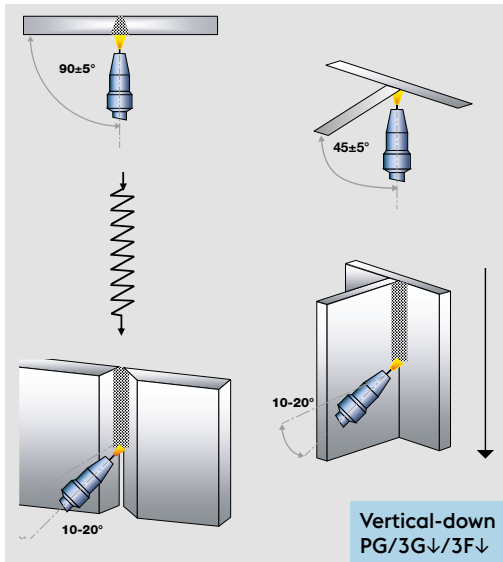


Vertical-up
PF/3G↑/3F↑

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

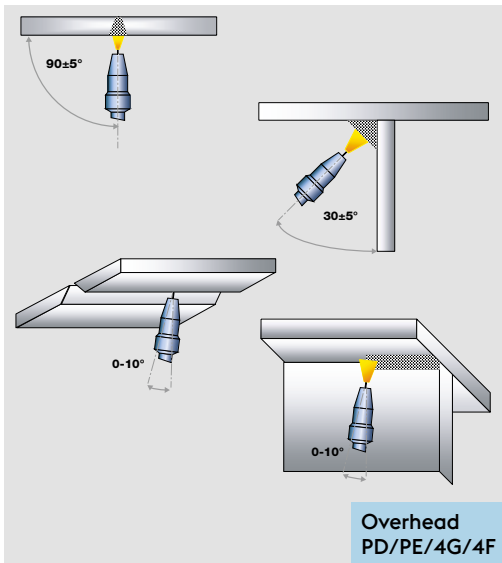
Ø mm inch	Stick-out mm inch	Welding current		Arc voltage		Run
		A		V		
		PF/3G↑	3F↑	PF/3G↑	3F↑	
1.0 0.039	15 0.6	140-170		19-22		Root
		190-240	170-210	22-25	22-24	Fill
1.2 0.045	15 0.6	140-180		20-22		Root
		200-240	210-250	23-26	23-26	Fill
1.4 0.052	20 0.8	200-240		23-26		Root
			210-250		23-26	Fill
1.6 1/16	20 0.8	Not recommended				Root
		210-270	210-260	23-27	23-27	Fill



Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø							Run
	mm	inch	mm	inch	A	V	
					PG/3G↓ 3F↓	PG/3G↓ 3F↓	
1.0	0.039	15	0.6		130-170	17.5-22	Root
					190-280	20-28	Fill
1.2	0.045	15	0.6		150-180	18-23	Root
					200-300	22-30	Fill



Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø	Stick-out		Welding current		Arc voltage		Run
mm inch	mm inch		A		V		
			PD/4F	PE/4G	PD/PE/4G	4F	
1.0 0.039	15 0.6		120-150		18-21		Root
			160-200	170-200	19-23	20-22	Fill
1.2 0.045	15 0.6		140-170		18-21		Root
			170-230	200-230	19-24	21-23	Fill
1.4 0.052			Not recommended				Root
	20 0.8		180-220	20-23	210-240	22-25	Fill
1.6 1/16			Not recommended				

Overview – All-positional Metal-Cored

Product name	EN ISO classification	AWS / SFA classification
diamondspark 46 MC	17632-A: T46 3 M M21 1 H5	A5.18/SFA-5.18: E70C-6M H4
diamondspark 52 MC	17632-A: T46 4 M M21 1 H5	A5.18/SFA-5.18: E70C-6M H4
diamondspark 54 MC	17632-A: T46 6 M M21 1 H5	A5.18/SFA-5.18: E70C-6M H4
diamondspark 550 MC	17632-A: T55 6 1NiMo M M21 1 H5	A5.28/SFA-5.28: E90C-K3H4
diamondspark 620 MC	17632-A: T62 4 Z M M21 1 H5	A5.28/SFA-5.28: E100C-GH4
diamondspark 700 MC	18276-A: T69 6 Mn2NiCrMo M M21 1 H5	A5.28/SFA-5.28: E110C-K4H4
diamondspark 900 MC	18276-A: T89 5 ZMn2NiCrMo M M21 1 H5	A5.28/SFA-5.28: E110C-K4H4
diamondspark 960 MC	18276-A: T89 4 ZMn2NiCrMo M M21 1 H5	-
diamondspark 1100 MC	18276-B: T Z 2 T15-1M21A-N4C1M2-H5	-
diamondspark CM2 MC	17634-A: T CrMo2 M M21 1 H5	A5.28/SFA-5.28: E90C-B3H4
diamondspark DCMS MC	17634-A: T CrMo1 M M21 1 H5	A5.28/SFA-5.28: E80C-B2H4

Overview – All-positional Metal-Cored

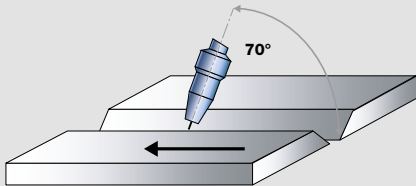
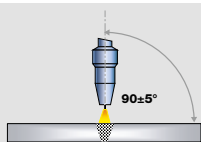
Product name	EN ISO classification	AWS / SFA classification
diamondspark DMO MC	17632-A: T 46 2 Mo M M21 1 H5	A5.28/SFA-5.28: E80C-GH4
diamondspark Ni1 MC	17632-A: T50 6 1Ni M M21 1 H5	A5.28/SFA-5.28: E80C-Ni1 H4
diamondspark Ni3 MC	17632-A: T46 6 3Ni M M21 1 H5	A5.28/SFA-5.28: E80C-Ni3 H4
diamondspark NiCu1 MC	17632-A: T46 6 Z M M21 1 H5	A5.28/SFA-5.28: E80C-G H4

Overview – All-positional Metal-Cored

Product name	Application	CVN toughness	Steel grade
diamondspark 46 MC	Multi-purpose up to 460 MPa YS. Mixed gas.	90J at -30°C	S235JR - S460N
diamondspark 52 MC	Multi-purpose up to 460 MPa YS. Mixed gas.	70J at -46°C	S235JR - S460N
diamondspark 54 MC	Multi-purpose up to 460 MPa YS. Mixed gas and CO ₂ .	80J at -60°C	S235JR - S460N
diamondspark 550 MC	Ni-Mo alloyed for steels up to 550MPa. Mixed gas.	60J at -60°C	S420N - S550Q
diamondspark 620 MC	ASTM A519 Gr. 4130. <1 % Ni. Mixed gas.	70J at -40°C	ASTM A519 Gr.4130
diamondspark 700 MC	High strength steels up to 690 MPa. Mixed gas	85J at -60°C	S550Q - S690Q
diamondspark 900 MC	High strength steels up to 900 MPa. Mixed gas	70J at -50°C	S890
diamondspark 960 MC	High strength steels up to 960 MPa. Mixed gas	60J at -40°C	S960
diamondspark 1100 MC	High strength steels up to 1100 Mpa YS. Mix gas	40J at -40°C	YS > 1100 MPa
diamondspark CM2 MC	2.25 % Cr-0.5 % Mo type creep resistant steels. PWHT. Mixed gas.	110J at +20°C	10CrMo9 - G19CrMo9-10

Overview – All-positional Metal-Cored

Product name	Application	CVN toughness	Steel grade
diamondspark DCMS MC	1 % Cr-0.5 % Mo type creep resistant steels. PWHT. Mixed gas.	80J at -20°C	13CrMo4-G17CrMo5-5
diamondspark DMO MC	0.5 % Mo type creep resistant steels. PWHT. Mixed gas.	90J at -20°C	16Mo3 - L450QB
diamondspark Ni1 MC	Low temperature steels up to 500 MPa. <1 % Ni. CTOD. Mixed gas.	90J at -60°C	S355JR - S500Q
diamondspark Ni3 MC	3,0% Ni wire for Ni alloyed steels up to 3,5%. Mixed gas.	90J at -60°C	S355JR - S500Q
diamondspark NiCu1 MC	Weathering steels. Mixed gas.	70J at -60°C	S235JRW - S355K2W

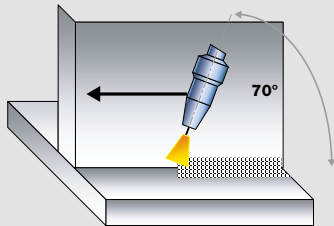
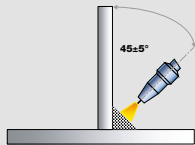


**Downhand
PA/1G/1F**

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO_2)

Ø	Stick-out		Welding current		Arc voltage		Run
mm inch	mm inch	A		V			
		PA/1G	1F	PA/1G	1F		
1.0 0.039	15 0.6	100-140		18-21		Root	
		220-270	230-270	23-26	25-28	Fill	
1.2 0.045	15 0.6	150-180		18-20		Root	
		250-320	240-320	27-30	24-31	Fill	
1.4 0.052	20 0.8	170-200		21-23		Root	
		270-350	210-360	29-32	24-32	Fill	
1.6 1/16	Not recommended					Root	
	20 0.8	300-400	230-400	29-32	25-33	Fill	

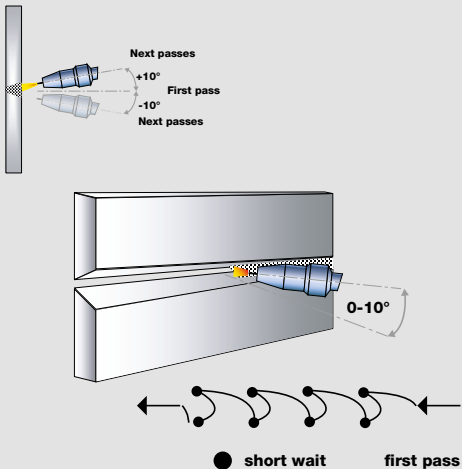


**Flat Fillet
PB/2F**

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø		Stick-out		Welding current	Arc voltage	Run
mm	inch	mm	inch	A PB/2F	V PB/2F	
1.0	0.039	15	0.6	230-270	25-28	Fill
1.2	0.045	15	0.6	240-320	24-31	Fill
1.4	0.052	20	0.8	210-360	24-32	Fill
1.6	1/16	20	0.8	230-400	25-33	Fill

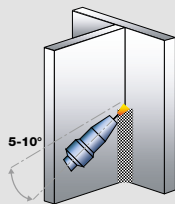
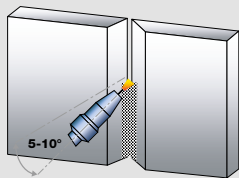


Horizontal-vertical
PC/2G

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø		Stick-out		Welding current	Arc voltage	Run
mm	inch	mm	inch	A PC/2G	V PC/2G	
1.0	0.039	15	0.6	110-140	18-21	Root
				190-230	23-26	Fill
1.2	0.045	15	0.6	150-170	19-21	Root
				200-260	21-26	Fill
1.4	0.052	20	0.8	160-210	20-25	Root
				220-280	23-27	Fill
1.6	1/16	Not recommended				Root
		20	0.8	230-300	24-29	Fill



First pass



Next passes

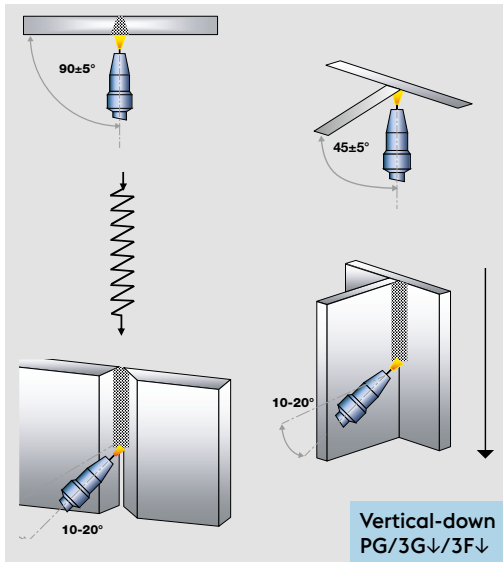


Vertical-up
PF/3G↑/3F↑

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø	Stick-out		Welding current		Arc voltage		Run
	mm	inch	mm	inch	A	V	
					PF/3G↑	3F↑	
1.0	0.039	15	0.6		100-130	19-20	Root
					130-170	130-160	Fill
1.2	0.045	15	0.6		130-160	17-21	Root
					170-190	140-170	Fill
1.4	0.052	Not recommended					
1.6	1/16	Not recommended					

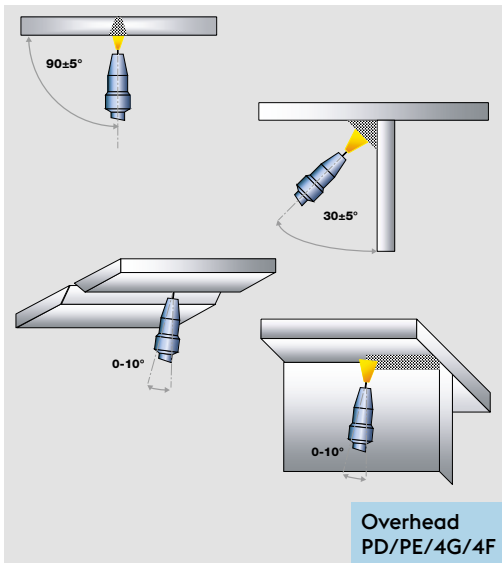


Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø	Stick-out		Welding current		Arc voltage		Run
	mm	inch	mm	inch	A	V	
					PG/3G↓ 3F↓	PG/3G↓ 3F↓	
1.0	0.039	15	0.6		140-170	18-22	Root*
					230-250	23-26	Fill
1.2	0.045	15	0.6		150-180	18-21	Root*
					250-280	24-28	Fill

* Usually one layer weld.



Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø		Stick-out		Welding current		Arc voltage		Run
mm	inch	mm	inch	A		V		
				PD/4F	PE/4G	PD/PE/4G	4F	
1.0	0.039	15	0.6	110-140		18-21		Root
				160-210	180-230	21-24	21-24	Fill
1.2	0.045	15	0.6	140-170		18-21		Root
				180-240	190-240	21-25	22-25	Fill
1.4	0.052	Not recommended						Root
		20	0.8	210-240	210-240	22-25	22-24	Fill
1.6	1/16	Not recommended						

Overview – Downhand Basic

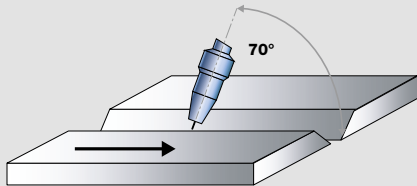
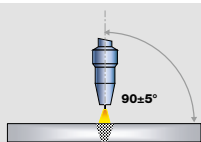
Product name	EN ISO classification	AWS / SFA classification
diamondspark 44 BC	17632-A: T42 4 B M21 1 H5	A5.20/SFA-5.20: E71T-5M JH4 / E71T-5C JH4
diamondspark 52 BC	17632-A: T46 4 B M21 3 H5	A5.20/SFA-5.20: E70T-5M JH4 / E70T-5C JH4
diamondspark 550 BC	18276-A: T55 4 1NiMo B M21 3 H5	A5.29/SFA-5.29: E90T5-GM-H4
diamondspark 700 BC	18276-A: T69 6 Mn2NiCrMo B M21 3 H5	A5.29/SFA-5.29: E110T5-K4M-JH4
diamondspark 700 BC (C1)	18276-A: T69 4 Mn2NiCrMo B C1 3 H5	A5.29/SFA-5.29: E110T5-K4C-JH4
diamondspark 900 BC	18276-A: T89 4 Mn2Ni1CrMo B M21 3 H5	A5.29/SFA-5.29: E120T5-GM-H4
diamondspark CM2 BC	17634-A: T CrMo2 B M21 3 H5	A5.29/SFA-5.29: E90T5-B3M-H4
diamondspark CM5 BC	17632-A: T CrMo5 B M21 3 H5	A5.29/SFA-5.29: E80T5-B6M-H4
diamondspark DCMS BC	17634-A: T CrMo1 B M21 3 H5	A5.29/SFA-5.29: E80T5-B2M-H4
diamondspark DCMV BC	17634-A: T Z B M21 3 H5	A5.29/SFA-5.29: E90T5-GM-H4
diamondspark DMO BC	17632-A: T 46 6 Mo B M21 3 H5	A5.29/SFA-5.29: E80T5-GM-H4
diamondspark Ni1 BC	17632-A: T46 6 1Ni B M21 3 H5	A5.29/SFA-5.29: E80T5-Ni1M-JH4
diamondspark NiCu1 BC	17632-A: T46 6 Z B M21 3 H5	A5.29/SFA-5.29: E80T5-WGM H4

Overview – Downhand Basic

Product name	Application	CVN toughness	Steel grade
diamondspark 44 BC	Steel up to 420 MPa YS. Mixed and CO ₂ .	100J at -60°C	S235JR - S355N
diamondspark 52 BC	Steel up to 460 MPa YS. Mixed gas and CO ₂ .	80J at -60°C	S235JR - S460N
diamondspark 550 BC	Cr-Ni-Mo alloyed for high strength steel up to 550 MPa YS. Mixed gas.	100J at -40°C	S420N - S550Q
diamondspark 700 BC	Ni-Mo-alloyed for high strength steels up to 690 MPa YS. Mixed gas.	80J at -60°C	S620Q - S690Q
diamondspark 700 BC (C1)	Ni-Mo-alloyed for high strength steels up to 690 MPa YS. CO ₂ .	80J at -40°C	S620Q - S690Q
diamondspark 900 BC	Ni-Mo-alloyed for high strength steels up to 890 MPa YS. Mixed gas.	75J at -40°C	S690Q - S960Q
diamondspark CM2 BC	2.25 % Cr-0.5 % Mo type creep resistant steels. Mixed gas.	100J at +20°C	CrMo9-10 - 26CrMo7
diamondspark CM5 BC	5 % Cr-0.5 % Mo type creep resistant steels. Mixed gas.	100J at +20°C	X12CrMo5
diamondspark DCMS BC	1 % Cr-0.5 % Mo type creep resistant steels. Mixed gas.	100J at +20°C	13CrMo4 - G17CrMo5-5
diamondspark DCMV BC	Cr-Mo-V- alloyed creep resistant steels (G17CrMoV5-10). Mixed gas.	100J at +20°C	G17CrMoV5-10

Overview – Downhand Basic

Product name	Application	CVN toughness	Steel grade
diamondspark DMO BC	0.5 % Mo type creep resistant steels. Mixed gas.	130J at -60°C	16Mo3 - L450QB
diamondspark Ni1 BC	Low-temperature steels up to 460 MPa YS. <1 % Ni.	80J at -60°C	S355JR - S500Q
diamondspark NiCu1 BC	Weathering steels. Mixed gas	130J at -60°C	S235JRW - S355K2W

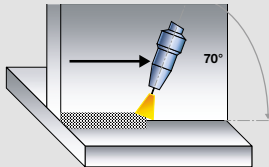
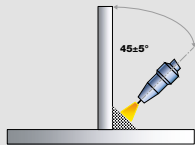


**Downhand
PA/1G/1F**

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø	Stick-out		Welding current	Arc voltage	Run
mm inch	mm inch	A	V		
		PA/1G/1F	PA/1G/1F		
1.0 0.039	15 0.6	130-160	19-21	Root	
		220-250	21-24	Fill	
1.2 0.045	15 0.6	130-150	17-20	Root	
		220-310	22-30	Fill	
1.4 0.052	20 0.8	170-200	20-22	Root	
		220-360	24-32	Fill	
1.6 1/16	Not recommended			Root	
	20 0.8	270-400	27-34	Fill	

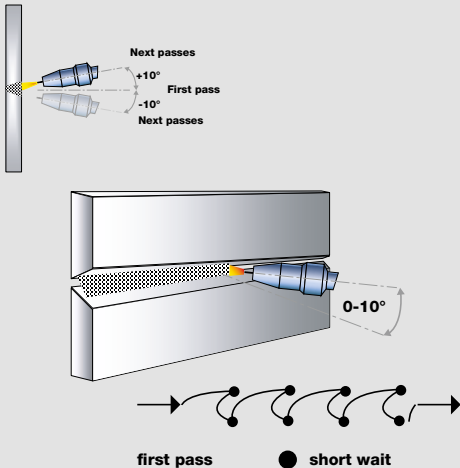


**Flat Fillet
PB/2F**

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø		Stick-out		Welding current	Arc voltage	Run
mm	inch	mm	inch	A PB/2F	V PB/2F	
1.0	0.039	15	0.6	230-250	24-26	Fill
1.2	0.045	15	0.6	230-310	22-30	Fill
1.4	0.052	20	0.8	270-350	22-30	Fill
1.6	1/16	20	0.8	260-400	27-34	Fill



Horizontal-vertical
PC/2G

Torch Positions and Welding Parameters

(Values for mixed gas - add 1.5-2 V for CO₂)

Ø	Stick-out		Welding current	Arc voltage	Run
mm inch	mm inch	A	V		
		PC/2G	PC/2G		
1.0 0.039	15 0.6	130-160	19-21	Root	
		220-250	21-24	Fill	
1.2 0.045	15 0.6	130-150	17-20	Root	
		220-290	22-31	Fill	
1.4 0.052	20 0.8	170-200	20-22	Root	
		270-300	26-30	Fill	
1.6 1/16	Not recommended			Root	
	20 0.8	270-310	27-32	Fill	

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