

Schutzgase

Übersicht und Anwendungsbereiche



Verfahren	Werkstoffe	Gase			Eigenschaften							
		Produkt	Zusammensetzung	EN ISO 14175	Schweiß-/Schneidegeschwindigkeit	Spritzer	Einbrand	Mechanische Gütewerte	Schnitt-/Nahtaussehen Oxidation	Poren-Unempfindlichkeit	universelle Anwendung	Rauch- und Schadstoff-reduzierung
MAG	Alle unlegierten und niedriglegierten Stähle, wie: Baustähle, Feinkornbaustähle Schiffbaustähle, warmfeste Stähle, Einsatz- und Vergütungsstähle	Arco 18	Ar 82 % + CO ₂ 18 %	M21	●●	●●	●●●	●●	●●	●●●	●●●	●
		Arco K 8	Ar 92 % + CO ₂ 8 %	M20	●●●	●●●	●●	●●●	●●●	●●	●●●	●●●
		Argon S 8	Ar 92 % + O ₂ 8 %	M22	●●●	●●●	●	●●	●●	●	●	●●
		Arco K5 05	Ar 90 % + CO ₂ 5 % + O ₂ 5 %	M23	●●●	●●●	●●	●●●	●●●	●●	●●●	●●
		Argon He25 03	Ar 72 % + He 25 % + O ₂ 3,05 %	M22	●●●	●●●	●●●	●●●	●●	●●●	●●	●●●
		Argon K13 04	Ar 83 % + CO ₂ 13 % + O ₂ 4 %	M25	●●	●●●	●●●	●●	●●●	●●●	●●	●
	Hochlegierte Cr-, CrNi-Stähle, Sonderstähle, Duplex-Stähle, Nickel-Basislegierungen	Arco K2	Ar 98 % + CO ₂ 2%	M12	●●	●●●	●●●	-	●●	●●●	●●●	●●●
		Argon S 1	Ar 99 % + O ₂ 1%	M13	●●	●●●	●●	-	●	●●	●●	●●
		Argon S 2	Ar 98 % + O ₂ 2 %	M13	●●	●●	●●	-	●	●●	●●	●●
		Argon He15 K2	Ar 83 % + He 15 % + CO ₂ 2 %	M12	●●●	●●●	●●●	-	●●●	●●	●●	●●●
MIG	Aluminium, Kupfer, Nickel-Legierungen, dicke Nähte	Argon 4.6	Ar 99,996 %	I1	●●	-	●●	-	●●	●●●	●	●●
		Argon/Helium 80/20	Ar 80 % + He 20 %	I3	●●	-	●●	-	●●●	●●●	●●	●●●
		Argon/Helium 70/30	Ar 70 % + He 30 %	I3	●●	-	●●	-	●●	●●●	●●	●●
		Argon/Helium 50/50	Ar 50 % + He 50 %	I3	●●●	-	●●	-	●●	●●●	●●●	●●●
		Argon/Helium 30/70	Ar 30 % + He 70 %	I3	●●●	-	●●●	-	●●	●●●	●●●	●●●
WIG	Alle schweißbaren Werkstoffe	Argon 4.6	Ar 99,996 %	I1	●●	-	●●	●●	●●	●●●	●●●	●●
		Argon 4.8	Ar 99,998 %	I1	●●	-	●●	●●●	●●●	●●●	●●●	●●●
	Hochlegierte austenitische CrNi-Stähle, Nickel, und Nickel-Legierungen.	Argon W2	Ar 98 % + H ₂ 2 %	R1	●●	-	●●	-	●●●	●●●	●●●	●●●
		Argon He3 W0,8	Ar 96,2 % + He 3 % + H ₂ 0,8 %	R1	●●	-	●●	-	●●●	●●●	●●●	●●●
		Argon W6	Ar 94%+ H ₂ 6%	R1	●●●	-	●●●	-	●●●	●●●	●●●	●●●
		Argon He15 W5	Ar 80%+ He 15%+H ₂ 5%	R1	●●●	-	●●●	-	●●●	●●	●●	●●●
WP WIG	Aluminium, Kupfer, und Nickel-Legierungen	Argon 4.6	Ar 99,996 %	I1	●	-	●	-	●	●	●●	●
		Helium 4.6	He 99,996 %	I2	●●●	-	●●●	-	●●	●●●	●●	●●●
		Argon/Helium 80/20	Ar 80%+ He 20%	I3	●●	-	●●	-	●●●	●●	●●●	●●
		Argon/Helium 70/30	Ar 70%+ He 30%	I3	●●●	-	●●●	-	●●	●●●	●●●	●●
		Argon/Helium 50/50	Ar 50%+ He 50 %	I3	●●●	-	●●●	-	●●	●●●	●●●	●●●
		Argon/Helium 30/70	Ar 30%+ He 70 %	I3	●●●	-	●●●	-	●●	●●	●●●	●●●
Wurzelschutz	Vollaustenite, zur Vermeidung der wurzelseitigen Oxidation Gasempfindliche Werkstoffe Titan-stabilisierte Austenite	Formiergas 95/05	N ₂ 95 % + H ₂ 5 %	N5	-	-	-	●●	●●●	-	●●	-
		Formiergas 90/10	N ₂ 90 % + H ₂ 10 %	N5	-	-	-	●●	●●●	-	●●	-
		Formiergas 80/20	N ₂ 80 % + H ₂ 20 %	N5	-	-	-	●●	●●●	-	●●	-
		Argon 4.6	Ar 99,996 %	I1	-	-	-	●●●	●●●	-	●●●	-
		Argon W6	Ar 94%+ H ₂ 6%	R1	-	-	-	●●●	●●●	-	●●●	-
		Argon W10	Ar 90%+ H ₂ 10%	R1	-	-	-	●●●	●●●	-	●●●	-
MSG-Löten	Beschichtete und unbeschichtete Feinbleche, nicht rostende ferritische Stähle	Argon 4.6	Ar 99,996 %	I1	●●	-	-	-	●●	-	-	-
		Argon S1	Ar 99 % + O ₂ 1 %	M13	●●	-	-	-	●●●	-	-	-
		Argon S2	Ar 98 % + O ₂ 2%	M13	●●	-	-	-	●●●	-	-	-
		Argon He15 K2	Ar 83 % + He 15 % + CO ₂ 2 %	M12	●●●	-	-	-	●●●	-	-	-
Lichtbogenbolzenschweißen	Stahl Alu	Arco 18	Ar 82 % + CO ₂ 18 %	M21	-	-	●●●	-	●●	-	-	-
		Argon 4.6	Ar 99,996 %	I1	-	-	●●	-	●●	-	-	-
		Argon/Helium 70/30	Ar 70% + He 30%	I3	-	-	●●●	-	●●●	-	-	-

●●● Sehr gute Eignung des Gases | ●● Gute Eignung des Gases | ● Ausreichende Eignung des Gases