HILCO HARDMELT 620	
AWS A5.13: E Fe 5-B (mod.) EN 14700: E Fe4 DIN 8555: E 4-UM-60-ST	Rutile coated electrode for wear resistant surfacing tool steels subject to metal-to-metal wear at elevated temperatures up to 550°C. Deposit weld metal is a high speed steel (HSS). Hardness of pure weld metal is 62 HRc can be increased after tempering.
HILCO HARDMELT 638	
EN 14700: E Z Fe14	Basic coated high efficiency (205%) electrode for wear resistant surfacing parts subject to grinding abrasion and moderate impact. Hardness of pure weld metal is 60 HRc.
HILCO SUGARHARD	
EN 14700: E Fe14	Basic coated high efficiency (205%) electrode for roughening the wet mill rollers used in the sugar can crushing process. Hardness of pure deposit weld metal is 63 HRc.
HILCO PURE NICKEL	
EN ISO 1071: E C Ni-Cl 1 AWS A5.15: E Ni-Cl	Basic coated electrode for cold welding grey and malleable cast iron grades and for joining these base metals to steel, copper and copper alloys. Recommended for usage on highly contaminated cast iron grades.
HILCO NICKEL IRON	
EN ISO 1071: E C Ni Fe-1 1 AWS A5.15: E Ni Fe-Cl	Basic coated electrode for repair, construction and production welding all commercial cast iron grades.

# ALUMINIUM ALLOYS

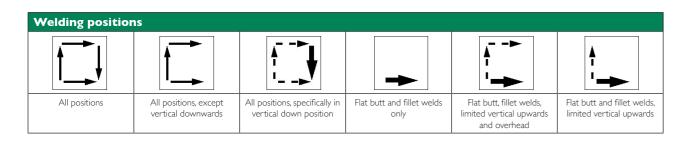
HILCO ALUMINIL Si5	
AWS A5.3: E 4043 EN ISO 18273: E AI 4043 (AlSi5) Werkstoffnr. 3.2245	The original all-purpose aluminium electrode for arc welding and brazing aluminium alloys containing up to 7% Si. Preheat at 150°C to 250°C thicker work-pieces prior to welding!
HILCO ALUMINIL Sil2	
EN ISO 18273: E Al 4047 (AlSi12) Werkstoffnr: 3.2585	Smooth welding aluminium electrode for welding aluminium castings, good colour match with base materials. Preheat thicker work-pieces prior to welding.



# COPPER ALLOYS

	HILCO BRONSIL
Γ	AWS A5.6: E CuSn-C (mod.)
	EN ISO 17777: Cu 5180B (ĆuSn7)
	Werkstoffnr, 2,1025

Basic coated tin-bronze electrode for joining and surfacing copper, copper alloys and bronze alloys. To be used for mechanical engineering and ship-building.



MIG/MAG welding wires for: mild and high tensile steels low alloy steels stainless steels aluminium & aluminium alloys copper and copper alloys	<ul> <li>TIG welding rods for:</li> <li>mild and high tensile steels</li> <li>low alloy steels</li> <li>stainless steels</li> <li>aluminium &amp; aluminium alloys</li> <li>copper and copper alloys</li> </ul>	Accessories: cutting and gouging electrodes tungsten electrodes welding cables welding machines abrasives	<ul> <li>oxy-acetylene gas welding rods</li> <li>brazing rods and fluxes for brazing</li> </ul>
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KONINKLIJKE BESCHIKKING HOFLEVERANCIER APPOINTMENT TO THE COURT OF THE NETHERLANDS URNISSEUE DE LA COUR PAR ORDONNANCE ROYALE IRCH KÖNIGLICHEN ERLASS HOFLIEFERANT DVEEDORES DE LA REAL CASA DE LOS PAISES BAJOS

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# WELDING ELECTRODES

# UN- AND LOW ALLOYED STEEL

#### **RUTILE COATED ELECTRODES**

HILCO RED EXTRA	
AWS A5.1: E 6013 EN ISO 2560-A: E 42 0 RC 11	Universal electrode for all welding positions, including vertical down. This electrode is characterised by easy handling, smooth arc transfer, easy slag removal and a finely rippled bead surface. Especially suitable for construction work where the use of one single type of electrode is permissible.
HILCO VELVETA	
AWS A5.1: E 6013 EN ISO 2560-A: E 42 0 RR 32	The quiet and easy controllable electrode, for smooth welding, especially vertical upwards. Designed for small diameter pipes, excellent X-ray quality. All-current type (AC/DC).
HILCO BROWN	
AWS A5.1: E 6013 EN ISO 2560-A: E 42 0 RC 11	Fast freezing rutile coated electrode for all welding positions, especially vertical-down. Excellent for usage on rusty, primered and contaminated steels.
HILCO VELORA	
AWS A5.1: E 6013 EN ISO 2560-A: E 42 0 RR 12	Slow freezing electrode for welding thin plate in downhand position. Spatter free type, less rework. Easy striking, even on transformers with low OCV, min. 42V.

### LOW HYDROGEN ELECTRODES

HILCO BASIC 55		
AWS A5.1: E 7016 EN ISO 2560-A: E 38 3 B 12 H10	Double coated rutile basic electrode for all position welding on both AC and DC current; except vertical down position. This electrode is characterised by easy handling, a well controllable arc, excellent root penetration, easy slag removal and excellent metallurgical properties up to -30°C.	<b>†</b>
HILCO BASIC SUPER		
AWS A5.1: E 7018-1 EN ISO 2560-A: E 42 5 B 32 H5	Universal low hydrogen electrode for all welding positions, except vertical down position. For applications where high demands on impact values (even at low temperatures, down to -40°C) are required. Operates on both AC and DC.	
HILCO BASIC		
AWS A5.1: E 7018-1 EN ISO 2560-A: E 42 5 B 32 H5	General purpose low hydrogen electrode for all welding positions, except vertical down. Smooth, quiet arc, very low spatter. easy slag removal and excellent mechanical properties down to -50°C.	
HILCO BI9CrMo		
AWS A5.5: E 8018-B2 H4 EN ISO 3580-A: E CrMo 1 B 32 H5	Basic-coated low hydrogen (HDM < 5 ml. / 100 gr. deposit weld metal) for welding low alloyed fine grain and creep resistant steels like 13CrMo4 5 up to a maximum operating temperature of 550°C.	
HILCO B20CrMo		
AWS A5.5: E 9018-B3 H4 EN ISO 3580-A: E CrMo 2 B 32 H5	Basic-coated low hydrogen (HDM < 5 ml. / 100 gr. deposit weld metal) electrode for welding Low alloyed fine grain and creep resistant steels like 10CrMo9.10 up to a maximum operating temperature of 600°C.	

#### ■ HIGH EFFICIENCY ELECTRODES

HILCO REGINA 150	
AWS A5.1: E 7024-1 EN ISO 2560-A: E 42 2 RA 53	Rutile-acid coated (recovery 160%) electrode for making x-ray quality fillet welds in the flat and horizontal position. The electrode has a smooth quiet arc, very low spatter and easily removable slag (self-releasing even in narrow angles).
HILCO REGINA 160	
AWS A5.1: E 7024-1 EN ISO 2560-A: E 42 0 RR 53	Easy-to-handle high efficiency (recovery 160%) electrode for smooth fast fillet welding in the flat and horizontal position. An all-current type (AC/DC).

#### CELLULOSE COATED ELECTRODES

HILCO PIPEWELD 6010	
AWS A5.1: E 6010 EN ISO 2560-A: E 38 3 C 21	This electrode is recommended and overhead position. Character and readily removable slag.
HILCO PIPEWELD 7010	
AWS A5.1: E 7010-P1 EN ISO 2560-A: E 42 3 C 25	This electrode is recommended in the vertical down position.Th forceful, spray type arc and read
HILCO E6011	
AWS A5.1: E 6011	Universal electrode for all weldi penetrating, easy handling, force the ideal choice for welding thro or galvanized materials.

# STAINLESS STEEL

## Corrosion and acid resistant

HILCO HILCHROME 308R	
AWS A5.4: E 308L-17	Rutile coated electrode for wel
EN ISO 3581-A: E 19 9 L R 3 2	grades like AISI 304, 304L.Typic
Werkstoffnr. 1.4316	materials (incl. higher carbon ty
HILCO HILCHROME 316R	
AWS A5.4: E316L-17	Multi-purpose electrode for we
EN ISO 3581-A: E 19 12 3 L R 3 2	resistant stainless steel grades li
Werkstoffnr. 1.4430	for all industries where superior
HILCO HILCHROME 347R	
AWS A5.4: E 347-17	Stabilised electrode for welding
EN ISO 3581-A: E 19 9 Nb R 3 2	steel grades like AISI 347, 321./
Werkstoffnr. 1.4551	All-current type (AC/DC).

# REPAIR AND MAINTENANCE

HILCO HILCHROME 307R	
AWS A5.4: E 307-16 (mod.) EN ISO 3581-A: E 18 8 Mn R 12 Werkstoffnr. 1.4370	Rutile basic coated electrode for joining dissimilar steels and difficult-to-weld steels Typical applications include joining 14Mn steels, spring steels, tool steels, and high carbon steels. This electrode is recommended for buffer layers prior to surfacing.
HILCO HILCHROME 312R	
AWS A5.4: ~E312-17 EN ISO 3581-A: E 29 9 R 3 2 Werkstoffnr: 1.4337	Rutile coated electrode which is to be considered as a problem solver for all kinds steel grades including stainless and difficult-to-weld steels. Typical applications for th WELD-ALL include joining hard manganese steels, tool steels, spring steels, bufferir as well as joining dissimilar steel grades. The electrode deposits a crack-resistant we metal with an increased ferrite content of approx. FN50.
HILCO HILCHROME 309R	
AWS A5.4: E309L-17 EN ISO 3581-A: E 23 12 L R 3 2 Werkstoffnr: 1.4332	Rutile coated electrode for welding corrosion resistant and heat resistant CrNi ste joining dissimilar metals and buffering. Typical applications include joining high-stren steels, un- and low alloyed heat treatable steels, stainless, ferritic chromium and austenitic chrome-nickel steels, austenitic manganese steels. The electrode suitable joining clad steels.
HILCO HILCHROME 309MoR	
AWS A5.4: E309MoL-17 EN ISO 3581-A: E 23 12 2 L R 3 2 Werkstoffnr. 1.4459	Rutile coated electrode for joining similar and dissimilar steels, buffering, joining hardenable and difficult-to-weld steels. Increased FN content ensuring maximum cracking resistance.
HILCO HARDMELT 600	
EN 14700: E Fe8 DIN 8555 : E 6-UM-60	Basic coated electrode for wear resistant surfacing parts of steel, cast steel and hig Mn-steel, subject to abrasion, metal-to-metal wear, impact and/or compression stre Deposit can be machined by grinding only. Hardness of pure weld deposit approx. 600 HB.

ed for all welding positions, particularly in vertical down terised by a deeply penetrating, forceful, spray type arc

ed primarily for welding high-strenght pipe butt joints he electrode is characterised by a deeply penetrating, adily removable slag.

ding positions. The electrode is characterised by a deeply eful, spray type arc and readily removable slag. E6011 is rough light to medium amounts of dirty, rusty, painted

elding low carbon 18Cr10Ni austenitic stainless steel cal applications include all industries where similar ypes) as well as ferritic 13% Cr steels are used.

elding low carbon 17Cr12Ni3Mo austenitic acid like AISI 316, 316L. Universal in applications but typical or corrosion resistance is required.

g low carbon 18Cr10NiNb (Cb) austenitic stainless Also suitable for unstabilised grades 304 and 304L.

is to be considered as a problem solver for all kinds of and difficult-to-weld steels. Typical applications for this rd manganese steels, tool steels, spring steels, buffering el grades.The electrode deposits a crack-resistant weld e content of approx. FN50.

elding corrosion resistant and heat resistant CrNi steels, uffering. Typical applications include joining high-strength at treatable steels, stainless, ferritic chromium and s, austenitic manganese steels. The electrode suitable for















