

## Classifications

EN ISO 2560-A	EN ISO 2560-B	AWS A5.5 / SFA-5.5	AWS A5.5M
E 46 5 1Ni B 4 5 H5	E5545-P2 A U H5	E8045-P2H4R	E5545-P2H4R
		E8018-GH4R	E5518-GH4R

## Characteristics and typical fields of application

Basic coated electrodes for vertical-down welds of large diameter pipelines and for structural work. Suitable for filler and cover pass welding in pipeline construction. Deposit is extremely crack resistant, and features high toughness and a very low hydrogen content. Deposition rate is 80-100% higher than for vertical up welding. The weld deposit of BÖHLER FOX BVD 85 shows an ideal combination between high strength and cryogenic toughness down to  $-50^{\circ}\text{C}$ . Special design and development work has enabled this electrode to provide exceptional striking characteristics and the avoidance of start porosity. Due to this and the good welding characteristics this special basic electrode offers easy handling even under field conditions.

Böhler FOX BVD 85 can be used in sour gas applications (HIC-Test acc. to NACE TM-02-84). Test values for SSC-test are available too.

## Base materials

S235J2G3 - S355J2G3, L290NB - L450NB, L290MB - L450MB, P235GH - P295GH  
API Spec. 5 L: A, B, X 42, X46, X 52, X 56, X 60, X 65, (X70)

## Typical analysis


	C	Si	Mn	Ni
wt.-%	0.05	0.4	1.1	0.9

## Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength $R_e$ MPa	Tensile strength $R_m$ MPa	Elongation A ( $L_0=5d_0$ ) %	Impact energy ISO-V KV J				
				20°C	-20°C	-30°C	-40°C	-50°C
u	500 ( $\geq 460$ )	560 (550 – 680)	27 ( $\geq 20$ )	170	140	120	100	65 ( $\geq 47$ )

u untreated, as welded

## Operating data

	Polarity	DC ( + )	Dimension mm	Current A
	Electrode identification	FOX BVD 85 8045-P2 E 46 5 1Ni B	3.2 × 350 4.0 × 350	110 – 160 180 – 210
	Redrying	if necessary: 300 – 350 °C / min. 2 h	4.5 × 350	200 – 240

Recommended interpass temperature  $> 80^{\circ}\text{C}$

## Approvals

TÜV (03531.), CE