

Classifications						
EN ISO 14171-A			AWS A5.17			
S 4 2 3 AR S2 Si			F7A2-EM12K / F7P2 -EM12K			
Characteristics and typical fields of application						
<p>KD50/EF200K is a wire -flux combination for submerged -arc welding of unalloyed steel grades. It is used in general purpose applications in structural steel and pipe. It can be used for single - and multi-wire welding with high welding speed using the two -run technique as well as for llet welding. The flux is donating Mn and Si to the weld pool (desoxidation) and therefore it is less sensitive for porosity issues due to dirt and rust on the plate. Most suitable for single run or 2-run procedures. Multi-run procedures s hould be limited to weld thickness of max 20 mm. For higher wall thickness EF200LT Plus or is to be preferred. Very good slag detachability and nice bead appearance.</p>						
Base materials						
General and ne grained structural steels, shipbuilding steels, pipe steels up to 4 20 MPa minimum yield s trength.						
Typical analysis of all-weld metal (wt.-%)						
	C	Mn	Si			
Wire	0.10	1.00	0.30			
Weld metal	0.06	1.60	0.75			
Mechanical properties of all-weld metal – typical values (minimum values)						
Heat-treatment	Yield strength R _e	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact work ISO -V (J) (Average value from 3 test results)		
	MPa	MPa	%	20°C	-20°C	-30°C
AW	≥ 420 (500)	≥ 540 (590)	≥ 22 (26)	≥ 70	≥ 47 (65)	≥ 47
1 hr 620°C	≥ 420 (480)	≥ 520 (570)	≥ 22 (26)	≥ 50	≥ 35	≥ 27
Operating data						
	Ø (mm)		Polarity: DC (+) / DC (-)	Redrying of flux: 300 – 350 °C / 2 hrs min.		
	2.0					
	2.5					
	3.0					
	4.0					
Approvals						
LR (3YM)						