

TENAX 35S

SINCE MORE THAN 60 YEARS!


OERLIKON

Mild steel fully basic, **low hydrogen electrode** for all position welding



Available also in VPMD vacuum pack in order to guarantee lowest Hydrogen levels.

www.lincolnelectric.eu

Weld more, no repair!



Since **more than 60 years** Tenax 35S is the most recognized electrode for high performance welding. Reliable welding performance is important in order to assure optimal quality and **consequently higher productivity**. “Welding” isn’t only the time needed to “melt” and deposit weld metal. Welding time also includes all the activities to prepare and rework after weld. Depending on thickness a typical postwelding (slag removing + grinding + repair welding) time could be optimistically estimated as 10% of time cycle related to welding. If we can reduce the postwelding time by 50% it is possible to **save even 4,5% of labor cost!**

				REDUCING POSTWELDING TIME BY 50%	THE TOTAL COST OF WELDING COULD BE REDUCED BY 4,5%		
Standard basic stick	Welding time	Labor cost	Cost of deposit	Postwelding time	Labor cost	Cost of post welding	Total cost
	[h]	[€/h]	[€]	[h]	[€/h]	[€]	[€]
	100	40	4000	10	40	400	4400
Tenax 35S	Welding time	Labor cost	Cost of deposit	Postwelding time	Labor cost	Cost of post welding	Total cost
	[h]	[€/h]	[€]	[h]	[€/h]	[€]	[€]
	100	40	4000	5*	40	200	4200

*Reduction in post welding time and cost is an estimate only and is based on the improved quality and operator confidence with a high quality basic electrode.

Thanks to the reliable arc control, easy slag removal and low spatter level Tenax 35S is well recognized by welders. **Welders know the difference!**
This is the reason why they choose Tenax 35S since more than 60 years!

- 4,5%

TENAX 35S

Tenax 35S is a mild steel fully basic, low hydrogen electrode for all position welding of a number of structural steel and all applications whenever outstanding mechanical properties are required.

Tenax 35S contains a percentage of iron powders for smoother side wall wetting and enhanced deposition rate, but still suitable for positional welding. The weld appearance is excellent and spatter levels minimal. The excellent mechanical properties also makes the electrodes suitable for critical applications in offshore, nuclear and pressure vessels as well as general construction industry. Very high X-ray quality. Available also in VPMD vacuum pack in order to guarantee lowest Hydrogen levels.



WELDING POSITIONS



CURRENT TYPE

AC/DC +/-

All-weld metal mechanical properties *

	Yield [N/mm ²]	Tensile [N/mm ²]	A [%]	Impact [J]	
				-40°C	-50°C
As welded – required	420 min.	510-590	26 min.		47 min.
PWHT 620°C x 1h	420 min.	490-560	26 min.		50 min.
PWHT 610°C ± 10°C x 3h	461	554	37		165
PWHT 610°C ± 10°C x 9h	459	551	35		87
PWHT 620°C x 12h	463	530	38	207	

*For more details or further indications, contact our local representative.

All weld metal chemical composition %

C	Mn	Si	S	P	Cu	Ni	Mo	Cr	V	Nb
0,04-0,08	1-1,5	0,2-0,5	0,015 max	0,02 max	0,08 max	0,08 max	0,03 max	0,08 max	0,025 max	0,05

TENAX 35S

AWS A5.1 E7018-1 H4R

ISO 2560-A E 42 5 B 32 H5



Examples of materials to be welded	
Steel grades/Code	Type
General structural steels	
EN 10025	S185, S235, S275, S355
Ship plates	
ASTM A A 131	Grade A, B, D, AH32 to EH40
Cast steels	
EN 10213-2	GP240R
Pipe material	
EN 10208-1	L210, L240, L290, L360
EN 10208-2	L240, L290, L360, L415, L445
API 5LX	X42, X46, X52, X60, X65
EN 10216-1	P235T1, P235T2, P275T1
EN 10217-1	P275T2, P355N
Boiler & pressure vessel steel	
EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine grained steel	
EN 10025 part 3	S275, S355, S420, S460
EN 10025 part 4	S275, S355, S420, S460

To order		
W000380285	TENAX 35S 2.00X0300XCBOX	CBOX
W000380286	TENAX 35S 2.50X0300XCBOX	CBOX
W000380289	TENAX 35S 2.50X0350XCBOX	CBOX
W000380291	TENAX 35S 3.20X0450XCBOX	CBOX
W000380293	TENAX 35S 4.00X0450XCBOX	CBOX
W000380295	TENAX 35S 5.00X0450XCBOX	CBOX
W000380312	TENAX 35S 6.00X0450XCBOX	CBOX
W000380314	TENAX 35S 2.50X0300XVPMD	VPMD
W000287341	TENAX 35S 2.50X0350XVPMD	VPMD
W000287342	TENAX 35S 3.20X0350XVPMD	VPMD
W000287343	TENAX 35S 3.20X0450XVPMD	VPMD
W000287344	TENAX 35S 4.00X0450XVPMD	VPMD
W000287345	TENAX 35S 5.00X0450XVPMD	VPMD
W000403911	TENAX 35S 3.20X0450XVPMD	VPMD
W000403910	TENAX 35S 4,00X0450XVPMD	VPMD

CUSTOMER ASSISTANCE POLICY

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