١-قائمة السلع وجدول التسليم

الطلبية المرقمة (١٥/م/س ج ن-١/٢٠١٩) تجهيز وتنصيب منظومة حرق (تصميم جديد) لافران معمل سمنت الكوفة مع تاهيل محطات تخفيض الغاز الرئيسية والثانوية

رقم الفقرة	وصف السلع	الكمية	الوحدة	مكان التسليم النهائي	فترة التجهيز بالأيام: الموعد المتوقع للتسليم	فترة التجهيز بالأيام: فترة التجهيز المقترح من مقدم العطاء (تملأ من قبل مقدم العطاء)
1	Supply and installation complete new design composition burner system for cement rotary kiln using two types of fuel (liquid & gas) with two ways primary air (axial & radial direction) which insure the following targets and suitable for general technical information in kufa cement plan:- **The targets**: 1.Reduce fuel ,power and maintenance costs. 2.Extension refractory life. 3.A plus reliability between types of fuels. 4.Improving product quality. 5.scale down emissions. 6.Superior flame shaping. 7.Suitable (mechanical ,electrical and operational) for kufa cement kiln. **Kiln general technical data as following:** •Cement rotary kiln with dimensions (5.25 * 5.75 * 175) m . •Wet process , 1500 tons / day , kiln speed 1.5 r.p.m with unex cooler. •Heat consumption (1350 – 1900) kcal/kg clinker. •Used heavy oil & gas as fuels. •The bricks used 7.2 m high alumina (as cooling zone) & 35 m magnesia (cooling & burning zone). **Oil fuel data** : •Heat value = 9600 kcal/kg , API Gravity @ 15.6 C° = 14.1. •SP- gr @15.6 C° = 0.9718 , flash point > 100 C° . •Vis.@50 C° = 292.3 c.st. , sulfur content = 4.69 wt.%. •Ash content = 0.03 wt.% , carbon residue = 10.7 wt%	2		CIF or CIP	بحدود (٤ شهر) تجهيز (١ شهر) تنصيب (١٥ يوم لكل فرن) يوم تبدأ من تاريخ • توقيع العقد (نقدي) او • التبليغ بالاعتماد	

					Gas fuel data •Calorific value 1076 Btu/ft3 , calculated molecular weight 20.60 gm / mole. •Nitrogen 0.172 mole% , carbon dioxide 2.55 mole % , methane = 81.9%. •Hydrogen sulfide 0.001 mole% , ethane = 8.4 % , propane = 3.98% •Butane = 0.585%, N-butane = 1.27 % , and others hydrocarbons.	
				2	**Supply and installation external primery air fan (25000 m3/hr &250 mbar), prefer single stage , include:** **•Inlet silencer .** **•Differential and gauge pressure measurement.** **•Frequency drives motor.** **•Frequency convweter .** **•Pipes between primery air fan and burner.** **•Control unit (located in the sub control panel).**	2
				2	Supply and installation external cooling fan (with its accessories) for emergency shut-off power, to cool the new burner design (power motor prefer less than 7.5 kw)	3
				2	Supply and installation complete burner management system (BMS) which allows the local and remote from control room.	4
				2	Supply and installation camera for burning zone with cooling system and displayer in control room.	5
				2	Supply and design overhead trolley with drawing and installation, that suitable for exiting rail. when there is any problem will appears , the supplier company should solve it.	6
				2	Rehabilitation or replacing all valves for fuel oil (oil valve train) that include replacing all (heat, pressure sensors, volumetric flow rate measuring), and also shut off valve suitable for existing air pressure. This work include checking and replacing all steam valves (that require for new burner design) with accessories.	7
				2	Rehabilitation or replacing all valves for fuel gas (gas valve train) that use for remote controlling and local operation , also replacing all (heat , pressure sensors & volumetric flow rate measuring) also replacing shut off valve suitable for existing air pressure.	8
				1	Rehabilitation or replacing all fuel gas valves in main station (two lines), that also include	9

					replacing all (heat , pressure sensors , filters and heat exchangers) this work include checking and replacing all steam heating system valves (that require for main station).	
					Supply and installation warning gas leakages system , one for gas train valve unit, another one nearby to every burners.	10
					Supply electrical and mechanical components (control , measuring and any complementary work equipment) which insure stable operation .	11
					Assemble and wiring connection for all electrical control and measuring signals to apparatuses and burner system with control room (logic system)	12
					Supply all parts (apparatuses) of new design burner system from specialized global companies in this domain (cement burner technology), which must have similar activities to our kilns attaché with offer	13
					Supplier Company should be visit the plant to inform them about the operation pattern and the technical data available.	14
					We prefer our technical staff sharing wih We prefer our technical staff sharing with all rehabilitation and installation works under your supervision.	15
					Supply all detail catalogs and engineering drawing (mechanical , electrical operation and maintenance steps) also list of spare parts showing(fast , medium and low consumption) during the period after signing the contact and before starting the installion	16
					Supply spare parts for the fast consumption parts that should be enough for one year (supplying must be during delivery period).	17
					Delivery time for all parts during four months , while the company making rehabilitation in paragraphs (7, 8 &9).	18
					Installation works and connection all parts during fifteen days for each kiln individually (stopping for kiln after kiln respectively).	19

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					Experimental operation for every kiln under company's supervisor 720 hours and don't excess than 45 days (as real steady state operation) , starting after finish works in paragraph (19).	20
					One- year warranty for all parts , starting with the completing of the pilot process when a problem or any damages does appear , the supplier company must resolve it	21
					The offer should include fully one – site training programs for operational and technical staffs (the theoretical training should be complete before experimental operation).	22

1-list of goods and delivery schedule

Tender NO: (5A/1/SOC-1/2019)Supply and installation complete new design composition burner system for rotary kiln off AL- Kufa cement plant and rehabilitation gas stations (main ,secondary)

Item No.	Goods Description	Quantity	Unit No.	Final Delivery Destination	Supplying Period (in days)	
					Estimated Delivery period	The proposed Delivery Period by Bidder (filled by Bidder)
1	Supply and installation complete new design composition burner system for cement rotary kiln using two types of fuel (liquid & gas) with two ways primary air (axial & radial direction) which insure the following targets and suitable for general technical information in kufa cement plan:- The targets: 1. Reduce fuel ,power and maintenance costs. 2. Extension refractory life. 3. A plus reliability between types of fuels. 4. Improving product quality. 5. scale down emissions. 6. Superior flame shaping. 7. Suitable (mechanical ,electrical and operational) for kufa cement kiln. Kiln general technical data as following: • Cement rotary kiln with dimensions (5.25 * 5.75 * 175) m . • Wet process , 1500 tons / day , kiln speed 1.5 r.p.m with unex cooler. • Heat consumption (1350 – 1900) kcal/kg clinker.	2		CIF or CIP	Supply PERIOD About (4 months) Installation PERIOD (1 momth) (15 days per kiln) starting from : The date of signing the contract (Cash) Or The date of advising about the (L/C)	

	• Used heavy oil & gas as fuels. • The bricks used 7.2 m high alumina (as cooling zone) & 35 m magnesia (cooling & burning zone). Oil fuel data : • Heat value = 9600 kcal/kg , API Gravity @ 15.6 C^o = 14.1. • SP- gr @15.6 C^o = 0.9718 , flash point > 100 C^o . • Vis.@50 C^o = 292.3 c.st. , sulfur content = 4.69 wt.%. • Ash content = 0.03 wt.% , carbon residue = 10.7 wt%. Gas fuel data • Calorific value 1076 Btu/ft^3 , calculated molecular weight 20.60 gm / mole. • Nitrogen 0.172 mole% , carbon dioxide 2.55 mole % , methane = 81.9%. • Hydrogen sulfide 0.001 mole% , ethane = 8.4 % , propane = 3.98% • Butane = 0.585%, N-butane = 1.27 % , and others hydrocarbons.					
2	Supply and installation external primery air fan (25000 m^3/hr &250 mbar), prefer single stage , include: • Inlet silencer . • Differential and gauge pressure measurement. • Frequency drives motor. • Frequency convweter . • Pipes between primery air fan and burner. • Control unit (located in the sub control panel).	2				

3	Supply and installation external cooling fan (with its accessories) for emergency shut- off power, to cool the new burner design (power motor prefer less than 7.5 kw)	2				
4	Supply and installation complete burner management system (BMS) which allows the local and remote from control room.	2				
5	Supply and installation camera for burning zone with cooling system and displayer in control room.	2				
6	Supply and design overhead trolley with drawing and installation, that suitable for exiting rail. when there is any problem will appears , the supplier company should solve it.	2				
7	Rehabilitation or replacing all valves for fuel oil (oil valve train) that include replacing all (heat, pressure sensors, volumetric flow rate measuring), and also shut off valve suitable for existing air pressure. This work include checking and replacing all steam valves (that require for new burner design) with accessories.	2				
8	Rehabilitation or replacing all valves for fuel gas (gas valve train) that use for remote controlling and local operation , also replacing all (heat , pressure sensors & volumetric flow rate measuring) also replacing shut off valve suitable for existing air pressure.	2				
9	Rehabilitation or replacing all fuel gas valves in main station (two lines), that also include replacing all (heat , pressure sensors , filters and heat exchangers) this work include checking and replacing all steam heating system valves (that require for main station).	1				
10	Supply and installation warning gas leakages system , one for gas train valve unit, another one nearby to every burners.					
11	Supply electrical and mechanical components (control , measuring and any complementary work equipment) which insure stable operation .					
12	Assemble and wiring connection for all electrical control and measuring signals to apparatuses and burner system with control room (logic system)					

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13	Supply all parts (apparatuses) of new design burner system from specialized global companies in this domain (cement burner technology), which must have similar activities to our kilns attaché with offer					
14	Supplier Company should be visit the plant to inform them about the operation pattern and the technical data available.					
15	We prefer our technical staff sharing wih We prefer our technical staff sharing with all rehabilitation and installation works under your supervision.					
16	Supply all detail catalogs and engineering drawing (mechanical , electrical operation and maintenance steps) also list of spare parts showing fast , medium and low consumptionduring the period after signing the contact and before starting the installion					
17	Supply spare parts for the fast consumption parts that should be enough for one year (supplying must be during delivery period).					
18	Delivery time for all parts during four months , while the company making rehabilitation in paragraphs (7, 8 &9).					
19	Installation works and connection all parts during fifteen days for each kiln individually (stopping for kiln after kiln respectivety).					
20	Experimental operation for every kiln under company's supervisor 720 hours and don't excess than 45 days (as real steady state operation) , starting after finish works in paragraph (19).					
21	One- year warranty for all parts , starting with the completing of the pilot process when a problem or any damages does appear , the supplier company must resolve it					
22	The offer should include fully one – site training programs for operational and technical staffs (the theoretical training should be complete before experimental operation).					

Tender NO: (5A/1/SOC-1/2019)

Supply and installation complete new design composition burner system for rotary kiln off AL- Kufa cement (plant and rehabilitation gas stations (main ,secondary)

IT.NO	SPECIFICATION	QTY
1	Supply and installation complete new design composition burner system for cement rotary kiln using two types of fuel (liquid & gas) with two ways primary air (axial & radial direction) which insure the following targets and suitable for general technical information in kufa cement plan:- The targets: 1-Reduce fuel ,power and maintenance costs. 2-Extension refractory life. 3-A plus reliability between types of fuels. 4-Improving product quality. 5-scale down emissions. 6-Superior flame shaping. 7-Suitable (mechanical ,electrical and operational) for kufa cement kiln. Kiln general technical data as following: • Cement rotary kiln with dimensions (5.25 * 5.75 * 175) m . • Wet process , 1500 tons / day , kiln speed 1.5 r.p.m with unex cooler. • Heat consumption (1350 – 1900) kcal/kg clinker. • Used heavy oil & gas as fuels. • The bricks used 7.2 m high alumina (as cooling zone) & 35 m magnesia (cooling & burning zone). Oil fuel data : • Heat value = 9600 kcal/kg , API Gravity @ 15.6 C^o = 14.1. • SP- gr @15.6 C^o = 0.9718 , flash point > 100 C^o . • Vis.@50 C^o = 292.3 c.st. , sulfur content = 4.69 wt.%. • Ash content = 0.03 wt.% , carbon residue = 10.7 wt%. Gas fuel data • Calorific value 1076 Btu/ft^3 , calculated molecular weight 20.60 gm / mole. • Nitrogen 0.172 mole% , carbon dioxide 2.55 mole % , methane = 81.9%. • Hydrogen sulfide 0.001 mole% , ethane = 8.4 % , propane = 3.98% • Butane = 0.585%, N-butane = 1.27 % , and others hydrocarbons.	2

2	Supply and installation external primery air fan (25000 m^3/hr &250 mbar), prefer single stage, include: • Inlet silencer. • Differential and gauge pressure measurement. • Frequency drives motor. • Frequency convweter. • Pipes between primery air fan and burner. • Control unit (located in the sub control panel).	2
3	Supply and installation external cooling fan (with its accessories) for emergency shut- off power, to cool the new burner design (power motor prefer less than 7.5 kw)	2
4	Supply and installation complete burner management system (BMS) which allows the local and remote from control room.	2
5	Supply and installation camera for burning zone with cooling system and displayer in control room.	2
6	Supply and design overhead trolley with drawing and installation, that suitable for exiting rail. when there is any problem will appears, the supplier company should solve it.	2
7	Rehabilitation or replacing all valves for fuel oil (oil valve train) that include replacing all (heat, pressure sensors, volumetric flow rate measuring), and also shut off valve suitable for existing air pressure. This work include checking and replacing all steam valves (that require for new burner design) with accessories.	2
8	Rehabilitation or replacing all valves for fuel gas (gas valve train) that use for remote controlling and local operation , also replacing all (heat, pressure sensors & volumetric flow rate measuring) also replacing shut off valve suitable for existing air pressure.	2
9	Rehabilitation or replacing all fuel gas valves in main station (two lines), that also include replacing all (heat, pressure sensors, filters and heat exchangers) this work include checking and replacing all steam heating system valves (that require for main station).	1
10	Supply and installation warning gas leakages system, one for gas train valve unit, another one nearby to every burners.	
11	Supply electrical and mechanical components (control, measuring and any complementary work equipment) which insure stable operation.	
12	Assemble and wiring connection for all electrical control and measuring signals to apparatuses and burner system with control room (logic system)	
13	Supply all parts (apparatuses) of new design burner system from specialized global companies in this domain (cement burner technology), which must have similar activities to our kilns attaché with offer	

14	Supplier Company should be visit the plant to inform them about the operation pattern and the technical data available.	
15	We prefer our technical staff sharing wih We prefer our technical staff sharing with all rehabilitation and installation works under your supervision.	
16	Supply all detail catalogs and engineering drawing (mechanical , electrical operation and maintenance steps) also list of spare parts showing fast , medium and low consumption during the period after signing the contact and before starting the installion	
17	Supply spare parts for the fast consumption parts that should be enough for one year (supplying must be during delivery period).	
18	Delivery time for all parts during four months , while the company making rehabilitation in paragraphs (7, 8 &9).	
19	Installation works and connection all parts during fifteen days for each kiln individually (stopping for kiln after kiln respectivety).	
20	Experimental operation for every kiln under company's supervisor 720 hours and don't excess than 45 days (as real steady state operation) , starting after finish works in paragraph (19).	
21	One- year warranty for all parts , starting with the completing of the pilot process when a problem or any damages does appear , the supplier company must resolve it	
22	The offer should include fully one – site training programs for operational and technical staffs (the theoretical training should be complete before experimental operation).	

٣- Drawing

Drawings List		
No. Of Drawing	Name Of Drawing	Purpose
	NO DRAWING	

٤- Test And Engineering Inspection

The Following Tests And Engineering Inspection will be executed (Fill in the schedule of tests and engineering inspections)

List of Inspections and Tests	
Line Item No	The required inspection for the tender materials are as follows
1.	Supply inspection certificate for all items from third part inspection (specialized company) confirm that items suitable for kiln data of Kufa plant

استمارة المواصفات الفنية للطلبية الاستيرادية

IT. NO	SPECIFCATION	QTY.
1.	Supply and installation complete new design composition burner system for cement rotary kiln using two types of fuel (liquid & gas) with two ways primary air (axial & radial direction) which insure the following targets and suitable for general technical information in kufa cement plan:- The targets: 1. Reduce fuel ,power and maintenance costs. 2. Extension refractory life. 3. A plus reliability between types of fuels. 4. Improving product quality. 5. scale down emissions. 6. Superior flame shaping. 7. Suitable (mechanical ,electrical and operational) for kufa cement kiln. Kiln general technical data as following: • Cement rotary kiln with dimensions (5.25 * 5.75 * 175) m . • Wet process , 1500 tons / day , kiln speed 1.5 r.p.m with unex cooler. • Heat consumption (1350 – 1900) kcal/kg clinker. • Used heavy oil & gas as fuels. • The bricks used 7.2 m high alumina (as cooling zone) & 35 m magnesia (cooling & burning zone). Oil fuel data : • Heat value = 9600 kcal/kg , API Gravity @ 15.6 C^o = 14.1. • SP- gr @15.6 C^o = 0.9718 , flash point > 100 C^o . • Vis.@50 C^o = 292.3 c.st. , sulfur content = 4.69 wt.%. • Ash content = 0.03 wt.% , carbon residue = 10.7 wt%. Gas fuel data • Calorific value 1076 Btu/ft^3 , calculated molecular weight 20.60 gm / mole. • Nitrogen 0.172 mole% , carbon dioxide 2.55 mole % , methane = 81.9%. • Hydrogen sulfide 0.001 mole% , ethane = 8.4 % , propane = 3.98% • Butane = 0.585%, N-butane = 1.27 % , and others hydrocarbons.	2

2	Supply and installation external primery air fan (25000 m^3/hr &250 mbar), prefer single stage , include: • Inlet silencer . • Differential and gauge pressure measurement. • Frequency drives motor. • Frequency converter . • Pipes between primary air fan and burner. • Control unit (located in the sub control panel).	2
3	Supply and installation external cooling fan (with its accessories) for emergency shut- off power, to cool the new burner design (power motor prefer less than 7.5 kw)	2
4	Supply and installation complete burner management system (BMS) which allows the local and remote from control room.	2
5	Supply and installation camera for burning zone with cooling system and displayer in control room.	2
6	Supply and design overhead trolley with drawing and installation, that suitable for exiting rail. when there is any problem will appears , the supplier company should solve it.	2
7	Rehabilitation or replacing all valves for fuel oil (oil valve train) that include replacing all (heat, pressure sensors, volumetric flow rate measuring), and also shut off valve suitable for existing air pressure. This work include checking and replacing all steam valves (that require for new burner design) with accessories.	2
8	Rehabilitation or replacing all valves for fuel gas (gas valve train) that use for remote controlling and local operation , also replacing all (heat , pressure sensors & volumetric flow rate measuring) also replacing shut off valve suitable for existing air pressure.	2
9	Rehabilitation or replacing all fuel gas valves in main station (two lines), that also include replacing all (heat , pressure sensors , filters and heat exchangers) this work include checking and replacing all steam heating system valves (that require for main station).	1
10	Supply and installation warning gas leakages system , one for gas train valve unit, another one nearby to every burners.	
11	Supply electrical and mechanical components (control , measuring and any complementary work equipment) which insure stable operation .	

12	Assemble and wiring connection for all electrical control and measuring signals to apparatuses and burner system with control room (logic system)	
13	Supply all parts (apparatuses) of new design burner system from specialized global companies in this domain (cement burner technology), which must have similar activities to our kilns attaché with offer	
14	Supplier Company should be visit the plant to inform them about the operation pattern and the technical data available.	
15	We prefer our technical staff sharing with our technical staff sharing with all rehabilitation and installation works under your supervision	
16	Supply all detail catalogs and engineering drawing (mechanical , electrical operation and maintenance steps) also list of spare parts showing fast , medium and low consumption) during the after signing the contact and before starting the installation.	
17	Supply spare parts for the fast consumption parts that should be enough for one year (supplying must be during delivery period).	
18	Delivery time for all parts during four months , while the company making rehabilitation in paragraphs (7, 8 &9).	
19	Installation works and connection all parts during fifteen days for each kiln individually (stopping for kiln after kiln respectively).	
20	Experimental operation for every kiln under company's supervisor 720 hours and don't excess than 45 days (as real steady state operation) , starting after finish works in paragraph (19).	
21	One- year warranty for all parts , starting with the completing of the pilot process when a problem or any damages does appear , the supplier company must resolve it	
22	The offer should include fully one – site training programs for operational and technical staffs (the theoretical training should be complete before experimental operation).	