SINHGAD TECHNICAL EDUCATION SOCIETY'S SINHGAD INSTITUTE OF TECHNOLOGY

Sinhgad Institutes (Affiliated to Savitribai Phule Pune University, Pune & Approved by AICTE)

Gat No. 309/310, off Mumbai Pune Expressway Kusagaon (Bk), Lonavala Pune – 410401 website: sit.sinhgad.edu

7.1.2: The Institution has facilities for alternate sources of energy and energy conservation measures

Sinhgad Institute of Technology takes initiative for green environment. Encouraging use of alternative energy sources for positive impact on environment is also a step in that direction. The energy usage the campus is boosting the people to use non-polluting sources to improve energy efficiency

The bill-copies of purchased for all equipment used are provided in this file

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4	LED Lighting	29

ATTESTED

(Dr. M. S. Gaikwad)
PRINCIPAL

SINHGAL INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401 TUTE OF CHANGE OF THE O

Dr. M. S. GAIKWAD
PRINCIPAL
Sinhgad Institute Of Technology, Lonavala

AFTESTED

Dr. M. S. Galkwad) PRINCIPAL

Military 21 de marie de la comissión

Tax Invoice Invoice No. e-Way Bill No. | Dated GK Energy Marketers Pvt Ltd FLAT NO.350, BLDG NO.25 LB.S. MAIN ROAD LOKMANYA NAGAR, NAVI PETH NEAR DANDEKA BRIDGE GIRCLE PUNE - 411 030 GSTIN/UIN: 27AADCG3379A1ZT State Name: Maharashtra, Code: 27 CIN: U74900PN2008PTC132926 PNGK/18-19/024 23-Oct-2018 Mode/Terms of Payment Delivery Note Other Reference(s) Supplier's Ref. PNGK/18-19/024 E-Mail: office@energymarketers.in Dated Buyer's Order No. SINHGAD INSTITUTE OF TECHNOLOGY SIT/PO/2017-18 22-Dec-2017 Delivery Note Date **GAT NO- 309/310, KUSGAON (BK),** Despatch Document No. OFF. MUMBAI-PUNE EXPRESS WAY, LONAVALA, PUNE-410401 Despatched through Destination State Name : Maharashtra, Code: 27 Terms of Delivery Disc. % Amount Description of Goods HSN/SAC Quantity Rate ber SI No. 61.904.76 KWP 6.19,047.62 85437092 10.00 KWP SOLAR ROOFTOP SPV POWER PLANT-10KWP QIP (GK ENERGY MARKETERS PVT LTD) 2.50 % 15,476,19 Output CGST MH 2.50% 15,476.19 2.50 % Output SGST MH 2.50% Total ₹ 6,50,000.00 10.00 KWP E. & O.E Amount Chargeable (in words) Indian Rupees Six Lakh Fifty Thousand Only

HSN/SAC	Taxable	Central Tax		State Tax		Total
11000000000	Value	Rate	Amount	Rate	Amount	Tax Amount
85437092	6,19,047.62	2.50%	15,476.19	2.50%	15,476.19	30,952.38
	6,19,047.62		15,476.19		15,476.19	30,952.38

Tax Amount (in words): Indian Rupees Thirty Thousand Nine Hundred Fifty Two and Thirty Eight

paise Only

Company's VAT TIN : 27720808726V Company's CST No. 27720808726C Company's Service Tax No.: AADCG3379AST001 : AADCG3379A Company's PAN

We declare that this invoice shows the actual price of the goods described and that all particulars are true

for GK Eder

This is a Computer Generated Invoice

ATTESTED

(Dr. M. S. Gaikwad) PRINCIPAL

GK Energy Marketers Pvt Ltd

FLAT NO.350, BLDG NO.25 L.B.S. MAIN ROAD
LOKMANYA NAGAR, NAVI PETH
NEAR DANDEKA BRIDGE CIRCLE
PUNE - 411 030

CIN: U74900PN2008PTC132926

SINHGAD INSTITUTE OF TECHNOLOGY

Ledger Account
GAT NO- 309/310,KUSGAON (BK),
OFF, MUMBAI-PUNE EXPRESS WAY,
LONAVALA, PUNE

1-Apr-2017 to 9-Oct-2019

Date		Particulars	Vch Type	Vch No.	Debit	Page Cred
21-3-2018	Ву	Indian Bank(C/c A/c No-6133560128)	Receipt			2,50,000.0
						2,50,000.0
	To	Closing Balance			2,50,000.00	
					2,50,000.00	2,50,000.0
1-4-2018	Ву	Opening Balance				2,50,000.0
23-10-2018	To	Sales @ 5% GST MH	Sales Maharashira (MA)	PNGK/18-19/024	6,50,000.00	
18-3-2019	By		Receipt			2,50,000.0
	By		Receipt			1,50,000.0
	To		Online Payment		2,50,000.00	
	To	Indian Bank(C/c A/c No-6133560128)	Online Payment		1,50,000.00	
	Ву	Clasias Bulgasa			10,50,000.00	6,50,000.0
	Бу	Closing Balance			10,50,000.00	4,00,000.0
1-4-2019	To	Opening Balance		_	4,00,000.00	
13-6-2019		Indian Bank(C/c A/c No-6133560128)	Receipt		•	1,50,000.0
	-	Indian Bank(C/c A/c No-6133560128)	Receipt			2,50,000.0
	,	Indian Bank(C/c A/c No-6133660128)	Payment		2,50,000,00	
		Indian Bank(C/c A/c No-6133560128)	Payment		1,50,000.00	
2-7-2019		Indian Bank(C/c A/c No-6133560128)	Receipt		/ V No. 10 No. 1	1,00,000.0
6-7-2019		Indian Bank(C/c A/c No-6133560128)	Receipt			1,00,000.0
11-7-2019		Indian Bank(C/c A/c No-6133560128)	Receipt			1,00,000.0
12-7-2019		Indian Bank(C/c A/c No-6133560128)	Receipt			1,00,000.0
					8,00,000.00	8,00,000.0

ATTESTED

(Dr. M. S. Gaikwad)
PRINCIPAL

SINHGAC INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401 HEST ED

(Dr. M. S. Sallaviell)

BANGW INSTITUTES, LEVINOROR

	100	Receipt Vou	icher			
	GKE	nergy Marke	ters Pvt Li	td		
Date: 06/07/2019	9		Rece	eipt No. 054		
Received From	Sinhgad Institut	Sinhgad Institute of Technology				
Towards		rder No- SIT/F		18 dated 22.12.2017 Installation		
Ch. Number	NA	Ref	No.	MAHBH19187464065		
Ch. Bank Name	NA					
Rupees:-	1,00,000/-	Rupees In	Nords:-	One lake Rs, Only		

For :-GK Energy Marketers Not Ltd, LBS rd, Pune :-30

		Receipt V	oucher				
	GKE	Energy Mark	eters Pvt L	td			
Date: 11/07/2019			Rec	eipt No. 055			
Received From	Sinhgad Institut	Sinhgad Institute of Technology					
Towards		Against Work Order No- SIT/PO/2017-18 dated 22.12.2017 Installatio of Solar Power pack 10Kwp					
Ch. Number	NA		ef No.	MAHBH19192021148			
Ch. Bank Name	NA						
Rupees:-	1,00,000/-	Rupees I	n Words:-	One lakh Rs Only			

Received By

For :-GK Energy Marketers Pytitid, LBS rd, Pune :-30

ATTESTED

(Dr. M. S. Gaikwad)
PRINCIPAL

		Receipt Voucher				
	GKE	nergy Marketers Pvt I	.td			
Date: 21/03/201	8	Rec	eipt No. 049			
Received From	Sinhgad Institut	Sinhgad Institute of Technology				
Towards	Against Work Order No- SIT/PO/2017-18 dated 22.12.2017 Installation of Solar Power pack 10Kwp					
Ch. Number	2569	Ref No.	NA			
Ch. Bank Name	Cosmos Coperat	tive Bank Itd				
Rupees:-	2,50,000/-	Rupees In Words:-	Two lakh Fifty Thousand Rs			
			Received By			

		Receipt Vouc	her			
	GKE	nergy Markete	rs Pvt Lt	d		
Date: 02/07/2019	9		Rece	ipt No. 053		
Received From	rom Sinhgad Institute of Technology					
Towards	Against Work Order No- SIT/PO/2017-18 dated 22.12.2017 Installat of Solar Power pack 10Kwp					
Ch. Number	NA	Ref I	No.	MAHBH19183281641		
Ch. Bank Name	NA					
Rupees:-	1,00,000/-	Rupees In W	ords:-	One lakh Rs Only		

Received

For :- GK Energy Marketers Pyt Ltd LBS rd, Pune :-30

For :- GK Energy Marketers Pvt Ltd LBS rd, Pune :-30-

ATTESTED

(Dr. M. S. Gaikwad) PRINCIPAL SINHGAD INSTITUTE OF TECHNOLOGY

Kusgaon (Bk.), Lonavala-410401

* Little arevanual (LAE) googles

		Receipt Vo	oucher			
		Energy Mark	eters Pvt Lt	d		
Date: 12/07/2019	9		Rece	eipt No. 056		
Received From	Sinhgad Institut	Sinhgad Institute of Technology				
Towards	Against Work Order No- SIT/PO/2017-18 dated 22.12.2017 Installation of Solar Power pack 10Kwp					
Ch. Number	NA	Re	ef No.	MAHBH19193094191		
Ch. Bank Name	NA					
				One lakh RS Only		

Received By

For :-GK Energy Marketers Pvt Ltd LBS rd, Pune :-30

ATTESTED

(Dr. M. S. Gaikwad) PRINCIPAL



SINHGAD INSTITUTE OF TECHNOLOGY

Applituded to Samerabar Piber Power University in Appointed by April Assembled by MIAJ and S00/310 Keypoon (50), Crit Municipal Fund to press with London Tool Fund - \$10.450.

Sinhgad Institutes

PROF. M. N. NAVALE

Founder President

DR. (MRS.) SUNANDA M NAVALE

NAMES OF BRIDE

Founder Secretory

DR M S GAIKWAD

OF BUILDINGS

Principal

Date - 22 12 2017

To, JK Energy Marketers Pvt. Little F. No. 330, B No. 25, Caround Floor, Lokomoya Nagar, LBS Main Road, Near Danidekar Bridge Ciricle, Pures 411030

> Subject -: Purchase Order for Installation of 10 kWy Rooftop Solar Power Plant under (OTP of SPPU...

Refs Your Questation dated 27 [1/2017]

50

With reference to the subject mentioned above, we are pleased to place Posttone Order for installation of 10 kW, Roctorp Solar Power Place United Systems Systems

Sr. No.	Description	Capacity (kW _e)	Last Rate per kW _F (Rs.)	Total Amoun (Rs.)
1.]	Installation of 16 kWs Rooflop Solar Pawer Plant	10.	555,000%	K-50,000-
			Total (Rs.)	6,50,000 -

180: Six Usen Fifth Thomassacchus)

Terms and Conditions:

Lochmen Specification

As no SPR NA AVETAS Dated Dr 1982011

Dilygos

US! Including

3. Payment

Rs. 2.50(500). Ally pice and Baltings on satisfactory installation and

Inspection.

4. Installation

Within 30 days after receipt of P. O.

5. Product warranty

5 years and 25-year linear power output warrenty on PV modules

Thanking your

Yourshinesply.

Founder President - Vice President STES ATTESTED

(Dr. M. S. Gaikwad)

SINHGAL INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavale-410401

Dr. M. S. Gallowad)

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SINHGAD TECHNICAL EDUCATION SOCIETY

(Rogd, No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

10/16, Erandwane, Smt. Khilare Marg, Off. Karve Road, Pune - 411 004. Telefax : (020) 2545 4008 Email : stes@sinhgad.edu

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D.

FOUNDER SECRETARY

Date :- 16.12.2008

P.O.No.H-135 /08-09

To, Annut Urla M-1, Nirant Colony, Bibyewadi.

Sub:- Supply and Installation of Solar Heating System for Hostel building (96 rooms) for Sinhgad Technical Education Society at Gat. No. 320, Kusgaon, Lonavala.

Sir,

Rajgad Hostel

This has reference to your quotation PRO./08-09/STES/3 dated 26.11.2008 and subsequent discussion you had with our Project Manager and we are pleased to place an order as per details given herebelow.

Sr. No.	with our Project Manager and we are please Description	Unit	Qty.	In (Rs.)	In (Rs.) 16,50,000.00
	Supply and Installation of Solar Water Heating System for 12000 Lpd Solar Water Hating System (As per	Nos.	01	16,50,000.00	
	specifications given in Annexure - I)		7		16,50,000.0

(Rupees Sixteen Lacs Fifty Thousand Only)

Terms And Conditions

1. Price

: Above prices are for supply and installation of the system including all piping at

Lonavala Campus.

2. Taxes

: Inclusive of all taxes duties and any other levies.

3. Completion: Immediate.

4. Warranty

: 7 years from the date of installation.

5. Payment

: The payment shall be made on satisfactory completion of the work and certification of

the bill by our Engineer.

6. Billing

Bill to be raised in favour of Sinhgad Technical Education Society at Lonavala.

Thanking you,

Yours faithfully

M.N.NAVALE PRESIDENT

(Dr. M. S. Gaikwad)

PRINCIPAL

Technical Specifications

SWHS of 12000 Lpd @ 60° C

Capacity : 12000 Lpd per SWHS

No of SWHS: 2000 Lpd x 06 Nos.

Output

Temperature : 60°C

Type of SWHS: Gravity - flow Tank : Insulated S.S. Tank

BIS approved & laser/ ultrasonic welded collector panel 96 Nos.

Tank stands 06 Nos. Collector Support:

Cold water piping: G.l. 1" x 5 mtr. x 06 Nosca 30

G.I. 1/2" x 6/mir. x 06 Nos.

System piping: G.I. 1" x 20 mtr. x 06 Nos.

Theres in Utility piping: KiTEC: "x" x 35 mtr. x 06 Nos. " 100

KiTEC: 1/2" x 70 mtr. x 06 Nos.

: 1/2" x 96 Bathrooms Bib cocks

Collector Panel

Make : BIS - approved, Branded

: Cu fins-Cu pipes Type

: LASER Welding

: Selective -absorption coating Absorber

Coating

: Powder coated Finish

: BIS-approved, as per IS:12933 Certification

Collectors Supports

: Frame -M.S. Angle 35mm x 35mm x 4mm thick. Material

M.S. Angle 20mm x 20mm x 3mm thick.

: Red oxide primer, black finish paint. Finish

Tank

: 2000Ltr. Capacity

: Horizontal, depressurized Type

: Ø 1000mm x 2500 mm L Dimensions : Conical

Ends ; S.S. 304, JINDAL make / imported Material

Shell-14SWG/2mm; Conlcal ends-14SWG/2mm: 2000Ltr

: S.S.304 End fittings

TIG Welding : Aluminum 245WG, HINDALCO/BALCO-make

Cladding

Contd...2

(Dr. M. S. Gaikwad) PRINCIPAL

Insulation

Sacrificial

: Rockwool, density 48 kg/m3, 100 mm thickness : Aluminum Ø 12.5 mm (Useful only upto hardness of 100 mg/Ltr.)

Anode

Tank Stand

: Tank legs – M.S. Angle 50mm x 50mm x 5mm thick; Material

Tie brace- M.S. Angle 35mm x 35mm x 5mm thick

Saddle support-M.S. flat 100mm x 6mm thick

Base Plate - 75mm x 6mm thick

Finish

- : Red oxide primer , black finish paint.

old piping & System piping

Material

: G.I. 'B' class, galvanized as per IS:1239

Make

: B.I.S. - approved (I.S.I. mark)

Pipe fittings : B.I.S.-approved (I.S.I. mark)

Insulation (for: Rockwool pipe section, density 144 kg./m3, 25mm thickness

System piping)

Utility Piping

: Multi-layered composite (Aluminum/ Polyethylene composite) Material

Make

: KiTEC PR PL (Plumbing-grade), as per BS 7291:part I:1990

Pipe fittings

: KiTEC composite compression fittings-internal sealing

ATTESTE

(Dr. M. S. Gaikwad) PRINCIPAL



SINHGAD TECHNICAL EDUCATION SOCIETY

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

19/15, Erandwane, Smt. Khilare Marg, Off. Karve Road, Pune - 411 004. Telefax : (020) 2545 4008 Email : stes@sinhgad.edu

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D. FOUNDER SECRETARY

Date: 23.11.2009

P.O.No.H-119 /09-10

To, Chaitanya Saur Urja 181, Shop No. 7, Nav Prassana Hsg. Soc., Opp. Hotel Janjira, Navi Peth,

Sub:-Provision of Solar Water Heating System for Hostel at Kusgaon, Lonavala.

Sir.

Propregad & Toranged Hortel

This has a reference to your quotation no. Ud/inth/067rev/09 dated 06.11.2009 and subsequent discussion you had with our Project Manager and we are pleased to place work order for the above mentioned job at the rates quoted by you.

The work is to be executed to the entire satisfaction of the undersigned and adhering to the specifications stipulated in the Annexure I. The work is to be completed within the period of 03 months i.e. by 23rd February 2010.

The undersigned, agrees with the estimated cost of Rs.51,10,840.00 (Rupees Fifty One Lacs Ten Thousand Eight Hundred Fourty Only.). as per details given in Appendix 'A'. However, the payment shall be made as per the actual measurements jointly recorded and accepted.

Please return copy of this Work order with Annexure - I duly signed in token of your acceptance.

Thanking you,

Yours faithfully,

M.N.NAVALE PRESIDENT

Encl: Appendix 'A'

131/12

ATTESTED

PRINCIPAL

SINHGAL INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401

copyfor into n.a. to

1) Civil Enpineer Shi Vasekavsis
2) Electoical Ing. Shi Hagaankarsin
2018 000

Sr.	Description	Unit	Qty.	Rate In (Rs.)	Amount In (Rs.)
No.		Job	01	48,68,500.00	48,68,500.00
1	Supply, installation and commission of 36000 LPD standard Thermosyphon Non HHC, Non pressuriesed type solar water heating system @60° C consisting of 36 No x 1000 Ltr. insulated SS 304 hot water storage tanks (12on each building) 288 Nos. TBP make BIS approved solar flat collectors (96 on each building) Mounting stand for tanks and supports for collectors. Tempreature gauge, strainer, sacrifical anode, heating element 3kwx3 Nos.	Joo	01		
	for each tank Ball valve – 1 No Grouting of collector and tank legs etc. complete as per detailed specifications given in your quotation Xerox copy which is attached at Annexure to Appendix 'A'	*			
2	MS frame work for collectors and fixing of complete system against wind loads	Kg.	3462	70.00	2,42,340.00
					51,10,840.00

(Rupees Fifty One Lacs Ten Thousand Eight Hundred Fourty Only.)

ATTESTED

(Dr. M. S. Gaikwad)
PRINCIPAL

SINHGAC INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401

ATTESTED

Dr.M. S. Gallowau)

Terms and Conditions

- 1. Rate quoted include supply, install and commissioning of the system satisfactorily. Hot water with adequate pressure shall be available at all the bathrooms at a time. Also the rate quoted include all taxes, freight and insurance except octroi. No octroi is applicable at Kusgaon, Lonavala.
- Completion period: 3 months from the date of work order.
- Water and electricity shall be provided by STES.
- 4. Civil work for grouting shall be provided by STES.
- Available accommodation for storage shall be provided by STES.
- 6. Payment: 10% with work order as advance.
 70% against the delivery of material
 20% On completion and commission of the system satisfactorly.
- Gaurantee: 60 months from the date of completion of installation except glass panel.

Thanking you,

Yours faithfully

M.N.NAVALE PRESIDENT

ATTESTED

(Dr. M. S. Gaikwad)
PRINCIPAL

SINHGAL INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401

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SINHGAD TECHNICAL EDUCATION SOCIETY

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

19/15, Erandwane, Smt. Khilare Marg, Off Karve Road, Pune - 411 004.

Telefax: (020) 2545 4008 E-mail: stes@sinhgad.edu Website: www.sinhgad.edu

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT

P.O.No. - 180 / 10-11

DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D. FOUNDER SECRETARY Date:- 13.09,2011

To,

Racold Thermo Ltd. Chakan Talegaon Road.

Chakan Dist.,

Pune

Sub: Supply and Installation of Solar Water Heating System at our Lonavala Campus.

longed hestel Konni Godowani, Indragani Sir,

This has reference to your quotation No. Nil dated 27.11.2010 and subsequent discussion you had with our Project

Sr. No.	r. We are pleased to place an order as per details given Description	Unit	Qty.	Rate Per Unit (Rs.)	In (Rs.)
1	Supply and Installation of Solar Water Heating System including plumbing: A) 110 room Hostel Bldg (3 Bldgs, 13200 Ltr. each) B) 88 room Hostel Bldg (1Bldg, 11000 Ltr. each) Details of system, scope of work, specifications etc shall be as per Appendix-A enclosed Total Amount	Lit.	39600	127.00 127.00	50,29,200.00 13,97,000.00 64,26,200.00

(Rupees Sixty Four Lacs Twenty Six Thousand Two Hundred Only.)

Terms and Conditions

1. Price

: Above prices are for supply and installation of the system including all piping.

2. Taxes

: Inclusive of all taxes.

3. Warranty

4. Payment

: 7 years from the date of Installation. : An advance of 10% shall be paid on accepting the order. 75% of amount will be paid on receipt of 100% materials at site duly certified by STES engineer. 15% of amount will be paid only after

installation.

Note- Our P.O. No.333/10-11 dt. 03.03.2011 be treated as cancelled

Please sign the duplicate copy as token of your acceptance.

Thanking you.

Yours faithfully

M.N. NAVALE PRESIDENT Encl: Appendix 'A'

(Dr. M. S. Gaikwad) PRINCIPAL

TECHNICAL SPECIFICATIONS

	Solar	Flat Plate Collector - Omega Type
1	Collector design type	Italian design- screw less construction for durability
	Type of absorber	Selective Black chrome with Nicket Undercoat
	No. of Risers	10 risers
1	Riser Tube	Copper tube dia 12.5mm x 0.55mm thk.
\$	Fin Material	A10.50 mm thick
5.	Header Tube	Copper tube dia 25.4mm x 0.72mm thk x1120mm length
7	Size of collector	2060 x 1055 x100 mm
8	Glass	Thoughened glass 4mm thick
9	Transmittance of glass	Up to 87%
0	Solar Absorptivity	0.966
1	Solar Emmisivity	0.12
12	Frame Material	Aluminium -PU coated
13	Collector Body	Box Type Structure
14	Insulation	Class appel and Rock wool
15	Insulation Thickness	Back Insulation -50mm thick, Side Insulation -25mm thick
16	Insulation Thickness	Back Insulation -50mm thick, Side Insulation -25mm thick
17	Dry Weight	50 kg
18	End Connections	Free Brass serrated couplings dia 25mm
19	Hardware	Stainless Steel -SS 304
20	Back Al. reflector	Aluminum reflector foil -50 micron this.
21	Side Al reflector	Aluminium reflector foil -100 micron thik
22	Testing Pressure	6 bar
23	Efficiency	More than 77 %
24	Grommel	EPDM
25	Glass Beeding	LPDM
26	I No. of collectors	1No.per 125Lit.

** Guarantee-7 years replacement guarantee on all Omega Collectors

	Tank (SS	304L/Rock wool / Aluminium cladding)
1	Insulation Material	Rock wool 100mm thick
2	Waterproof Covering	Aluminum Cladding
3	Inner Container	SS 304L 2mm thick
4	Cladding Material	Al-24 SWG

ATTESTED

Employer

(Dr. M. S. Gaikwad)

SINHGAL INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401 Contractor

PRICING AND SCOPE OF SUPPLY

GRAVITY CIRCULATION SYSTEM	Flat Plate Type	Flat Plate Type	
Collector Type		SS Tank	
Tank Type	SS Tank	88 Nos.	
No.of Rooms	110 Nos.	88x4 Nos.=352 Nos.	
Total No. Students	110x4 Nos=440 Nos.	30Lit	
Hot water per Student	30Lit	352x30=10560 LPD=R/O	
System Capacity LPD	440x30= 13200 LPD	11000LPD	
	2400 LPD x 4 = 9600LPD	2000 LPD x 4 =8000 LPD	
System Divided into	1800 LPD x 2 = 3600LPD	1500 LPD x 2 ± 3000 LPD	
		Rs.127.00/Lit	
Rate per Liter inclusive of Complete Plumbing of the System & Hostel	Rs.127.00/Lit		
Utility	0001	76 Nos.	
No. of Collectors	92Nos		

Solar Tank, Solar Collector Panles, Stand for Solar Collector Panles & Solar Tank, Temperature Gauge, Electrical Backup, Tank to Pnel Plumbing, Inlet Plumbing to solar System, outlet Plumbing to Solar System. Transportation, Lifting of the System, System Installation & Commissioning.

(Dr. M. S. Gaikwad) PRINCIPAL

PLUMBING BREAKUP FOR LONAVALA CAMPUS

		Utility
Pipe Size	Pipe Type	Intlet & Outelt Plumbing
2532 (1.25")	Kitec	Outlet Plumbing
2025 (1") Kitec		Outlet Plumbing
1620 (3/4")	Kitec	Outlet Plumbing
1216 (1/2")	Kitec	Airvent Pipe
1/2"	GI+Rockwol +AI Cladding	System Plumbing Tank-Panel
1"	GI+ Rockwol +Al Cladding	Udlity
Valve Size	Valve Type	To Prevent water mixing
Y2**	NRV at the Intler of Bathroom	To prevent back flow from syster
1.25"	NRV at the Intler of System	To turn system on/off
1.25"	Ball Valve	To Show temperature
	Temperature Guage	To heat water in rainy season
3 Kw	Electrical Backup	To remove air trapped in Panels
1	Air Akeys	

Duct Layout

2025 (1") 5th Flr

2025 (1") 4th Flt

1620 (3/4") 3rd Flr

1620 (3/4") 2nd Flr

1216 (1/2") 1ª Flr

Terrace Line Details

Inlet Line

2532 (1.25")

Main Header Line

2532 (1.25")

Divded into two line 2025 (1")

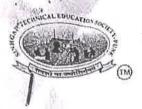
Employer

Contractor

ATTESTED

(Dr. M. S. Gaikwad)

PRINCIPAL



SINHGAD TECHNICAL EDUCATION SUCIETY

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

19/15, Erandwane, Smt. Khilare Marg, Off Karve Road, Pune - 411 004.

Telefax: (020) 2545 4008 E-mail: stes@sinhgad.edu Website: www.sinhgad.edu

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT

DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D.

FOUNDER SECRETARY

Date :- 13.09.2011

P.O.No.- 182 / 11-12

To, Racold Thermo Ltd. Chakan Talegaon Road. Chakan Dist., Pune

Sub: Supply and Installation of Solar Water Heating System for 96 rooms Hostel, (G+3 floors) building at Vishalguel hotel our Lonavala Campus.

Sir,

This has reference to your quotation No. Nil dated 04.05.2011 and subsequent discussion you had with our Project

Sr. No.	er.We are pleased to place an order as per details given Description	Unit	Qty.	Rate Per Unit (Rs.)	Amount In (Rs.)
Supply and Installation for 12000 Lpd S Heating System (As per Appendix'A') Total Amount	Supply and Installation for 12000 Lpd Solar Water	Ltrs.	12000	127.00	15,24,000.00
	(As per Appendix'A')				15,24,000.00

(Rupees Fifteen Lacs Twenty Four Thousand Only.)

Terms and Conditions

1 Price

: Above prices are for supply and installation of the system including all piping.

2. Taxes

Inclusive of all taxes.

Warranty

: 7 years from the date of Installation for solar panels and 1 year for Tanks.

4. Payment

: 80 % of amount shall be paid on receipt of 100% materials at site and balance 20% of amount

will be paid only after installation & satisfactory commissioning the system.

Note- Our P.O. No.54/11-12 dt. 10.06.2011 be treated as cancelled.

Please sign the duplicate copy as token of your acceptance.

Thanking you.

M.N. NA VALE

PRESIDENT Encl: Appendix - 'A'

hfully

ATTESTE

(Dr. M. S. Gaikwad) PRINCIPAL

TECHNICAL SPECIFICATIONS

) 1 2 3 1 4 5 6 7 8	Capacity of main storage tank Material of Construction No. of Solar Collectors Insulation material Thickness of insulation Density of insulation Insulation cover	2000 Ltr. x 6 Nos/ SS304L/ 2mm thick. 14 Nos Per Tank, "RACOLD" make omega type Rock wool 100mm 48kg/meter cube
) 1 2 3 1 4 5 5 7 8	No. of Solar Collectors Insulation material Thickness of insulation Density of insulation Insulation cover	14 Nos Per Tank, "RACOLD" make omega type Rock wool 100mm 48kg/meter cube
) 1 2 3 3 1 4 5 5 7 7 8	Insulation material Thickness of insulation Density of insulation Insulation cover	Rock wool 100mm 48kg/meter cube
) 1 2 3 3 4 5 5 7 8	Thickness of insulation Density of insulation Insulation cover	100mm 48kg/meter cube
) 1 2 3 3 4 5 5 7 8	Density of insulation Insulation cover	48kg/meter cube
) 1 2 3 3 1 4 5 6 7 8	Insulation cover	48Kg/meter cure
3 1 5 5 7 7 8	A CONTRACTOR OF STREET	Lateralisium Messo
) 1 2 3 3 4 5 5 5 7 8		Aluminium 24swg
)	Welding	TIG welding Italian design- screw less construction for durability
3 3 4 5 5 7 8	Collector design type	Selective Black chrome with Nicket Undercoat
2 3 4 5 6 7 8	Type of absorber	
3 4 5 5 7 8	No. of Risers	10 risers
1 5 6 7 8	Riser Tube	Copper tube dia 12.5mm x 0.55mm thk.
5 5 7 8	Fin Material	At 0.50 mm thick Copper tube dia 25.4mm x 0.72mm thk x1120mm length
5 7 8	Header Tube	Copper tube dia 25.4mm x 0.72mm dia x1120mm 75.8
7	Size of collector	2060 x 1055 x100 mm
S	Glass	Thoughened glass 4mm thick
	Transmittance of glass	Up to 87%
	Solar Absorptivity	0.966
9	Solar Emmisivity	0.12
0	Frame Material	Aluminium –PU coated
1	Collector Body	Box Type Structure
2	Insulation	Glass wool and Rock wool
3	Insulation Thickness	Back Insulation -50mm thick, Side Insulation -25mm thick
4	Insulation density	48kg/mtr cube
5	Dry Weight	50 kg
6	End Connections	Free/ Brass serrated couplings dia 25mm
7	Hardware	Stainless Steel -SS 304
8	Back Al. reflector	Aluminium reflector foil -50 micron thik
9	Side Al reflector	Aluminium reflector foil -100 micron thik
0	Testing Pressure	6 bar
1	Efficiency	More than 77 %
13	Grommel	EPDM

Internal plumbing between panel and solar tank, inlet plumbing to solar tank, outlet plumbing from solar tank to utility using kitec make pipes only.

Employer

ATTESTED

Quit ho

Contractor

(Dr. M. S. Gaikwad)
PRINCIPAL





SINHGAD TECHNICAL EDUCATION SOCIETY

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

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Telefax: (020) 2545 4008 E-mail: stes@sinhgad.edu Website: www.sinhgad.edu

DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D.

FOUNDER SECRETARY

Date: - 07.01.2016

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT

P.O.No.H- 154 /15-16

RenXSol Ecotech Private Limited B-2/5, Ganga Residency Hadapsar, Pune: - 411 028

Sub:- Supply and Installation of Solar Water Heating System for Sinhgad Technical Education Society at Lonavala. Pernhalgad Boys Hoste

Sir,

This has reference to your quotation No. Nil dated 07.01.2016 and subsequent discussion you had with our Project Manager and we are pleased to place an order as per details given herebelow.

Sr. No.		Unit	Qty.	Rate In (Rs.)	Amount In (Rs.)
1	Supply and Installation of Solar Water Heating System for 1000 Lpd Solar Water Hating System (As per Annexure - I)	Ltrs.	10000	147.00	14,70,000.00
	Total Amount				14,70,000.00

(Rupees Fourteen Lacs Seventy Thousand Only.)

Terms And Conditions

1. Price

: Above prices are for supply and installation of the system including all piping.

2. Taxes

: Inclusive of all taxes.

3. Warranty: 7 years from the date of installation.

4. Payment : The payment shall be made on satisfactory completion of the work and

certification of the bill by our Engineer.

Thanking you,

ours faithfully

M.N.NAVALE PRESIDENT

(Dr. M. S. Gaikwad) PRINCIPAL



Sinhgad Institutes

SINHGAD TECHNICAL EDUCATION SOCIETY

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

19/15, Erandwane, Smt. Khilare Marg, Off Karve Road, Pune - 411 004.

Telefax.: (020) 2545 4008 Emall: stes@sinhgad.edu Website: www.sinhgad.edu

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D. **FOUNDER SECRETARY**

P.O.No. 168/16-17

Date: - 18.01.2017

To. Renxsol Ecotech Private Limited B-2/5, Ganga Residency, Hadapsar, Pune - 411 028

Sub :- Supplying, Installing, Testing and Commissioning of Solar Water Heating System for new hostel of STES at Kusgaon - Lonavala.

This has reference to your quotation no, Nil dated 16.01.2016 and subsequent discussion you had with our Project Manager. We are pleased to place an order as per details given below:

.Sr. No.	Description of Items	Unit	Qty.	Rate In (Rs.)	Amount In (Rs.)
1	Supplying, Installing, Testing and commissioning of Solar Water Heating System for 12000 litres capacity as per the scope and specifications given in Annexure I attached	Ltrs.	12000	147.00	17,64,000.00
m	Total Amount				17,64,000.00

(Rupees Seventeen Lacs Sixty Four Thousand Only.)

Terms and Conditions

1. Price

: Above prices are for Supplying, Installing, Testing and commissioning of Solar Water Heating System including cold and hot water piping upto each bathroom

including bibcock.

2. Taxes

: Inclusive of all taxes, duties and transportstation.

3. Completion: 2 months from the date of P.O.

4. Warranty

: 7 years from the date of installation.

5. Payment

: 50% advance with Purchase Order and balance after satisfactory completion of

the work and certification of bill by our Engineer.

Thanking you,

Yours faithfully

M.N.NAVALE PRESIDENT

Encl - Annexure - I

(Dr. M. S. Gaikwad) PRINCIPAL

Annexure-I

1. Scope:

The scope of work includes design, supply, install, testing and commissioning of Solar Water Heating System of 12000 liters capacity including solar panels, storage tanks and cold and hot water piping upto each bathroom including 15mm CP Bibcock of reputed make. The cold water piping shall be of class 'B' GI pipe and hot water piping shall be kitec piping as per standard. Both cold water and hot water piping shall be of adequate size so as to give desired pressure at the user end.

Storge tank

ii) Capacity of each tank

iv) Diamensions

vi) Insulation cover

vii) Welding

3. Collector:

i) Total number

ii) Type iii) Size

iv) Absorptivity

v) Emissivity

vi) Absorber Coating vii) Frame material viii) Insulation ix) Glazing

x) Grommet xi) Glass Beeding xii) Hard ware xiii) Finish

4. Piping:

i) Cold water supply

ii) Hot water supply

5. Support: Structure

2. Hot water: i) Total number of Tanks

iii) Material for construction

v) Insulation

96 Nos.

Cu-Cu 2000mmx1000mmx95mm.

SS 304L

As required

48kg/cu mtr.

TIG Welding

Aluminium 22 SWG

> 0.95 < 0.12

Ultrasonic with Selective Coating Extruded Aluminium, 16swg Rock wool/ Fiber glass wool

4 Nos. (& HOS) -3000 litre Horizontal 1500

Rock wool, 100mm thick of density

Toughened glass **EPDM EPDM**

SS304 Powder Coated

GI class'B'

kitec self Insulated

MS ISA/ISMC uly painted with one primer and 2 coats of bank paint

6. Ball valve: i) Material

i) Material

ii) Seat iii) Trim

iv) End connection

v) Make

Gun Metal/ Brass

PTEE seat

Alloy ball (Nickel coated) Screwed female BSP thread

ISI Make

Contd....2

(Dr. M. S. Gaikwad) PRINCIPAL

7. Design Parameters:

8. Scope of STES:

i) Solar Radiation

ii) Efficiency of Collector iii) Ambient Temperature of 70% 25deg.C

cold water

iv) Sunshine hours average per day :

5/6 hr. 60 deg. C

v) Output hot water temperature at

Normal flow

vi)Operating pressure of system

On gravity flow

1000 watts/Sq.mtrs

vii) Operation

i) Safe Storage facility for material ii) Eleritical power free of cost.

Employer

Contractor

ATTESTED

(Dr. M. S. Gaikwad) PRINCIPAL





SINHGAD TECHNICAL EDUCATION SOCIETY®

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

19/15, Erandwane, Smt. Khilare Marg, Off Karve Road, Pune - 411 004.

Telefax: (020) 2545 4008 E-mail: stes@sinhgad.edu Website: www.sinhgad.edu

PROF. M. N. NAVALE M.E. (ELECT.) MIE., MBA. FOUNDER PRESIDENT DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D. FOUNDER SECRETARY

P.O.No.27 /15-16

Date: - 23.06.2015

To, NESPAL Air Water Heater Pvt. Ltd. Plot no. A-51, Five star Industrial Area, M.I.D.C. Shendra, Aurangabad- 431010.

Sub: Provision of Solar Air Water Heater for Purandar Hostel at STES Kusgaon-Lonavala. (2000 litres/day).

Sir,

This has reference to your quotation No. MH/PS/0515/18/02dated 2.05.2015 and discussions you had with our Project Manager and we are pleased to place an order for the above-mentioned work as per details given here below.

Sr. No.	Description of Items	Unit	Qty.	Rate In (Rs.)	Amount In (Rs.)	
1	Providing, Testing and Commissioning Solar Air water heater System including connection to each bathroom including bib cock. Capacity 2000 litres/day as per specification given in your quotation		1	3,75,000.00	3,75,000.00	
	Total Amount				3,75,000.00	

(Rupees :- Three Lacs Seventy FiveThousand Only.)

TERMS AND CONDITIONS

1. Price

: Rates are inclusive of all taxes.

2.Completion

: Three Weeks from the date of work order...

3. Transportation

: At actual.

4. Warranty

: One year from the date of installation.

5. Payment

: The payment shall be made on satisfactory completion of the work and

certification of the bill by our Engineer.

Thanking you,

Yours, faithfully

M.N. NAVALE PRESIDENT

ATTESTED

(Dr. M. S. Gaikwad)



BLACKT ELECTROTECH

PLOT NO 33, MAHADEO NAGAR. AKOLI ROAD, AMRVATI Maharashtra 444605 India GSTIN 276WNPD2719K1ZA

Tax Invoice

BT5428

Balance Due Rs.0.00

Bill To

Sinhgad Institute of Technology, Lonavala

Pune MH

GSTIN 27AABTS9900QIZS

invoice Date:

22/09/2021

Terms:

Advance

Due Date:

22/09/2021

Place Of Supply: Maharashtra (27)

#	Item & Description	HSN/SAC	Qty	Rate	CGST	SGST	Amount
1	Photosensitive PIR Device Celling type : (BT31C)	903180	13.00	290.00	339.30 9%	339.30 9%	3,770.00
						Sub Total	3,770.00
					C	GST (9%)	339.30
					S	GST (9%)	339.30
						Total	Rs.4,448.60
					Payme	nt Made	(-) 4,448.60
					Bala:	nce Due	Rs.0.00

Notes

Looking forward for your business.

BLACKT ELECTROTECH

Terms & Conditions

Terms & Conditions

1. Payment term 100% advance.

2. Rates based on current USD.

Rates based on current USD.
 Client is responsible for GST details, company will not be responsible if any problem comes; please check.

PRINCIPAL



Tax Invoice

BT5452

Balance Due Rs.4,106.40

BLACKT ELECTROTECH

PLOT NO 33, MAHADEO NAGAR, AKOLI ROAD, AMRVATI Maharashtra 444605 India GSTIN 278WNPD2719K1ZA

BILLTO

Sinhgad Institute of Technology, Lonavala

Pune MH

GSTIN 27AABTS9900QIZS

Invoice Date:

24/09/2021

Terms:

Advance

Due Date:

24/09/2021

Place Of Supply: Maharashtra (27)

#	Item & Description	HSN/SAC	Qty	Rate	CGST	SGST	Amount
*	Photosensitive PIR Device Celling type : (8T31C)	903180	12.00	290,00	313.20 9%	313.20 9%	3,480.00
						Sub Total	3,480.00
					C	GST (9%)	313.20
					S	GST (9%)	313.20
						Total	Rs.4,106.40
					Bala	ince Due	Rs.4,106.40

Notes

Looking forward for your business.

BLACKT ELECTROTECH

Terms & Conditions

Terms & Conditions

1. Payment term 100% advance.

2. Rates based on current USD.

3 Client is responsible for GST details, company will not be responsible if any problem comes; please check.

ATTESTED

(Dr. M. S. Gaikwad)



BLACKT ELECTROTECH

PLOT NO 33, MAHADEO NAGAR AKOLI ROAD, AMRVATI Maharashura 444605 GSTIN 27BWNPD2719K1ZA

Tax Invoice

BT5438

Balance Due Rs.0.00

Bill To

Sinhgad Institute of Technology, Lonavala

Pune MH

GSTIN 27AABTS9900QIZS

Invoice Date:

23/09/2021

Terms:

Advance

Due Date:

23/09/2021

Place Of Supply: Maharashtra (27)

MARKET							
#	item & Description	HSN/SAC	Qty	Rate	CGST	SGST	Amount
1	Photosensitive PIR Device Ceiling type : (BT31C)	903180	12.00	290.00	313.20 9%	313.20 9%	3,480.00
						Sub Total	3,480.00
					C	GST (9%)	313.20
					S	GST (9%)	313.20
						Total	Rs.4,106.40
Series .					Payme	ent Made	(-) 4,106.40
					Bala	nce Due	Rs.0.00

Notes

Looking forward for your business.

Terms & Conditions

Terms & Conditions

1. Payment term 100% advance.

2. Rates based on current USD.

ATTESTED onsible if any problem comes; please check. 3. Client is responsible for GST details, company will

> (Dr. M. S. Galkwad) PRINCIPAL



BLACKT ELECTROTECH

PLOT NO 33, MAHADEO NAGAR, AKOLI ROAD, AMRVATI Maharashtra 444605 GSTIN 278WNPD2719K1ZA

Tax Invoice

BT5425

Balance Due Rs.0.00

Bill To

Sinhgad Institute of Technology, Lonavala

GSTIN 27AA8TS99000HZS

Invoice Date:

21/09/2021

Terms:

Advance

Due Date:

21/09/2021

Place Of Supply: Maharashtra (27)

#	Item & Description	HSN/SAC	Qty	Rate	CGST	SGST	Amount
1	Photosensitive PIR Device Ceiling type: (BT31C)	903180	13.00	290.00	339.30 9%	339.30 9%	3,770,00
						Sub Total	3,770.00
			1 (0000000) 1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	onen et sommen de de e	CGST (9%)		339.30
	ATTEST	FD			5	GST (9%)	339.30
	orani in					Total	Rs.4,448.60
				nt Made	(-) 4,448.60		
	(Dr. M. S. Gaikwad) PRINCIPAL				Balar	nce Due	Rs.0.00

Notes

Looking forward for your business.

BLACKTELECTROTECH

SINHGAD INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401

Terms & Conditions

Terms & Conditions

1. Payment term 100% advance.

2. Rates based on current USD.

3. Client is responsible for GST details, company will not be responsible if any problem comes: please check

PROPRIETOR



SINHGAD TECHNICAL EDUCATION SOCIETY

(Regd. No. MAH / 7199-93 / Pune dt. 6/7/93 & F-8282 (Pune) dt. 12/8/93)

19/15, Erandwane, Smt. Khilare Marg, Off Karve Road, Pune - 411 004. Telefax.: (020) 2545 4008 Email: stes@sinhgad.edu Website: www.sinhgad.edu

PROF. M. N. NAVALE M.C. (ELECT) MIE., MBA. FOUNDER PRESIDENT DR. (MRS.) SUNANDA M. NAVALE B.A., MPM, Ph.D. FOUNDER SECRETARY

P.O.No. 85/17-18

Date :- 12.01.2018

To. INDOMAX MULTI-TRADES 106-Daisy, Silver Dale, 66/B, B T Kawade Road, Ghorpadi, Pune-411 001.



Sub:- Supply of LED Floodlight for STES at Kusgaon-Lonavala.

Sir.

This has reference to your quotation No. QTN/IMT/-0118 dated 10.01.2018 and discussion with our Project Manager we are pleased to place an order for supply of material as r

Sr. No.	Description Description	Unit	Qty	Rate	Amount
1	Supply of BJFL 100W LEDs			In (Rs.)	In (Rs.)
	HSN Code: 94054090.	Nos.	40	6350.00	2,54,000.00
2	Supply of BCLSB 18W 4ft Batten HSN Code: 94051090	Nos.	66	450.00	29,700.00
3	Supply of surface mounted 18W Downlighter HSN Code: 94051090	Nos.	89	800.00	71,200.00
	Total Amount				
	Add GST 12%		- 1		3,54,900.00
	Net Amount		MOUTH EAST		42,588.00
Danne	Thereas Francisco Art. A. C. St.				3 97 499 00

(Rupees Threes Lacs Ninety Seven Thousand Four Hundred Eighty Eight only)



Terms and Conditions

1. Price

: Above prices is inclusive of all taxes, duties and GST.

2. Completion

: 1 Week. : FOR Site.

3. Delivery 4. Warranty

: Flood light and batten- 60 months, Surface downlighter -24 months from

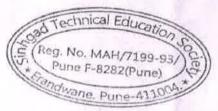
the date of supply.

Payment

: On delivery and certification of bill by our Site Engineer.

Thanking you, Yours faithfully

M.N.NAVALE PRESIDENT



ATTESTED

(Dr. M. S. Gaikwad) PRINCIPAL SWHGAC INSTITUTE OF TECHNOLOGY Kusgaon (Bk.), Lonavala-410401

ATTESTED

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PRINCIPAL
INNEAE NOTED BRIEDING DOV
RESERVE (PK.), Languales Frederich