

120 years



IZOLYATOR

Centuries-old traditions – state-of-the-art technologies

REFERENCES



Power Generation

Thermal, nuclear
and hydro energy



Power Transmission

Long distance, regional,
municipal power lines



Power Consumption

Industry, transportation,
oil and gas

Centuries old traditions – state of the art of technologies



Izolyator is a major Russian manufacturer of high-voltage bushings with over 120 year-long history. Our century-long existence on the market has proved the fact that our company's success is the success of our clients. In conditions of rapidly developing power market we stay focused on our customers' growing requirements and sensitive to their needs in – sometimes – very difficult situations.

In late 2007, we completed a large-scale project to transfer production facilities from Moscow city territory and Istra region of Moscow region. This allowed for a complete production renovation and process efficiency improvement with the use of modern equipment making it possible to achieve significant lead time reduction together with capacity increase.

Izolyator is a permanent leader in the field of high-voltage bushing manufacturing and sales in Russian Federation. One of our key principle is the constant product quality improvement. As of this moment, the plant boast a unique of its kind in Russia Test Center that allows to run full cycle electric tests of AC and DC HV bushings. Our entire product range is put for testing at the facility.

Nowadays, our product quality not only conforms to all international requirements and quality standards, but also has been confirmed by audits of such world-known transformer manufacturers as Siemens, Crompton Greaves, Alstom. Operational convenience, flexible cooperation terms and customer orientation have been confirmed by many favorable references and letters of recommendation from our clients and partners.

Our aim is to be a world leader in development, production and implementation of modern technologies in power engineering, creating the foundation for a stable and sustainable power supply for the society in the whole and for every individual! It is our strategic goal and mission!

Dr. Alexander Slavinsky

Chairman of the Board of Directors of Izolyator Company
Vice-President of Russian Electrotechnical Academy
Vice-President of TRAVEK International Association

Our mission

We create the foundation for a sustainable power supply of society and every human.



Our vision

We aim to be a world leader in design, production and modern technologies implementation in the power sector.



Social responsibility

Izolyator forms a social policy on the basis of harmonized interests of the company owners and personnel, local community and society with strict adherence to the laws of Russian Federation.



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Izolyator in numbers



120 years

of successful production of high voltage bushings



Exports to

30 countries



More than 570 000 bushings produced

Including over 500 000 OIP and over 70 000 RIP insulated bushings

installed at FGC UES facilities



34 000 Izolyator bushings

With 20 000 pcs in non-stop operation over 35 years



Sole production in Russia to make bushings in the range

From 12 to 1200 kV



Products meet

GOST R 55187-2012

IEC 60137:2008

IEC 62199:2004

Advanced engineering design office

- Creation of new bushings designs
- Advanced production technologies development
- Research and development works
- Mass produced series modernization

Production

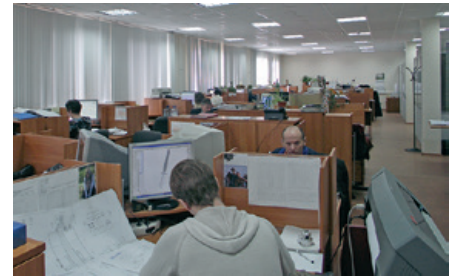
- The most advanced technological equipment from the best OEMs
- Patented RIP technology
- Patented external polymer insulation production technology
- Internal insulation with length up to 12 m and diameter up to 750 mm

Test Center

- AC tests up to 1200 kV
- DC tests up to ± 1600 kV
- Test under full and chopped lightning impulse 1.2/50 μ s
- Test under switch impulse 250/2500 μ s
- Insulating materials and prototype tests

Service Center

- Qualified technical service support
- Complex diagnostics
- Warranty and post warranty maintenance
- Customer service and hot line for technical divisions in client companies



PRODUCTS



Oil to Air Bushings
for oil switches
Voltage: 35–220 kV,
Current: 1000–3150 A



Oil to Oil Bushings for
cable connection to
transformer
Voltage: 110–500 kV,
Current: 630–1000 A



Line Bushings Air to Air
Voltage: 66–220 kV,
Current: 2000–4000 A



AC Bushings
Voltage:
+/- 126–800 kV,
Current: 1800–5400 A



Oil to SF6 Bushings
for switchgear
Voltage: 220 kV,
Current: 2000–3150 A



Air to Oil Bushings for
power transformers and
shunt reactors
Voltage: 12–1150 kV,
Current: 315–2500 A



Removable Air to Oil
Bushings for power
transformers
Voltage: 20–35 kV,
Current: 6–20 kA



Partners

Izolyator customers are world known international and Russian companies operating in the field of power Generation, Transmission and Distribution; Construction of large power facilities; Production of power equipment.

We aim to be a global leader in design, production and implementation of modern technologies in power industry.



Among company partners



Power grid system in Russian Federation



ROSSETI

Rosseti Public Joint Stock Company

(Russian Grids) is a power grid operator in Russia and one of the largest grid companies in the world.



Rosseti is a holding company that manages subsidiaries and affiliated Interregional distribution grid companies (MRSK) and Federal Grid Company of Unified Energy System (FGC UES).

FGC



UES



FGC UES Plc manages and develops the Unified national (all-Russia) power grid. The unified power system of Russia is a national asset and guarantee of energy security.

FGC UES Plc is the largest in the world public grid company.

MRSK – is a foundation of power distribution structure in Russia.

MRSK competences include power supply to the public, large industrial consumers, transport, agriculture and social facilities including technological connection of consumers to power grids.





Rosseti Plc, certificate for GKT type bushings for 24–172 kV voltage range

№ 13-4/15

Manufacturer/Applicant

Izolyator plant / Massa Ltd (Moscow Region, Pavlovskaya Sloboda)

Equipment

High-voltage GKT bushings for high voltages from 24 to 172 kV, in O-type climatic execution, 1 application category compliant to TU 3493-001-31317133-2008 (except 27 kV GKT type bushings) Complies with Technical requirements and is recommended for application on subsidiaries and branches facilities of ROSSETI Plc (approved by attestation board on 14 January 2015 #13-4/15).

*First Deputy General Director at Rosseti Plc
R.N. Berdnikov*



Rosseti Plc, certificate for GK type bushings for 252–550 kV voltage range

№ 13-7/15

Manufacturer/Applicant

Izolyator plant / Massa Ltd (Moscow Region, Pavlovskaya Sloboda)

Equipment

High-voltage GK bushings for high voltages from 252 to 550 kV, in O-type climatic execution, 1 application category compliant to TU 3493-002-31317133-2008 Complies with Technical requirements and is recommended for application on subsidiaries and branches facilities of ROSSETI Plc (approved by attestation board on 14 January 2015 #13-7/15).

*First Deputy General Director at Rosseti Plc
R.N. Berdnikov*



Rosseti Plc, certificate for GKV type bushings for 40.5–252 kV voltage range

№ 13-6/15

Manufacturer/Applicant

Izolyator plant / Massa Ltd (Moscow Region, Pavlovskaya Sloboda)

Equipment

High-voltage GKV bushings for high voltages from 40.5 to 252 kV, in O-type climatic execution, 1 application category compliant to TU 3493-003-31317133-2008 Complies with Technical requirements and is recommended for application on subsidiaries and branches facilities of ROSSETI Plc (approved by attestation board on 14 January 2015 #ИЗ-6/15).

*First Deputy General Director at Rosseti Plc
R.N. Berdnikov*



Rosseti Plc, certificate for GKL type bushings for 72.52–252 kV voltage range

№ 13-5/15

Manufacturer/Applicant

Izolyator plant / Massa Ltd (Moscow Region, Pavlovskaya Sloboda)

Equipment

High-voltage GKL bushings for high voltages from 72.5 to 252 kV, in O-type climatic execution, 1 application category compliant to TU 3493-005-31317133-2009 Complies with Technical requirements and is recommended for application on subsidiaries and branches facilities of ROSSETI Plc (approved by attestation board on 14 January 2015 #ИЗ-5/15).

*First Deputy General Director at Rosseti Plc
R.N. Berdnikov*

FGC

UES

FGC UES reference letter on high-voltage bushings by Izolyator

On 3 July 2015, FGC UES JSC sent a reference letter to Indian PowerGrid Corporation of India Limited concerning Izolyator 550 and 800 kV RIP-insulated bushings that are operated in regional grids, branches of FGC UES. In the document, FGC UES confirms a high quality of Izolyator products and recommends the company as a reliable strategic partner.

Sincerely,
V.P. Dikoi

Deputy Chairman of the Board, Chief Engineer

Федеральная
Сетевая Компания

Единой
Энергетической Системы

03.07.2015 1975

Открытое акционерное общество
Россети
Россет-Энергетическая Система
Россет-Энергетическая Система
Россет-Энергетическая Система

Att. of
Power Grid Corporation of India
Ltd., Saudamini, Plot No.-2,
Sector-29, Gurgaon-122001,
Haryana, India
Tel. +91-124-2571700-19
(Extn. 2348/3325);
Fax: +91-124-2571831

TO WHOM IT MAY CONCERN

Dear Gentlemen!

In the course of many decades, from the moment of appearance of Electrical Power Sector in Russian Federation and up to the present day **Massa LLC – IZOLYATOR** factory remains our regular supplier of high-voltage bushings for the needs of our Company. Below herewith we are kindly informing You on the list of HV bushings, rated **500kV/315A, 500kV/1600A, 500kV/2500A, 800kV/315A**, with internal solid resin impregnated paper (RIP) insulation which have been developed, designed, manufactured, type tested, supplied, installed by Massa LLC at the facilities of subdivision companies of JSC Federal Grid Company of Unified Energy System (JSC FGC UES): MES of Northwest, MES of Urals, MES of East, MES of Center, MES of Volga, MES of Siberia, MES of West Siberia, MES of South.

Type of Bushing	Factory drawing	Year of commissioning	Factory Serial No.	Q-ty, pcs	Total Q-ty
500kV/315A (for reactors)	ИВУЕ.686355.129	2009	П-21771 П-21881 П-19941 П-20497 П-21234 П-21273	6	

		2010	П-26489 П-26834 П-27972 П-25791 П-21929	5	
		2011	П-32977 П-33077 П-34093 П-34178 П-23848 П-24355 П-25186 П-31891	8	
		2012	П-35175 П-42418	2	
		2013	П-34038 П-49090 П-53615 П-53518 П-54083 П-50548 П-50547 П-53439 П-49051 П-49050 П-49799	11	
500kV/1600A (transformer)	ИВУЕ.686355.173	2011	П-39608 П-39738	4	
		2012	П-45051 П-46008 П-46054 П-44984 П-48212 П-43386 П-40599	7	
		2013	П-40271	1	
500kV/2500A (transformer)	ИВЕКО.686354.001 ИВЕКО.686354.002 ИВУЕ.686355.172 ИВУЕ.686355.146-01	1999	Ч-48481	1	
		2005	Ч-89899	1	
		2008	П-06227 П-10840 П-12457 П-13488 П-15598 П-16544 П-08181 П-13764 П-12832 П-12741 П-19736 П-19098 П-19461 П-24454 П-26803 П-22900 П-13380 П-39932 П-40091 П-40647 П-22158 П-22850 П-24228	10	
		2009	П-19736 П-19098 П-19461	3	
		2010	П-24454 П-26803 П-22900	3	
		2011	П-13380 П-39932 П-40091 П-40647 П-22158 П-22850 П-24228	7	
		2012	П-42246 П-40667 П-40514 П-41067 П-41215 П-40933 П-41427 П-39607 П-42008 П-41369 П-41639	11	
		2013	П-54603 П-50428 П-54432 П-54433 П-51960 П-49090 П-52074 П-52210 П-48863 П-43036 П-52018 П-50281	12	
800kV/315A (for reactors)	ИВУЕ.686356.165	2013	П-52993 П-52372	2	
		2014	П-46179	1	95

We confirm hereby the high quality of the supplied products by **Massa LLC**, as well as a complete compliance with the requirements of **IEC 60137 standard, GOST 10693 standard** and normative documents. All high-voltage bushings mentioned above have passed successfully all type and routine tests and are successfully operating up to the present time since their commissioning. There have not been occurred any problem with installation, commissioning and maintenance.

A successful experience in development of the partnership relations between **Massa LLC and JSC FGC UES** allows to recommend **Massa LLC - Izolyator factory** as a reliable partner for manufacturing and supplies of the bushings for high (110, 220, 330) and extra-high voltage levels (420, 550, 800 etc.).

JSC FGC UES confirms herewith that **Massa LLC - Izolyator factory** is a strategical partner, wishing You prosperity and further innovative development of Energy Transmission and Distribution in Russia and Worldwide!

Your sincerely,

Deputy Chairman of the Board –
chief engineer

V.P. Dikoi

FGC

UES

Reference letter of FGC UES

In the course of many decades from the moment of appearance of Electrical Power Sector in Russian Federation and up to the present day Massa LLC – Izolyator factory – remains our regular supplier of high-voltage bushings for the needs of our Company. Below herewith we are kindly informing You on the list of HV bushings, rated 500kV/315A, 500kV/1600A, 500kV/2500A, with internal solid resin impregnated paper (RIP) insulation which have been developed, designed, manufactured, type tested, supplied, installed by Massa LLC at the facilities of subdivision companies of JSC Federal Grid Company of Unified Energy System (JSC FGC UES): MES of North West, MES of Urals, MES of East, MES of Center, MES of Volga, MES of Siberia, MES of West Siberia, MES of South.

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Yours sincerely,
Deputy Chief Engineer of JSC FGC UES
A.M. Epifanov

Federal Grid Company of Unified Energy System

Att. of
Power Grid Corporation of
India Ltd., Saudamini, Plot No.-
2, Sector-29, Gurgaon-122001,
Haryana, India.
Tel.: +91-124-2571700-19 (Extn.
2348/3325); Fax.: +91-124-
2571831.

TO WHOM IT MAY CONCERN

Date: 18th June 2014

Dear Gentlemen!

In the course of many decades, from the moment of appearance of Electrical Power Sector in Russian Federation and up to the present day Massa LLC – IZOLYATOR factory remains our regular supplier of high-voltage bushings for the needs of our Company. Below herewith we are kindly informing You on the list of HV bushings, rated 500kV/315A, 500kV/1600A, 500kV/2500A, with internal solid resin impregnated paper (RIP) insulation which have been developed, designed, manufactured, type tested, supplied, installed by Massa LLC at the facilities of subdivision companies of JSC Federal Grid Company of Unified Energy System (JSC FGC UES): MES of Northwest, MES of Urals, MES of East, MES of Center, MES of Volga, MES of Siberia, MES of West Siberia, MES of South.

Type of Bushing	Factory drawing	Year of commissioning	Factory Serial No.	Q.ty, pcs.	Total Q.ty
500kV/315A (for reactors)	ИВЕУ 686355.129	2009	П-21771 П-21881 П-19941 П-20467 П-21234 П-21273	6	
		2010	П-20489 П-26634 П-27972 П-25751 П-21928	5	
		2011	П-32977 П-33077 П-34093 П-34178 П-23848 П-24355 П-25186 П-31691	8	
500kV/1600A (transformer)		2011	П-39608 П-39738	4	
500kV /2500A (transformer)	ИВЕУ 686354.001 ИВЕУ 686354.002 ИВЕУ 686355.172	1999	П-48461	1	
		2005	П-89899	1	
		2008	П-06227 П-10840 П-12457 П-13488 П-15598 П-16544 П-08181 П-13764 П-12832 П-12741	10	
		2009	П-19736 П-19098 П-19461	3	
		2010	П-24454 П-26853 П-22900	3	
		2011	П-13380 П-39932 П-40061 П-40647 П-22158 П-22850 П-24228	7	
					48

We confirm hereby the high quality of the supplied products by Massa LLC, as well as a complete compliance with the requirements of IEC 60137 standard, GOST 10693 standard and normative documents. All high-voltage bushings mentioned above have passed successfully all type and routine tests and are successfully operating up to the present time since their

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A successful experience in development of the partnership relations between Massa LLC and JSC FGC UES allows to recommend Massa LLC – Izolyator factory as a reliable partner for manufacturing and supplies of the bushings for high (110, 220, 330) and extra-high voltage levels (420, 550, etc.).

JSC FGC UES confirms herewith that Massa LLC – Izolyator factory is a strategical partner, wishing You prosperity and further innovative development of Energy Transmission and Distribution in Russia and Worldwide!

Your sincerely,

Deputy Chief Engineer of JSC FGC UES

A.M. Epifanov





Federal Grid Company of Unified Energy System

18.06.2014 EA-2946

Attn. of
Power Grid Corporation of
India Ltd., Saudamini, Plot No.-
2, Sector-28, Gurgaon-122001,
Haryana, India
Tel. +91-124-2571700-19 (Extn.
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Type of Bushing	Factory drawing	Year of commissioning	Factory Serial No.	Q-ty, pcs	Total Qty
500kV/315A (for reactor)	243.800.034	1972	C-41081	1	
	IBEKO 586344.006-02	1983	56741	1	
	IBEKO 586344.029	1985	T-45495	1	
	IBEKO 586345.004	1988	T-91118 29552 57733	3	
	IBEKO 586341.004-06	1990	4-57642	1	
		2000	4-70257 4-13651 4-72576 4-71799	4	
		2001	4-71695 4-83992	2	
		2002	4-49759(93r.a.) 4-63207 4-74155 4-71993 4-76710 4-78380 4-78935 4-76385	8	
		2003	4-24197(99r.a.) 4-82559 4-83167 4-57640 T-1543 4-81608 4-91669	7	
		2004	4-81799 4-84058 4-84693 4-60252 4-95516 4-87251 4-79796 4-90319 4-92623 4-90114 4-39753	16	
		2005	4-39282(91r.a.) 4-61214 4-89635 4-83759 4-82035 4-82293 4-83524 4-91698 4-89850 4-89662 4-89850 C-98645(75r.a.)	1	
		2006	4-95976 4-98660 4-96195 4-82653 4-94921 4-86180 4-88021 4-96309	8	
		2007	4-99988 (88r.a.) 4-83511 4-95679 75140 4-94527	5	
		2008	4-89609 4-93467 4-15148 4-15344 4-16494 4-95519 4-07814 48921 73141 4-07994	10	
		2009	4-17704 4-18015 4-18358	3	80

Reference letter of FGC UES

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Yours sincerely,
Deputy Chief Engineer of JSC FGC UES
A.M. Epifanov

		2010	4-18942 4-17947	2	
		2012	4-18178	1	
500kV/1600A (transformer)	243.800.011	1983	2529 38504 78787 88349	4	
	243.800.011-01	1985	4-49196 T-49199	2	
	243.800.085	1987	T-51124 T-53169 T-54674 T-64163	4	
	243.800.085-01	1988	T-72897 T-79328 T-95308 T-95309	6	
	243.800.095-09		T-38593 T-80204		
	IBEKO 586344.025-02	1989	T-75459 T-90255 T-95551 T-98471	4	
	IBEKO 586344.030	1991	4-16952 4-23692	2	
		1992	4-16804 4-29371	2	
		1994	4-25899 4-53032	2	
		1997	30060 30062 59237	3	
		1998	4-43568	1	
		2000	4-37401 4-31711 T-93040 4-79349	4	
		2001	4-36879 T-99613 4-76701 131299 131300 131301 4-10200 C-90910 4-86098	9	
		2002	4-38700 4-55328 4-45996 4-79516 4-70845	5	
		2003	4-33850 4-67951 T-14008 T-69927 4-34605 4-82410	6	
		2004	4-85728 4-81882 4-31709 T-83370 4-86626	5	
		2005	4-80007 4-26690(75r.a.) 4-27928(75r.a.) 4-90038 4-90040 4-91657 4-92136 89993 T-39096 4-58869 4-7832	11	
		2006	T-43294(86r.a.) T-19738 4-59165(95r.a.) 4-93403 4-95029 4-95822 4-66030	7	
		2007	4-04187 T-04293 4-05711 4-68270 T-55402 T-66899 C-54385(75r.a.) 4-05710 T-49576	9	
		2008	4-03886	1	
		2009	4-56375 4-6953 4-07776	3	90
500kV/2000A (transformer)	IBEKO 586344.005	1988	50838	1	
	IBEKO 586344.005-09	1995	4-58007 4-58348	2	
	IBEKO 586344.010	1998	4-66623	1	
	IBEKO 586344.028	2000	4-73838 4-71528	2	
		2001	4-74998 4-77747 4-77361 4-74634	4	
		2002	4-78125 4-76745 4-78566 4-80112 4-80375 4-80469	6	
		2003	4-77360 4-83182 4-77360 4-83182	2	
		2005	4-45640 4-83506 T-70602(96r.a.) 4-89833 4-83506	4	
		2006	4-04922 4-80111 4-88884 4-04922	3	
		2007	4-02466 4-02989 4-03062 4-07555 4-04495	5	34
500kV / 2000-2500A (transformer)	IBEKO 586344.028(-01.-02)	2002	4-01914	1	
	IBEKO 586344.010 (-01.-02)	2003	4-82135 4-83183 4-83560 4-81323	4	
		2004	4-54042 4-89199	2	
		2005	4-62972 4-90660 4-89939 4-85622 4-89638 4-89941 4-89849 4-89899 4-90281 4-91213 4-98827 4-89848 4-89592	13	
		2006	4-04472 4-07052 4-97053 4-97695 4-98339 4-98699 4-99116 4-99145	30	69

			4-99147 4-93832 4-93834 4-97758 4-97915 4-97916 4-98341 4-98659 4-98701 4-98858 4-98700 4-93933 4-94921 4-96458 4-96443 T-52259 T-73942 4-97760 4-97896 4-97759 4-98310 4-98340		
		2007	П-00956 П-03019 П-01935 П-03017 4-98758 П-01913 П-02465	7	
		2008	П-13159 П-12832 П-02467 П-13381 П-13727 П-13862 П-10840 П-12457	8	
		2009	П-19264 4-48842	2	
		2011	П-13380	1	
750kV / 315A (reactor) - 1000A (transformer)	2x3 800.021 2x1 800.072 WBVE 586345.004 WBVE 586345.005	2002	C-87937 4-33757	2	
		2003	4-72041 T-53098	2	
		2004	4-81850 4-84882	2	
		2005	4-78390 4-83378	2	
		2008	4-80470 4-87460 4-92085	3	
		2010	4-94579	1	12
1150kV / 1250A (transformer)	2x1 800.119	2000	4-64087 4-65231	2	
		2001	4-78070	1	
		2003	4-70581	1	
		2008	4-89135	1	5

We confirm hereby the high quality of the supplied products by **Massa LLC**, as well as a complete compliance with the requirements of **IEC 60137 standard**, **GOST 10693 standard** and normative documents. All high-voltage bushings mentioned above have passed successfully all type and routine tests and are successfully operating up to the present time since their commissioning. There have not been occurred any problem with installation, commissioning and maintenance.

A successful experience in development of the partnership relations between **Massa LLC** and **JCS FGC UES** allows to recommend **Massa LLC - Izolyator factory** as a reliable partner for manufacturing and supplies of the bushings for high (110, 220, 330) and extra-high voltage levels (420, 550, etc.).

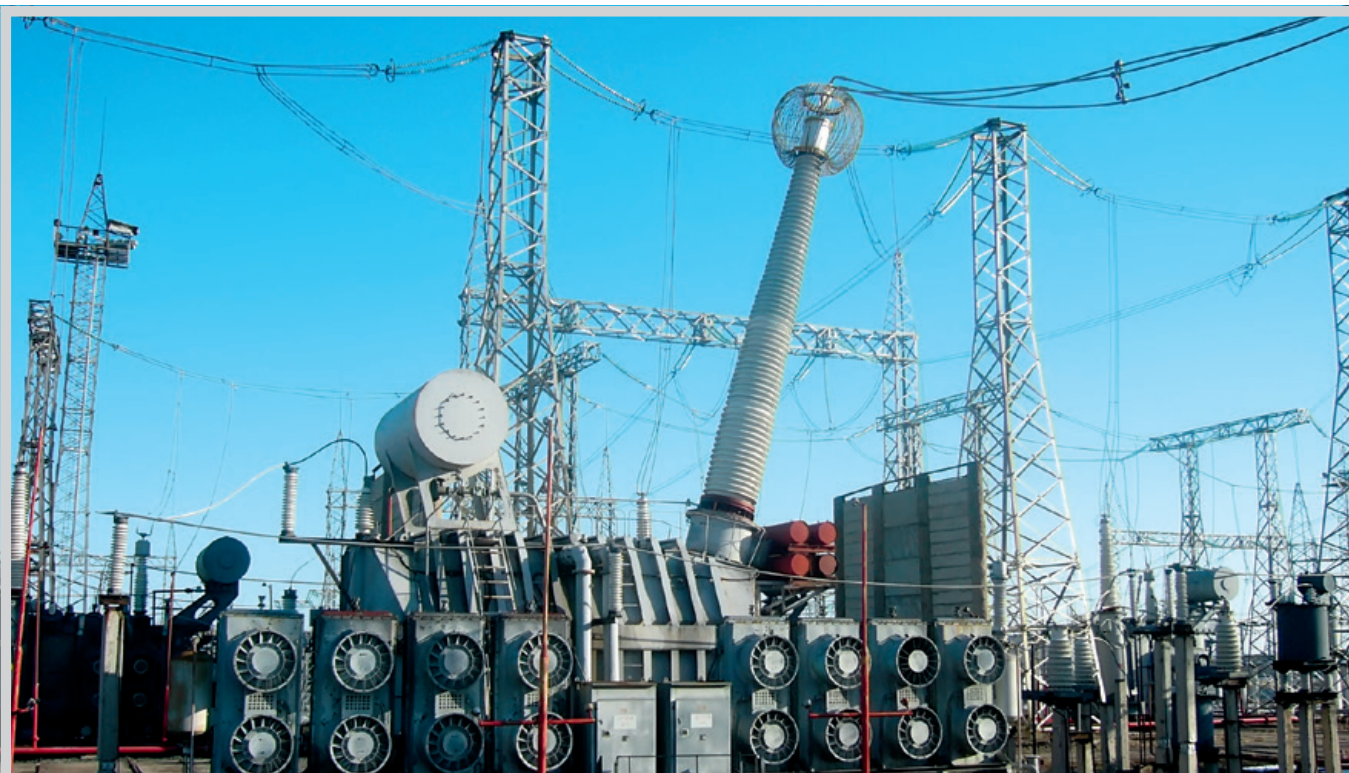
JCS FGC UES confirms herewith that **Massa LLC - Izolyator factory** is a strategic partner, wishing You prosperity and further innovative development of Energy Transmission and Distribution in Russia and Worldwide!

Your sincerely,

Deputy Chief Engineer of JCS FGC UES



A.M. Epifanov



1150 kV Izolyator bushing on a 300 MVar shunt reactor.
Itatskaya substation at Krasnoyarsk branch in MES Siberia of FGC UES JSC

FGC

UES

Main Power Transition lines of Western Siberia (MES West Siberia) is a branch of FGC UES operating on the territory of Ural Federal District. 3 federal states with 3.5 mln population enter the service area of the company.



24.10.2013 12:08 777301 КВ 20

Федеральная Сетевая Компания Единой Энергетической Системы

24.10.2013 № 44/38/176

Председателю Совета директоров ООО «Масса» А.З. Славинскому

Об отгрузке вводов

Уважаемый Александр Зинovieвич!

В рамках долгосрочных договоров поставки № 26-12/п от 20.04.2012, 53-13/п от 20.06.2013 и 65-13/п от 17.09.2013 ООО «Масса» было привлечено для выполнения поставок высоковольтных вводов в рамках программы ТОиР и комплектования аварийного резерва филиала ОАО «ФСК ЕЭС» - МЭС Западной Сибири.

В соответствии с договорами на 24.10.2013 была осуществлена поставка 18 трансформаторных и выключательных вводов: классами напряжения 110-330 кВ.

Все поставки были осуществлены в кратчайшие сроки, качество поставленной продукции ООО «Масса» (Завод «Изолятор») соответствует требованиям и обладает положительным заключением аттестационной комиссии ОАО «ФСК ЕЭС».

За время сотрудничества ООО «Масса» зарекомендовало себя как надежный партнер.

Заместитель главного инженера, Директор по организации эксплуатации основного оборудования

М.А. Бизяев

Курочкина (3462) 77 73 79

Вход. № 44/38/176 24.10.2013 г. подпись

MES West Siberia Reference letter

Our company contracted Massa Ltd under long term agreements #26-12/p dated 20 April 2012, #53-13/p dated 20 June 2013 and #65-13/p dated 17 September 2013 for high-voltage bushings supply for our maintenance program and the emergency reserve of the FGC UES – MES West Siberia branch.

In accordance with the agreement of 24 October 2013 we received 18 transformer and circuit-breaker bushings of 110–330 kV class.

All shipments were received within the shortest period of time. Massa Ltd (Izolyator plant) products meet our quality requirements and have been certified by FGC UES.

Massa ltd has proved a reliable partner throughout our cooperation.

Deputy Chief Engineer
Director of main equipment operation and maintenance
A.M. Bizyaev

FGC

UES

Main Power Transmission Lines of Center (MES Center) is a branch of FGC UES operating in Central, North-Western and Southern federal states. There are 19 federal subjects of Russian Federation with over 40 mln population in the service area of the branch.



Федеральная Сетевая Компания	Единая Энергетическая Система	КАПИТАЛЬНЫЕ ЗАКЛЮЧЕНИЯ СЕТИ ЭЛЕКТРОСНАБЖЕНИЯ Москва - Челябинск - Омск - Екатеринбург Рязань - Москва - Омск - Екатеринбург - Т. 1 Телефон: 800 500 50 11, 800 500 50 12 E-mail: info@mes-center.ru, web@mes-center.ru
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28.08.2014 - МЛ/36/682
 Председателю Совета директоров
 ООО «Масса»
 А.З. Славинскому

Павел Иванович
 О высоковольтных вводах

Уважаемый Александр Зиновьевич!

В рамках пятилетнего договора № 52-2012 от 02.04.2012 ООО «Масса» в 2013 году поставило 40 высоковольтных вводов для реализации программы ТОиР и комплектования аварийного резерва филиала ОАО «ФСК ЕЭС» МЭС Центра.

Также МЭС Центра заключил договор от 20.05.2014 №75-2014 с ООО «Масса» на поставку 74 вводов 110-750 кВ.

Все поставки были осуществлены в установленные сроки, качество продукции ООО «Масса» соответствует требованиям и обладает положительным заключением аттестационной комиссии ОАО «ФСК ЕЭС».

За время сотрудничества ООО «Масса» зарекомендовало себя как надежный партнер.

Директор по организации эксплуатации
 основного оборудования МЭС Центра

А.В. Горбунов
 А.В. Горбунов

Скрышкин
 2013

602
 28.08.2014
 подпись

Reference Letter of MES Center, branch of FGC UES

Under the five-year contract #52-2012 dated 2 April 2012 Massa Ltd supplied 40 HV bushings for the maintenance and replacement program in 2013 and emergency reserves replenishment of the branch of FGC UES – MES Center.

MES Center also contracted Massa Ltd (agreement #75-2014 dated 20 May 2014) for delivery of 74 bushings of 110-750 kV voltage classes.

All shipments met delivery time; the product quality meets our requirements and has been certified by FGC UES.

Massa ltd has proved a reliable partner throughout our cooperation.

Director of main equipment operation and maintenance
 MES Center
 A.V. Gorbunov

FGC

UES

Main Power Transmission Lines of South (MES South) is a branch of FGC UES operating in Southern and North Caucasus federal states. There are 11 subjects of Russian Federation with over 19 mln population in the service area of the branch.



OT: 000/ МОС Юга В ТЕЛ: 8 8793 369918 22 ОКТ. 2014 09:30 СТР:1

Федеральная Сетевая Компания Единую Энергетическую Систему

И.О. Подпись: *Панфилов А.А.* И.О. Подпись: *А.А. Панфилов*

Председателю Совета директоров ООО «Масс»-завод «ИЗОЛИТОР» А.А.Славинскому

Факс: +7(495) 727-27-66 Тел: +7(495) 727-33-11

Уважаемый Александр Зиновьевич!

На подстанциях МЭС Юга в рамках выполнения плановых программ, программ технического обслуживания и ремонта оборудования, пополнения аварийного резерва были приобретены и ООО «Масс» - завод «Изолятор» и замены высоковольтные вводы с RIP - изоляцией, изготовленные по современным технологиям.

В период с 2012 по 2014гг их количество составило порядка 214 шт, с различным классом напряжения от 110кВ до 500кВ, как трансформаторно-реакторного оборудования, так и для масляных выключателей с большим объемом масла.

За период эксплуатации на ПС МЭС Юга вышеуказанное оборудование зарекомендовало себя как надежное, способное работать в разных климатических условиях, претензий по качеству их изготовления в настоящее время нет.

Считаем, что данное оборудование обладает достаточно высокой эксплуатационной надежностью и при дальнейшей реализации различных программ, лет возражений не возникает.

МЭС Юга планирует закупить в 2015г. порядка 10 вводов разных классов напряжения.

Первый заместитель генерального директора - Главный инженер *Г.П. Ковтун* Г.П. Ковтун

Тел: 8(800) 22-93-11 (8793) 36-99-93

Вх № 361 от 22.10.14.

Reference Letter of MES South, branch of FGC UES

MES South has purchased Izolyator's (Mass Ltd) modern technology HV bushings with RIP insulation for implementation of our maintenance and replacement programs and emergency reserves replenishment.

From 2012 to 2014 our purchase volumes totaled 214 pcs in various voltage classes within 110–500 kV intended for transformer/ reactor equipment and oil switches with large oil volumes.

During operation time at PS MES South the above listed equipment proved reliable and able to perform in varying climatic conditions. We have no quality claims to this date.

This equipment has a high operational reliability and we see no obstacles for using it in our programs in future. MES South expects to purchase 10 bushings of various voltage classes in 2015.

1 Deputy General Director
Chief Engineer
G.N. Kovtun

FGC

UES

Main Power Transmission Lines of North-West (MES North-West) is a branch of FGC UES operating in North Western federal state.

There are 11 federal subjects of Russian Federation with over 14 mln population in the service area of the branch.



**Федеральная
Сетевая Компания**

Единой
Энергетической Системы

ВАХСТАЛЬНЫЕ ЭЛЕКТРИЧЕСКИЕ СГП
СЕВЕРО-ЗАПАДА - «ИЗОЛЯТОР» ООО «МАСА»
Телефон: (812) 292-5749
Факс: (812) 292-5749
Email: mas@mes-nw.ru

18.10.2013 - 117/с/1743

Председателю Совета директоров
ООО «Масса»
А.З. Славинскому

Об отгрузке вводов

Уважаемый Александр Зиновьевич!

В рамках долгосрочного договора поставки №1930/с от 20.03.2012 ООО «МАСА» было привлечено для выполнения поставок высоковольтных вводов в рамках программы ТОиР и комплектования аварийного резерва Филиала ОАО «ФСК ЕЭС» - МЭС Северо-Запада.

В соответствии с договором на 18.10.2013 была осуществлена поставка 129 трансформаторных и выключательных вводов классами напряжения 110кВ-330кВ.

Все поставки были осуществлены в кратчайшие сроки, качество поставленной продукции ООО «Масса» (Завод «Изолятор») соответствует требованиям и обладает положительным заключением аттестационной комиссии ОАО «ФСК ЕЭС».

За время сотрудничества ООО «МАСА» зарекомендовало себя как надежный партнер.

Заместитель генерального директора
по экономике и финансам



О.Э.Шакиров



Добро пожаловать!
(812) 292-5749

Reference Letter of MES North-West, branch of FGC UES

Under the long-term contract #1930/c dated 20 March 2012 Massa Ltd supplied HV bushings for the maintenance and replacement program and emergency reserves replenishment to the branch of FGC UES – MES North-West.

By 18 October 2013, in accordance with the agreement the supplier delivered 129 transformer/switch bushings of 110–330 kV voltage classes.

All shipments met strict delivery deadlines; Massa Ltd (Izolyator plant) products quality corresponds our requirements and has been certified by FGC UES.

Massa ltd has proved a reliable partner throughout our cooperation.

Deputy General Director on Economy and Finance
O.E. Shakirov



There are 3 technical centers and 22 ETL areas within the structure of **Kuzbassenergo-RES, branch of MRSK Siberia JSC**. They ensure power supply to almost 3 million people on the territory of 96.5 square kilometers.



Открытое Акционерное Общество	Межрегиональная распределительная сетевая компания Сибири	Филиал ОАО «МРСК Сибири» - «Кузбассэнерго - РЭС», ГТТ, 650091, Республика Хакасия, Кемеровская область, г. Кемерово, ул. М. Октябрьского, д. 11 тел. 8 (3802) 45-95-95, факс 8 (3802) 59-09-24 E-mail: kanto@mrsk.ru
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**Филиал «Кузбассэнерго -
региональные электрические сети»**

21.02.2013 № 14/00.2/2013

На № _____ От _____

Генеральному директору
ЗАО «НБЭ»
К.А. Руденко
ул. Заводская, д.1
г. Южноуральск, 457040

О качестве высоковольтных вводов

Уважаемый Константин Александрович!

В ответ на Ваше письмо от 07.02.2013 № 073 «О качестве поставленной продукции» сообщаем, что в 2011-2012 гг. филиал ОАО «МРСК Сибири» - «Кузбассэнерго-РЭС» приобрел у ЗАО «Новации и бизнес в энергетике» высоковольтные вводы производства ООО «Масса»:

- ввод ГКВШ-60-126/2000 О1 (ИВУЕ.686352.132) – 4 шт.
- ввод ГКТШ-60-126/800 О1 (ИВУЕ.686352.103) – 3 шт.

Претензий по качеству вышеуказанной продукции нет.

Заместитель генерального директора-
директор филиала

 А. Ю. Гринь

Николаев В.В.
(3842) 29-01-61

030259

Reference Letter of Kuzbassenergo-RES

In reply to your letter #073 of 7 February 2013 concerning feedback on product quality please be informed that Kuzbassenergo-RES purchased Massa Ltd-made HV bushings from Innovations and Business in Power Industry CJSC:

- GKVIII-60-126/2000 01 (ИВУЕ.686352.132) bushing – 4 pcs
- GKTIII-60-126/800 01 (ИВУЕ.686352.103) bushing – 3 pcs

We have no quality claims on the above mentioned equipment.

Deputy General Director – Branch Director
A.Yu. Grin



Today **Krasnoyarskenergo, branch of MRSK Siberia JSC**, is the largest regional grid company in Siberia. The company services territory of one of the largest federal subjects of Russian Federation – Krasnoyarsky kray with 2 339.7 thousand square kilometers (1/7 of Russia) area and 3 mln population.



Reference Letter of Krasnoyarskenergo

Herewith we inform that since 2011 Krasnoyarskenergo, branch of MRSK Siberia JSC, has purchased and put into operation 118 HV bushings of Massa Ltd production, among those:

- Switch type bushings up to 35kV – 42 pcs
- Transformer type bushings 110kV – 38 pcs
- Switch type bushings 110 kV – 29 pcs
- Line bushings 110 kV – 9 pcs

There are no quality claims on our side in the present moment.

Deputy Logistics and Procurement Director
A.A. Ransky

Открытое Акционерное Общество Межрегиональная распределительная сетевая компания Сибири Филиал «Красноярскэнерго» <u>31.01.2013. № 43/38/1288-404</u> на № _____ от _____ О предоставлении информации Уважаемый Константин Александрович! Настоящим сообщаем, что начиная с 2011 года филиалом ОАО «МРСК Сибири» – «Красноярскэнерго» было куплено и введено в эксплуатацию вводов производства ООО «Масса» в количестве 118 шт., из них выключательные до 35 кВ в количестве 42 шт., трансформаторные 110 кВ в количестве 38 шт., выключательные 110 кВ в количестве 29 шт. и линейные 110 кВ в количестве 9 шт. До настоящего времени претензий по данной продукции нет. Заместитель начальника департамента логистики и МТО Время В.Н. (391)259-3774+мх3-348	Филиал «Красноярскэнерго» 660021, Красноярский край, Красноярский край г. Красноярск, ул. Богдана, д. 144А Тел. в (391) 259-68-66, факс: в (391) 259-68-77 e-mail: info@krsn.ru Генеральному директору ЗАО «Новации и бизнес в энергетике» К.А. Руденко  А.А. Ранский № 038416
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Altaienergo – branch of MRSK Siberia Plc is a regional power company that ensures power supply in Altai Region and the Republic of Altai. Altai power system is almost 800 MW of power and 3500 Gcal of thermal capacity, about 70 000 km ETLs of all voltage classes (one of the lengthiest in Russia).



Открытое
Акционерное
Общество

Межрегиональная
распределительная сетевая
компания Сибири

Филиал «Алтайэнерго»

04.02.13г. № 41/29/999-ука

Филиал ОАО «МРСК Сибири» - «Алтайэнерго»
656002, Российская Федерация, Алтайский край,
г. Барнаул, ул. П.С. Купалова, д. 16
тел.: 8 (3852) 56-83-50, факс: 8 (3852) 56-09-28

Генеральному директору
ЗАО «Новации и бизнес в энергетике»
К.А.Руденко
ул.Заводская, д. 1, г.Южноуральск,
Челябинская обл., 457040

Отзыв о качестве
продукции

Уважаемый Константин Александрович!

Настоящим сообщаем, что филиалом ОАО «МРСК Сибири» - «Алтайэнерго» в период с 2011 г. по 2012 г. закуплено у ЗАО «Новации и бизнес в энергетике» высоковольтных вводов производства ООО «Масса» в количестве 127 штук. Претензий по качеству не выявлено, отказов продукции не зарегистрировано.

Начальник ДЛ и МТО

О.В. Туболец

Кашлева Е.Н.
(3852) 56-82-94

№ 008380

Reference Letter of Altaienergo

Herewith please be informed that Altaienergo, branch of MRSK Siberia JSC, purchased 127 Massa Ltd-made high-voltage bushings from Innovations and Business in Power Industry CJSC within 2011–2012:

We have not registered equipment failure or any quality claims on the equipment as of today.

Head of Logistics and Procurement Division
O.V. Tubolets



MRSK Center and Privolzhye JSC is one of Russia's largest Interregional distribution grid companies – a natural monopoly with pricing regulated by Federal Tariff Service and local Regulatory Bodies.





МРСК ЦЕНТРА И ПРИВОЛЖЬЯ
ОАО «МРСК Центра и Приволжья»
 Открытое акционерное общество
 «Акционерная распределительная
 сетевая компания Центра и Приволжья»
 (ОАО «МРСК Центра и Приволжья»)
 440000, г. Нижний Новгород,
 ул. Родионова, д. 35,
 тел. (833) 431-09-40; факс (833) 431-09-51;
 E-mail: info@mrsk-cpr.ru; www.mrsk-cpr.ru
 ИНН 4407080063

Заместителю коммерческого
директора по продажам
Ю.В. Павлову

на № _____ от _____

05.07.2018. № 10-02-11/140

Об опыте эксплуатации продукции завода ООО «Масса»

Уважаемый Юрий Васильевич!

ООО «Масса» на протяжении уже нескольких лет является постоянным поставщиком высоковольтных вводов 35-110 кВ в адрес филиалов ОАО «МРСК Центра и Приволжья».

Поставляемая продукция завода ООО «Масса» неизменно высокого качества, соответствует современным стандартам и требованиям НТД, прошедшая все необходимые испытания и сертификацию.

Заместитель главного инженера
по реконструкции и ремонтам



В.А. Горев

Reference letter of MRSK Center and Privolzhye JSC

Massa Ltd has been a regular supplier of 35–110 kV bushings to the branches of MRSK Center and Privolzhye in a number of years.

The products delivered by the plant of Massa Ltd are of invariably high quality and meet modern standards and requirements of normative and technical documentation having passed all necessary testing and certification.

Deputy Chief Engineer on Maintenance
V.A. Gorev

MRSK North West manages distribution complex of seven territories of the North Western Federal District of Russia: Republic of Karelia, Republic of Komi, Arkhangelsk region, Vologda region, Murmansk region, Novgorod region, Pskov region.



In response to Your letter ref. No. 01/312 of 08.11.2013, I inform You that disturbances in work of MRSK of North-West equipment during St. Jude storm in October of 2013 were not accompanied by damage of the bushings. There is no necessity in free supply of Your products, i.e. high-voltage bushings.

I'd like to express our gratitude for Your help in work aimed to eliminate disturbances caused by adverse weather condition in October of 2013.

Deputy General Director for technical matters, Chief Engineer
A.Yu. Gorokhov

Transformer-building plants and other consumers in Russia and in CIS countries



1  **POWER MACHINES TOSHIBA**
HIGH-VOLTAGE TRANSFORMERS
Power Machines – Toshiba. High-voltage transformers Ltd.
(Saint Petersburg, Russia)

2  **Manufacturing plant of Electroavod JSC**
(Moscow, Russia)

3 **SIEMENS**
Siemens Transformers Ltd.
(Voronezh, Russia)

4  **Togliatti Transformer**
(Togliatti, Russia)

5  **Ufa Transformer Plant, Electroavod JSC**
(Ufa, Russia)

6 **UETM**
Uralelectrotyazhmash (Ekaterinburg, Russia)

7 **SVEL**
SVEL – Power Transformers plant, SVEL Group
(Ekaterinburg, Russia)

8  **Zaporozhtransformator Plc**
(Zaporozhye, Ukraine)

9 **ATEF**  **ATEF Group of companies**
(Baku, Azerbaijan)

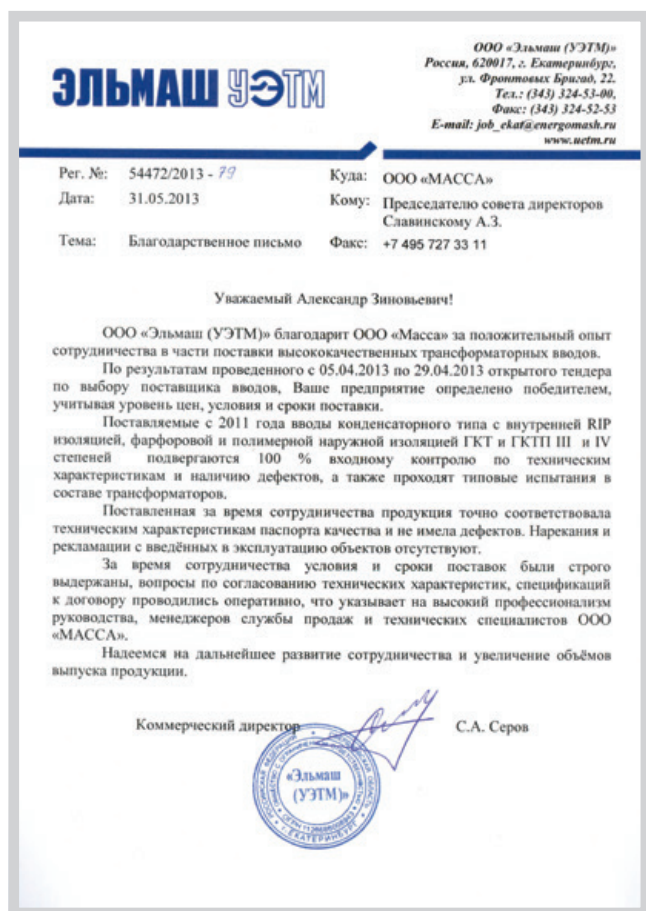
10  **Chirchiq transformer plant JSC**
(Tashkent, Uzbekistan)

11  **alageum electric**
Kentau transformer plant JSC
(Kentau, Kazakhstan)



Energomash CJSC (Ekaterinburg) – Uralelectrotyazhmash (UETM) is the largest Russian manufacturer of power equipment for generation, transmission, distribution and consumption of electricity.

As of today Uralelectrotyazhmash produces more than 2000 items for 3000 consumers in Russian Federation and abroad.



Reference letter of Energomash CJSC

Elmash Ltd (UETM) expresses gratitude to Massa Ltd for a positive cooperation experience in regard to delivery of high quality transformer bushings.

We have selected your company in the open tender on 5–29 April 2013 considering price level and terms of delivery.

Capacitance bushings with RIP type internal insulation and polymer or ceramic external insulation – GKT and GKTP III and IV grades – have undergone acceptance tests to verify technical characteristics and type tests on transformers since 2011.

The products that we received over entire period of cooperation accurately corresponded to the technical features specified in the manufacturer's certificate of quality and had no defects.

Quality claims or reclamations from operating facilities never occurred.

The supplier also adhered to the delivery time and conditions, timely technical issues coordination and contract specifications, which points out a high professionalism of the managing team, commercial and technical experts of Massa Ltd.

We are looking forward to continued cooperation with higher volumes of product output.

Commercial Director
S.A. Serov



Direction of «SVEL RosEnergTrans» Plant (that has been manufacturing dry-type transformers and current limiting reactors since 2003) at the end of 2008 created the Management Group «SverdlovElectro» (common brand «SVEL» Group).

The reason of diversification is the start-up of a new plant, manufacturing oil-immersed transformers «SVEL Power Transformers» and also the setting up of a new direction «Engineering». Under the brand of «SverdlovElectro» Group» at present two large production sites work: «SVEL RosEnergTrans» and «SVEL Power Transformers».

Reference Letter

Group SVEL CJSC thanks Massa Ltd for a positive cooperation experience concerning supply of high quality transformer bushings.

All Izolyator products met technical characteristics of the manufacturer's certificate of quality and came without defects. We confirm the smooth running of the commissioned facilities.

Within cooperation timeframe, our partners have promptly coordinated any issues concerning technical features, contract specifications, which proves a high professionalism of Massa Ltd team.

We sincerely hope to develop our cooperation and see our equipment production volumes grow.

*General Director of HC of Group SVEL CJSC
A. Yu. Kishko*

Reference Letter

For several years, OOO Massa is a regular supplier of high-voltage bushings for OOO SVEL – Power Transformers.

The products supplied by Your company always have high quality, comply with requirements of GOST, international standards and specifications.

We don't have any complaints regarding delivery terms, configuration and quality of high-voltage bushings made by Your company.

Head of material and equipment procurement department.

*Head of material and equipment procurement department
S. A. Skorinov*

Группа СverdlovЭлектро

СВЕЛ Сисловые трансформаторы

620010, Екатеринбург, ул. Чернышевского д. 61
Тел./факс: +7 (343) 253-50-17 (27)

№ 2206-15-234
Дата 18.06.2013 г.
Тема Благодарственное письмо

Кому: ООО «Масса» - фирма «ИЗОЛЯТОР»
Кем: Председатель Совета директоров
А. Э. Саввицкий

Уважаемый Александр Иванович!

ЗАО «Группа «СВЕЛ» благодарит ООО «Масса» за положительный опыт сотрудничества в части поставки высококачественных трансформаторных вводов.

Вся поставленная продукция производства завода «ИЗОЛЯТОР» точно соответствует техническим характеристикам паспорта качества и не имеет дефектов. Нарезка и раскатывание с вальцовкой в монтажные объекты осуществляются.

За время нашего длительного сотрудничества вопросы по составлению технической характеристики, спецификации в достовольно проводилось оперативно, что указывает на высокий профессионализм всех служб ООО «Масса».

Надеемся на дальнейшее развитие сотрудничества в увеличении объема выпуска продукции.

Генеральный директор УК ЗАО «Группа «СВЕЛ» А.Ю. Киско

Исполнитель:
Директор, Менеджер по закупкам
6800 Лыжа А.С.
E-mail: Lyzha@net.ru

Группа СverdlovЭлектро

СВЕЛ Сисловые трансформаторы

620010, Екатеринбург, ул. Чернышевского д. 61
Тел./факс: +7 (343) 253 50 17
www.svel.ru

№ 2206-15-230
Дата: 12.11.2013
Тема: Отсутствует в оригинале

Кому: ООО «Масса»
Кем: Избранному зам. генерального директора
Коммерческому директору Н.Д. Панфилову
Факс: + (495) 723-33-11

Уважаемый Иван Дмитриевич!

ООО «Масса» уже на протяжении нескольких лет является постоянным поставщиком высококачественных вводов в адрес ООО «СВЕЛ» Сисловые трансформаторы.

Поставленная продукция Вашего производства неизменно высокого качества, соответствует требованиям ГОСТ, международным стандартам и ТУ.

Претензий по срокам поставки, комплектации, качеству высококачественных вводов Вашего производства не возникло.

Начальник ОЗ МТ Скорин С.А.

Исполнитель:
Директор, Менеджер по закупкам
6800 Лыжа Е.С.
Телефон 253 50-14 (доб. 2177)
E-mail: lyzha@net.ru



Togliatti Transformer Limited Liability Company is one of the largest designers and manufacturers of electro-technical equipment in Russia and CIS countries.

Our enterprise was founded in June 1956. In 1961, the first transformer of voltage class 110 kV, capacity 5600 kVA was manufactured.

As of today, manufacture of power high-voltage transformers is one of the main lines of activities of our enterprise. The transformers under the trade mark of «Togliatti Transformer» LLC are operating at power plants, in power grids of federal and regional level, in power supply systems of industrial enterprises, in ferrous and non-ferrous metallurgy, on electrified railway lines, in agriculture and in other economic entities in Russia and CIS countries. Electro-technical equipment manufactured by Togliatti Transformer is reliably operating in more than 50 countries all over the world, including East and West Europe.

Reference Letter

Attn Chairman of the Board of Directors
of Massa LLC
A.Z. Slavinsky

Hereby we confirm that the high-voltage bushings manufactured by Massa LLC («IZOLYATOR» plant) supplied to Togliatti Transformer LLC are of high-quality, they have all the necessary tickets and certificates.

The issues related to coordination of technical characteristics, specifications to the contract were solved promptly, testifying high professionalism of Massa LLC managers, employees of sales department and technical specialists.

Successful long-term experience in development of partnership relations between Massa LLC («IZOLYATOR» plant) and Togliatti Transformer LLC allows us to recommend Massa LLC as a reliable partner, manufacturer and supplier of high-quality bushings.

Deputy Director General
A.V. Roslyakov

 **ТОЛЬЯТТИНСКИЙ
ТРАНСФОРМАТОР** 

Дата 22.06.15 № 448-2/526

на № _____ Дата _____

ООО «ТОЛЬЯТТИНСКИЙ ТРАНСФОРМАТОР»
4000, Россия, Тольятти, Самарская область, Индустриальная 1
Т.а.: (007) (8482) 75-98-09, 75-99-10
Факс: (007) (8482) 25-93-00, 75-99-11
ОКПО 13252015 ОГРН 1036391104069
ИНН 6323072765 КПП 631000001
E-mail: tt@transformator.com.ru
www.transformator.com.ru

Председателю Совета директоров
ООО «Масса»
А. З. Славинскому

Уважаемый Александр Зинovieвич!

Настоящим письмом подтверждаем, что высоковольтные вводы производства ООО «Масса» (Завод «ИЗОЛЯТОР»), поставляемые в адрес ООО «Тольяттинский Трансформатор», соответствуют высокому качеству, имеют все необходимые паспорта и сертификаты.

Вопросы по согласованию технических характеристик, спецификаций к договору проводились оперативно, что говорит о высоком профессионализме руководства, сотрудников отдела продаж и технических специалистов ООО «Масса».

Успешный многолетний опыт развития партнерских отношений между ООО «Масса» (Завод «ИЗОЛЯТОР») и ООО «Тольяттинский Трансформатор» позволяет рекомендовать ООО «Масса» как надежного партнера, производителя и поставщика высоковольтных вводов.

Зам. Генерального директора
по коммерции  А.В. Росляков

ИД 1439787 v 1

«Power Machines Toshiba. High-Voltage Transformers» LLC is a joint venture (JV) between OAO Power Machines and Toshiba corporation.

Project implementation started in September 2011 by signing by the companies of the agreement on creation of a joint venture and construction in Russia of a plant for manufacture of power transformers.

Power Machines share in the JV equals to 50,01%,
Toshiba corporation share – 49,99%.



Reference Letter

During the period of mutual cooperation of our organizations, Massa LLC «IZOLYATOR» plant proved to be a reliable partner supplying high-voltage bushings; the products delivered by «IZOLYATOR» plant are invariably of high-quality, they comply with current standards and requirements.

The quality of supplied products is confirmed by successful operation of the above mentioned equipment.

«Power Machines Toshiba. High-Voltage Transformers» LLC is expressing gratitude for your work. We recommend Massa LLC «IZOLYATOR» plant as a reliable manufacturer and supplier of high-quality bushings.

*With respect,
Chief Designer
A.P. Sidelnikov*



Zaporozhtransformator is a largest manufacturer in CIS and Europe of oil power transformers and electric reactors, with plant capacity on single site of 60 ths. MVA per year.

The plant was established in 1947 as Zaporozhye Transformer Plant (ZTZ), and privatized in 1994, establishing Zaporozhtransformator joint-stock company.

Reference Letter

Dear Ivan Dmitrievich,

We can confirm hereby that ООО «Масса» (IZOLYATOR plant) is for many years one of the principal suppliers of high-voltage bushings for transformers produced by PAO Zaporozhtransformator.

Products of ООО «Масса», as integral parts of the equipment made by PAO Zaporozhtransformator, is widely presented both in Russia and CIS countries. Operating experience of Izolyator products included into equipment made by PAO Zaporozhtransformator in recent years allowed ООО «Масса» to reach higher technical level and greatly improve characteristics of their items.

In recent years, Massa demonstrates their willingness to improve and develop products taking into account recommendations from PAO Zaporozhtransformator, which fact characterizes Massa as responsible and reliable partner.

*Best regards,
Director for procurement and logistics
S.N. Yeryomin*

	
www.ztr.com.ua ПАО «Запорожтрансформатор» Днепровское шоссе, 3 Запорожье, 69000, Украина	Тел. +38 (061) 2703900 Факс +38 (061) 2703739 E-mail: office@ztr.com.ua
от 07.07.2015 № 1/25-44	

ООО «Масса»
 Коммерческому директору -
 Первому заместителю Генерального директора
 Панфилову И.Д.

Уважаемый Иван Дмитриевич,

Подтверждаем, что ООО «Масса» (завод «ИЗОЛЯТОР») на протяжении многих лет является одним из основных поставщиков высоковольтных вводов для трансформаторного оборудования производства ПАО «Запорожтрансформатор».

Продукция ООО «Масса» в составе изделий ПАО «Запорожтрансформатор» широко представлена как в России, так и в странах СНГ. Опыт эксплуатации продукции завода «Изолятор» в составе изделий ПАО «Запорожтрансформатор» последние лет позволил повысить технический уровень и значительно улучшить характеристики продукции ООО «Масса».

В последние годы ООО «Масса» демонстрирует готовность улучшать и совершенствовать выпускаемую продукцию с учетом рекомендаций ПАО «Запорожтрансформатор», что характеризует ООО «Масса» как ответственного и надежного партнера.

С уважением,

 С.Н. Еремин
 Директор по закупкам и логистике



It is known as the **leading Kazakhstan manufacturer of general-purpose transformer equipment** supplied to all branches of industry, including electric power, metallurgy, machine building, transport, oil and gas complex, residential and public utilities sector.

The transformer-building plant founded in 1959 played major role in the development of power engineering. The equipment reliably operates throughout all CIS territory.

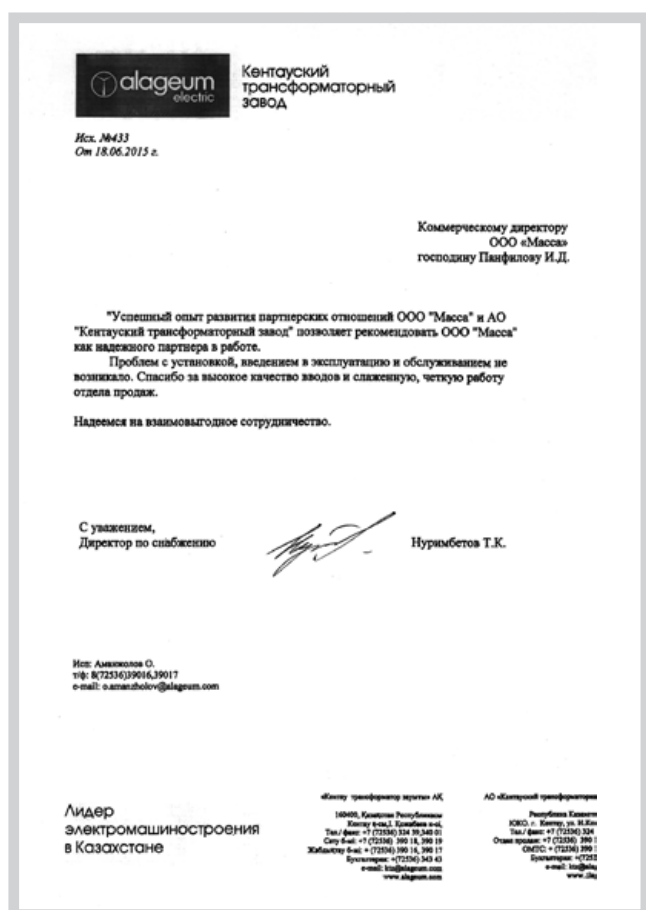
Reference letter

The successful partnership development between Massa Ltd and Kentau Transformer plant allows us to recommend Massa Ltd as a reliable partner.

We have witnessed no problems in installation, putting into operation and maintenance of the equipment. Thank you for the high quality of the supplied bushings and well-coordinated work of the sales department.

Looking forward to further cooperation.

Sincerely,
Purchasing Director
T.K. Nurimbetov



References of Power Industry and Heavy Industry enterprises of Russia and CIS countries





PAO Mosenergo is the largest regional generation company in Russian Federation and integral technological part of Russian Unified Energy System. The company is one of the world's largest producer of heat.

PAO Mosenergo has 15 power stations of installed electric power 12.7 ths. MW. Company's installed thermal power is 40.4 ths. Gcal/h.

Power stations of PAO Mosenergo supply more than 60% of electric power consumed in Moscow region and provide more than 70% of Moscow demand in thermal energy.

Reference Letter

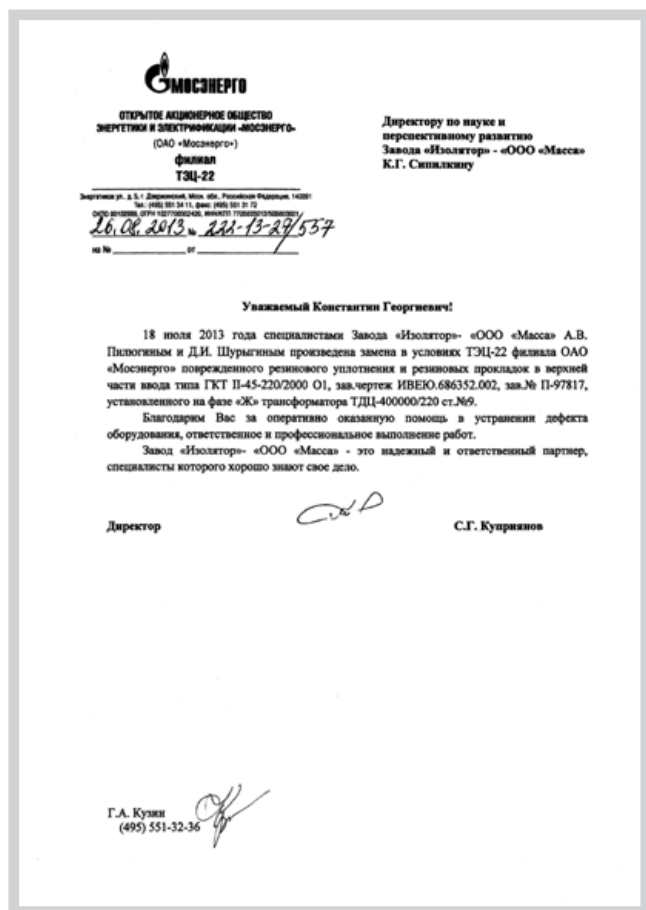
Dear Konstantin Georgievich,

On 18 July 2013, A.V. Pilyugin and D.I. Shurygin, specialists of Izolyator plant – OOO Massa, have replaced on site of TETs-22, branch establishment of OAO Mosenergo, the damaged rubber sealing and rubber gaskets in upper part of the bushing of type ГКТ II-45-220/2000 O1, dwg. ИВЕЮ.686352.002, serial No. П-97817, installed on phase «Zh» of transformer ТДЦ-400000/220 No. 9.

We are grateful to You for promptly rendered assistance in elimination of equipment defect, responsible and professional execution of works.

Izolyator plant – OOO Massa is reliable and responsible partner, personnel of which is highly competent in their field of business.

Director
S.G. Kupriyanov





State production association of electric power engineering
BELENERGO.

Vitebsk Republican Unitary Electric Power Engineering
Enterprise Vitebskenergo.

At present, RUP Vitebskenergo includes 6 power plants and 4 grid branches. The installed capacity of Vitebsk power system, largest in the Republic of Belarus, – 3521.9 MW which makes more than 40% of total power stations' capacity in the country within Belenergo structure.

Reference Letter

On operation of high-voltage bushings.

In response to Your inquiry about operation of high-voltage bushings made by OOO Massa (Russian Federation), we advise You as follows.

RUP Vitebskenergo operates the high-voltage bushings for 110–330 kV made by OOO Massa (Russian Federation).

There are no remarks or faults of the high-voltage bushings made by OOO Massa (Russian Federation) identified during period of operation. The HV bushings are in perfect technical condition and fully comply with ratings.

Deputy Chief Engineer
S.A. Posokhov

OT: ВИТЕБСКЭНЕРГО ТЕЛ: 80212474022 27.05.2015 9:33 СТП1

Дирекция историко-административная электроснабжения «БЕЛЭНЕРГО» Витебское республиканское унитарное предприятие электроэнергетики «Витебскэнерго» (РУП «Витебскэнерго») ул. Пролетаров, 30, 210029, г. Витебск тел. +375 (212) 47 01 50 – приемная факс: +375 (212) 47 30 75, 47 40 22 e-mail: energo@vitebsk.energo.by http://www.vitebsk.energo.by р/р 3012115917020 у Региональной дирекции № 200 ААТ «БПС-Сбербанк» БИК 153001369 УНП 300000252 27.05.2015 № 8101ф На № 255 ад 21.05.2015 г. Об эксплуатации высоковольтных вводов На Ваш запрос об эксплуатации высоковольтных вводов производства ООО «Масса» РФ сообщаем следующее. В РУП «Витебскэнерго» эксплуатируются высоковольтные вводы 110-330 кВ производства ООО «Масса» РФ. За время эксплуатации высоковольтных вводов производства ООО «Масса» РФ замечаний и неисправностей не выявлено. Высоковольтные вводы находятся в исправном техническом состоянии и полностью соответствуют паспортным характеристикам. Заместитель главного инженера С.А. Посохов +375212(47-00-55), Удалько	Государственное производственное объединение электроэнергетики «БЕЛЭНЕРГО» Витебское республиканское унитарное предприятие электроэнергетики «Витебскэнерго» (РУП «Витебскэнерго») ул. Пролетаров, 30, 210029, г. Витебск тел. +375 (212) 47 01 50 – приемная факс: +375 (212) 47 30 75, 47 40 22 e-mail: energo@vitebsk.energo.by http://www.vitebsk.energo.by р/р 3012115917020 у Региональной дирекции № 200 ОАО «БПС-Сбербанк» БИК 153001369 УНП 300000252 Генеральному директору ЗАО «Западный проект» Лагунову С.Н.
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State enterprise providing electric power to consumers in Minsk and Minskaya region, heat supply in cities Minsk, Molodechno, Zhodino, Borisov, Vileyka, Soligorsk, Slutsk and settlements Rudensk, Druzhny, Svisloch. Part of State Production Association Belenergo.

RUP Minenergo is the largest and most important enterprise among regional power systems in Belarus Republic that produces a quarter of republican electric power and heat which is distributed through Belenergo network.

Reference Letter

Over a period of years, ZAO Zapadny proyekt supplies the high-voltage bushings of various voltage classes made by OOO Massa to branch establishments of RUP Minskenergo: Slutsk Electric Grid, Stolbtsy Electric Grid, Molodechno Electric Grid, Borisov Electric Grid, Minsk Heat and Power Plant No.4, Zhodino Heat and Power Plant.

All delivered products have necessary data sheets and certificates. The delivery is carried out in strict compliance with technical documents. There are no claims regarding quality of the products.

Deputy Chief Engineer
A.A. Goranin

ОТ: РУП «Минэнерго» ТЕР: 13272111 25.05.2015 14:04 СТР: 1

Дирекции электрооборудования
«Белэнерго»
Минское республиканское унитарное
предприятие электроэнергетики
«МИНСКЭНЕРГО»
ул. Архангельская, 24, 220033, г. Минск
тел. (017) 223 81 03, факс (017) 227 21 11
E-mail: office@minskenergo.by
р/с 300207740011 Центр банковских услуг № 701
ААТ «БКС-Сбербанк» г. Минск, БИК 133001369

Государственное производственное
объединение электроэнергетики «Белэнерго»
Минское республиканское унитарное
предприятие электроэнергетики
«МИНСКЭНЕРГО»
ул. Архангельская, 24, 220033, г. Минск
тел. (017) 223 81 03, факс (017) 227 21 11
E-mail: office@minskenergo.by
р/с 300207740011 Центр банковских услуг № 701
ОАО «БКС-Сбербанк» г. Минск, БИК 133001369

На № 253 от 21.05.15

Генеральному директору
ЗАО «Западный проект»
Лагуна С.Н.

На протяжении ряда лет ЗАО «Западный проект» осуществляет поставку высоковольтных выводов различных классов напряжения производства ООО «Масса» для филиалов РУП «Минскэнерго»: Слуцкие ЭС, Столбцовские ЭС, Молодечненские ЭС, Борисовские ЭС, Минская ТЭЦ-4, Жодинская ТЭЦ.

Все поставленная продукция имеет необходимые паспорта и сертификаты. Поставка продукции выполняется в строгом соответствии с технической документацией. Замечаний по поводу качества продукции нет.

Зам главного инженера  А.А. Горанин

31 Магистрант 2184285



Mogilev power system provides generation, transmission, distribution and selling of electric and heat energy, with operative-dispatch control of these processes. **RUP Mogilevenenergo** includes 12 branches.

RUP Mogilevenenergo realizes investment projects in public-private partnerships in the Republic of Belarus.

Reference Letter

In response to Your inquiry of 20.05.2015, I can advise You that we don't have complaints regarding quality of high-voltage bushings for 330–35 kV made by OOO Massa (Russian Federation) and delivered by TChUP Sagrat.

*Best regards,
Chief Engineer
A.M. Shishov*

FROM : Mogilevenenergo. PHONE NO. : 00222253430 FRY. 20 2015 10:28PM P1

 Дирекция энергетики и электрификации
Могилевское республиканское унитарное предприятие
«Могилевэнерго»
(РUP «МОГИЛЕВЭНЕРГО»)
ул. Бонч-Бруевича, 3, 213030, г. Могилев
тел. (0222) 29 33 39, факс (0222) 29 34 81
e-mail: energo@mogilev.by
Р/р: 3012119335015 в Региональной Дирекции №600
А/АТ «БГЭС-Сбербанк», БИК 153001369

Государственное производственное объединение
«Могилевэнерго»
Могилевское республиканское унитарное
предприятие электроснабжения
«Могилевэнерго»
(РUP «МОГИЛЕВЭНЕРГО»)
ул. Бонч-Бруевича, 3, 213030, г. Могилев
тел. (0222) 29 33 39, факс (0222) 29 34 81
e-mail: energo@mogilev.by
Р/р: 3012119335015 в Региональной Дирекции №600
А/АТ «БГЭС-Сбербанк», БИК 153001369

17.05.2015 № 51.33/7164

на № _____ в/п _____

Об отзыве по вводу
высоковольтным

Директору ТЧУП «Саграт»
Мельнику Д.П.
Р/к: 8-017-237-71-01

На Ваш запрос от 20.05.2015 сообщено, что к поставленным ТЧУП «Саграт» вводам высоковольтным на напряжение 330-35 кВ производства ООО «Масса» (РФ) претензий по качеству нет.

С уважением,
Главный инженер



А.М. Шишов

Усевич
293-365



Electrical equipment maintenance factory (RETO).

Today the plant's main activity is service of high-voltage equipment: 6–500 kV power transformers, bushings, oil arc-suppression coils, electric motors.

The plant employs 320 highly qualified specialists whose work ensures timely repair and good working condition of substation equipment. People of Moscow region benefit from the uninterrupted supply of electricity.



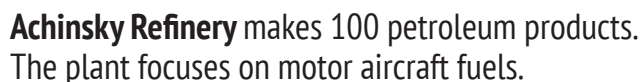
Reference letter from RETO

Massa Ltd has been a supplier of 20-220kV bushings to our company in a number of years.

The company products are of high quality, adhere to modern standards and normative and technical documentation with all certificates available.

Mass Ltd has always met delivery time for supply of their products.

Chief Engineer
A.A. Zhukov



Reference letter from Achinsky Refinery

Since 2006 we have replaced for Massa Ltd-made (Izolyator) 110 kV and 220kV line and oil switch bushings:

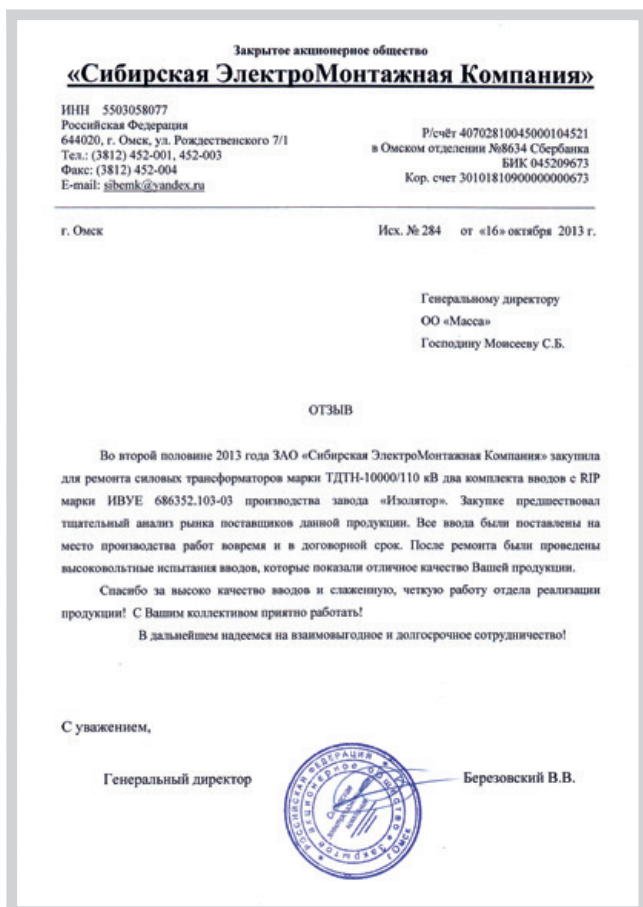
- 110kV line bushings – 27 pcs
- 110kV bushings for oil switches – 4 pcs
- 220kV bushings for oil switches – 13 pcs

The line bushings are polymer insulated, tank-type bushings – with ceramic external insulation.

We have not identified any faults in the equipment operation. The bushings are reliable and easy to operate: no running repair or overhaul is required – only minimal maintenance and measurements are done significantly cutting time on electrical equipment repairs.

Chief Power Engineer
A.Yu. Razin

180 power inspections have been made.



Reference Letter from Sibirskaya Electric-Installation Company

In the second half 2013, Sibirskaya Electric-Installation Company purchased 2 sets of IVUE 686352.103-03 bushings with RIP insulation made by Izolyator for servicing TDTN-10000/110kV power transformers.

The purchase was preceded by a detailed analysis of the supplier market for this product. The bushings were delivered to the installation facility on time. The HV tests run upon commissioning showed excellent quality of your products.

We would like to express our gratitude for the high product quality and professional sales department delivery – it is a pleasure to work with your team!

We expect to continue cooperation!

General Director
V.V. Berezovsky



Uralenergoremont JSC is one of the leading specialized maintenance companies on power equipment market.

Equipment modification is done on a turn-key basis including design, manufacture and supply, assembly and commissioning. All types of activities have necessary certifications. The company uses only modern equipment.


УРАЛЭНЕРГОРЕМОНТ
Год основания – 1948

Генеральному директору
ООО «Масса»
Господину Монсесу С.Б.

ОАО «УРАЛЭНЕРГОРЕМОНТ»
Юридический адрес: 620219, г. Екатеринбург, ул. Шенниково, 16,
Почтовый адрес: ул. Шенниково, 16, г. Екатеринбург, Россия, 620075
ИНН 6605001308, КПП 660501001, ОГРН 1026604941857,
ОКПО 00110833, тел. (343) 350-81-46, факс (343) 388-14-59,
e-mail: uer@uer.ru, www.uer.ru

На № 18.10.2013 № 24/1623
от _____

Уважаемый Сергей Борисович!

На протяжении ряда лет ООО «Масса» изготавливает и осуществляет поставку через своих дилеров, высоковольтные вводы на напряжение 35, 110, 220 кВ для нужд ОАО «УРАЛЭНЕРГОРЕМОНТ».

Вся поставленная продукция соответствует высокому качеству и имеет необходимые паспорта и сертификаты. Поставки выполнялись в оговоренные сроки и в строгом соответствии с технической документацией.

Руководство ОАО «УРАЛЭНЕРГОРЕМОНТ» отмечает профессионализм работников завода и рассчитывает на продолжение плодотворного сотрудничества.

Генеральный директор  И.Я. Гурьев

Reference letter from Uralenergoremont JSC

For several years Massa Ltd has manufactured and supplied through dealers 35, 110, 220kV bushings for the needs of Uralenergoremont JSC.

All products meet high quality standards and have required certificates and technical documentation. All deliveries were executed within schedule in strict compliance with technical specifications.

Uralenergoremont JSC management marks professionalism of the partners and looks forward to continue cooperation.

*General Director
I.Ya. Guryev*

Foreign customers

ALSTOM **SIEMENS**



KONČAR

elering
OHENDAME ENERGIAD





Crompton Greaves Limited – Indian based multinational with expertise in development and production of power equipment for generation, transmission and distribution of electricity headquartered in Mumbai.

Certificate of Official Supplier to Crompton Greaves Limited

CG Electric Systems Hungary Zrt.
Registered Office:
1095 Budapest, Mátyás utca 7.
T: +36 1 483 6000 W: www.cgelectric.com


Smart solutions.
Strong relationships.

We hereby certify that IZOLYATOR Massa Ltd. Company is a

Certified supplier

of CG Electric Systems Hungary Zrt.

Based on the initial approval audit performed on the 5th of July 2011.

Certification No.: 02/2011
Valid until: 14.07.2016

Budapest, 14.07.2011

Csaba Baráth
Lead auditor



Reference letter from Crompton Greaves Limited

Transformer division (T1) of Crompton Greaves Ltd., Mumbai, India has installed IZOLYATOR MAKE 3 NOS 600 KV 800 AMP, RIP bushings with Serial Nos. 30016, 30519 and 30622 manufactured by OOO Massa as per IEC 60137 on reactor testing transformer since April 2013.

We have tested 9 Reactors using this reactor testing transformer at 476 KV for total duration of approx. 9 to 10 hours till date.

Hereby we certify that performance of these RIP bushings on reactor testing transformer is satisfactory.

*General Manager & Plant Head.
Power Transformer Div.T1
Mumbai, India.*

Crompton Greaves Limited
Power Transformers Division (T1): Power Systems
Kanjur Marg (East), Mumbai 400 042, India
T: +91 22 6750 8000 F: +91 22 6750 8300


Smart solutions.
Strong relationships.

3RD March 2014

TO WHOM IT MAY CONCERN

Subject: Performance report

Transformer division (T1) of Crompton Greaves Ltd., Mumbai, India has installed IZOLYATOR MAKE 3 NOS 600 KV 800 AMP, RIP bushings with Serial Nos. 30016, 30519 and 30622 manufactured by OOO Massa as per IEC 60137 on reactor testing transformer since April 2013.

We have tested 9 Reactors using this reactor testing transformer at 476 KV for total duration of approx. 9 to 10 hours till date.

Hereby we certify that performance of these RIP bushings on reactor testing transformer is satisfactory.

Best regards

For Crompton Greaves Ltd.

General Manager & Plant Head.
Power Transformer Div. T1
Mumbai, India.

Registered Office:
CG House, 6th Floor, Dr. Ambedkar Road, Worli, Mumbai 400 030, India
T: +91 22 2453 7777 F: +91 22 2453 7750 W: www.cgglobal.com





Koncar Power Transformers Ltd. is a company that specializes in equipment and devices production for power generation, transmission and distribution as well as transportation and industry.

Founded in 1921, Koncar Power Transformers Ltd. employs 3800 employees.

Reference Letter from Koncar Power Transformers Ltd.

Koncar Power Transformers Ltd have purchased 53 bushings for projects in Russia in 2011 and 2012 year from Izolyator factory – OOO Massa for large power transformers (80, 125 and 200 MVA).

All the bushings were delivered on time and with the agreed terms.

According to past experience in working with OOO Massa we can confirm quality of products and all other standards regulation.

Purchasing Dpt,
Ivan Puk

**Končar
PowerTransformers
Ltd.**
A Joint Venture of
Siemens and Končar

Name: Nataša Mazurek
Department:
Phone: +386 (0)1 277-3111
Fax: +386 (0)1 277-3166
E-mail: n.mazurek@kpl.rs

Subject: Reference from Koncar Power Transformers Ltd.

Koncar Power Transformers Ltd. have purchased 53 bushings for projects in Russia in 2011. and 2012. year from Izolyator factory – OOO Massa for large power transformers (80, 125 and 200 MVA).

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According to past experience in working with OOO Massa we can confirm quality of products and all other standards regulation.

Your sincerely

Ivan Puk
Purchasing Department

KONČAR – ENERGETSKI
TRANSFORMATORI
d.o.o.
ZAGREB, Josipa Miroševića 12

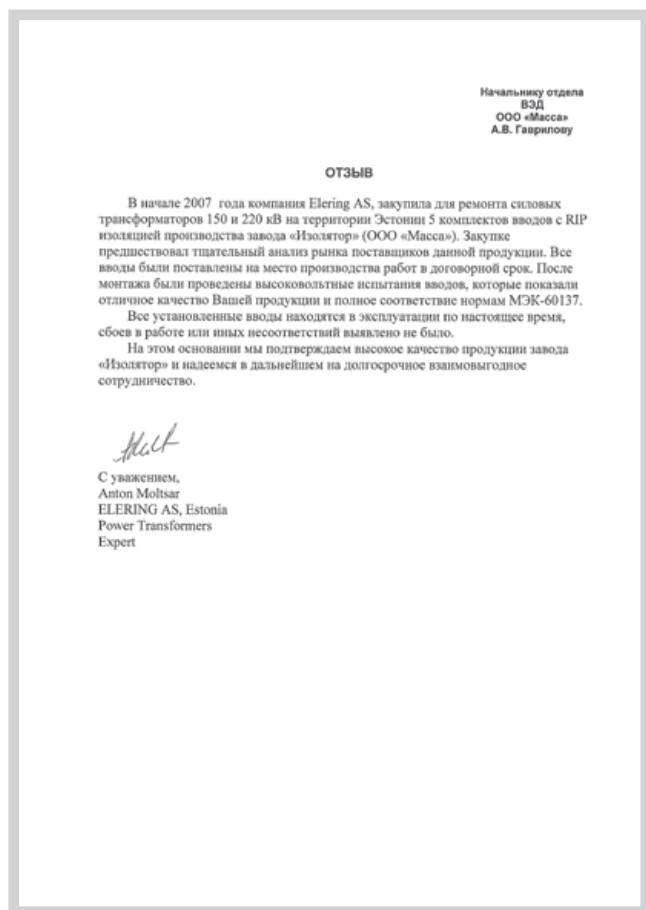
KONČAR POWER TRANSFORMERS LTD. p.p. 6097, Josipa Miroševića 12, 10000 Zagreb, HR
Management phone: +386 (0)1 277-3111, fax: +386 (0)1 277-3166, Sales & Marketing phone: +386 (0)1 277-3166, fax: +386 (0)1 277-3166
Purchasing phone: +386 (0)1 277-3166, fax: +386 (0)1 277-3166, E-mail: n.mazurek@kpl.rs, k.p.t@kpl.rs

Contract No.	Date of contract	Type of bushing	Voltage class	Quantity	Delivery date	Name of customer	Project name	Type of transformer (end user)	Location of end user
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-1	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	1.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-2	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-3	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-4	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-5	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-6	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-7	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-8	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-9	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-10	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-11	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-12	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-13	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-14	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-15	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-16	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-17	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-18	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-19	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-20	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-21	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-22	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-23	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-24	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-25	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-26	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-27	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-28	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-29	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-30	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-31	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-32	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-33	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-34	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-35	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-36	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-37	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-38	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-39	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-40	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-41	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-42	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-43	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-44	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-45	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-46	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-47	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-48	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-49	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-50	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-51	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-52	Russia
01000493	12.07.2011	BUŠINGI 174/40-50/50-01	174kV	3.000	12.07.2011	RUSSKAYA BSH	RUSSKAYA BSH	RUSSKAYA BSH-53	Russia

KONČAR – ENERGETSKI
TRANSFORMATORI
d.o.o.
ZAGREB, Josipa Miroševića 12

Elering AS (former name: Pohivork) is an electric power transmission system operator in Estonia. Elering was established on 1 November 1998 under the name of Pohivork as an operating unit of the Estonian national power company Eesti Energia.

The enterprise is an independent system operator that maintains and develops the national power grid.



Reference letter from Elering AS

At the beginning of 2007, Elering AS purchased 5 sets of bushings with RIP insulation made by Izolyator (Massa Ltd) for servicing 150kV and 220kV power transformers in Estonia.

The deal was forerun by a detailed analysis of the supplier market for this product. The bushings were delivered to the installation facility on time.

Tests run upon commissioning showed excellent quality of your products and full adherence to IEC-60137 standard.

All installed bushings are currently in operation with no failures or non-compliance identified.

Based on the above we confirm a high quality of Izolyator products and look forward to longterm cooperation.

*Anton Moltsar Elering AS
Estonia Power Transformers Expert*



Siemens is a German multinational conglomerate company headquartered in Berlin and Munich. It is the largest engineering company in Europe. The principal divisions of the company are Industry, Energy, Healthcare, and Infrastructure & Cities, which represent the main activities of the company.

The company is a prominent maker of medical diagnostics equipment and its medical health-care division, which generates about 12 percent of the company's total sales, is its second-most profitable unit, after the industrial automation division.

Siemens and its subsidiaries employ approximately 343,000 people worldwide and reported global revenue of around €71.9 billion in 2014 according to their annual report.

Izolyator company is an official bushing supplier certified by SIEMENS AG

Auditreport - CM-BU-Izolyator-Russia_20-June-2012					
Auditor:	K. Mogl M. Kaschenko I. Verbitskiy T. Zavalishina (party)	Date of Audit	20 June 2012	Close of Audit	22 June 2012
Participants:	A. Gavrilov, A. Novikov, T. Simakova, K. Spilkin				
Audit-ID:	CM-BU-Izolyator-Russia_20-June-2012	Supplier	Izolyator-Russia	Product /Process	Condensor bushings
Scoring general part					
Summary:		83%			
Scoring product related part					
Summary:		84%			
Strong points					
Fast delivery time and standard bushings on stock					
Severe deviations:					
no severe deviations see action list					
Non severe deviations or potentials:					
4 non severe deviations or recommendations see action list					
Audit result:		84.0% fully acceptable			
Comment:					
The audit team propose the approval of Izolyator					
Signum audit team:	Lead-Auditor	Co-Auditor	Co-Auditor		
	Mr. Mogl	Mr. Kaschenko	Mr. Verbitskiy		
Signum supplier:	General Manager	R & D Direktor	Quality		
	Mr. Sergey G. Morozov	Mr. Spilkin	Mr. Morozov		
Date:					

Page 2/7

H:\Summary CM-BU_Izolyator-Russia_20-June-2012.xlsSummary



Power Grid Corporation of India Limited (PowerGrid) is an Indian state-owned electric utilities company headquartered in Gurgaon, India. PowerGrid transmits about 50% of the total power generated in India on its transmission network.

Its subsidiary company, Power System Operation Corporation Limited (POSOCO) handles power management for Power Grid.

PowerGrid also operates a telecom business under the name POWERTEL.

The company owns and operation power grid comprising 106 804 km super high-voltage lines, 184 super high-voltage substations of alternating and direct current with total installed transformer capacity of 205 923 MVA.



Internet application Inspection Call Management System on the official website of Power Grid Corporation of India Limited

Izolyator is an official supplier of OIP and RIP bushings for the needs of Power Grid Corporation of India Limited.

Izolyator enters the official supplier list of completing parts to transformers (9-A and 9-B) in the Inspection Call Management System application of Power Grid Corporation of India Limited.

Bushings for up to 420 kV voltage

<http://apps.powergridindia.com/IMS/ComponentList/Power-Xformer%20upto%20420%20kV-CM%20List.pdf>

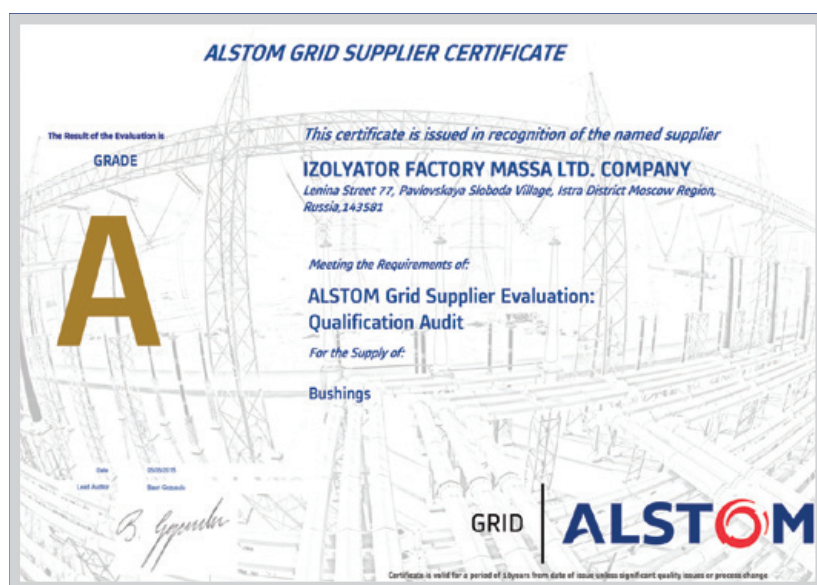
Bushings for up to 765 kV voltage

<http://apps.powergridindia.com/IMS/ComponentList/Power-Xformer%20for%20765%20kV%20CM-List.pdf>



Alstom is a French multinational company which holds interests in the electricity generation and rail transport markets.

3 Alstom had annual sales of €20.3 billion, and employed approximately 96,000 people in around 100 countries. Alstom's headquarters are located in Levallois-Perret, west of Paris. Its CEO is Patrick Kron.



Certificate of Official Supplier to Alstom



Reference letter of Alstom

Massa LLC. – Izolyator company is now in the list of suppliers of ALSTOM Grid AG in Switzerland.

ALSTOM

ALSTOM Grid AG Gas Insulated Substations Carl-Sprecher-Strasse 3 5036 Oberentfelden Switzerland

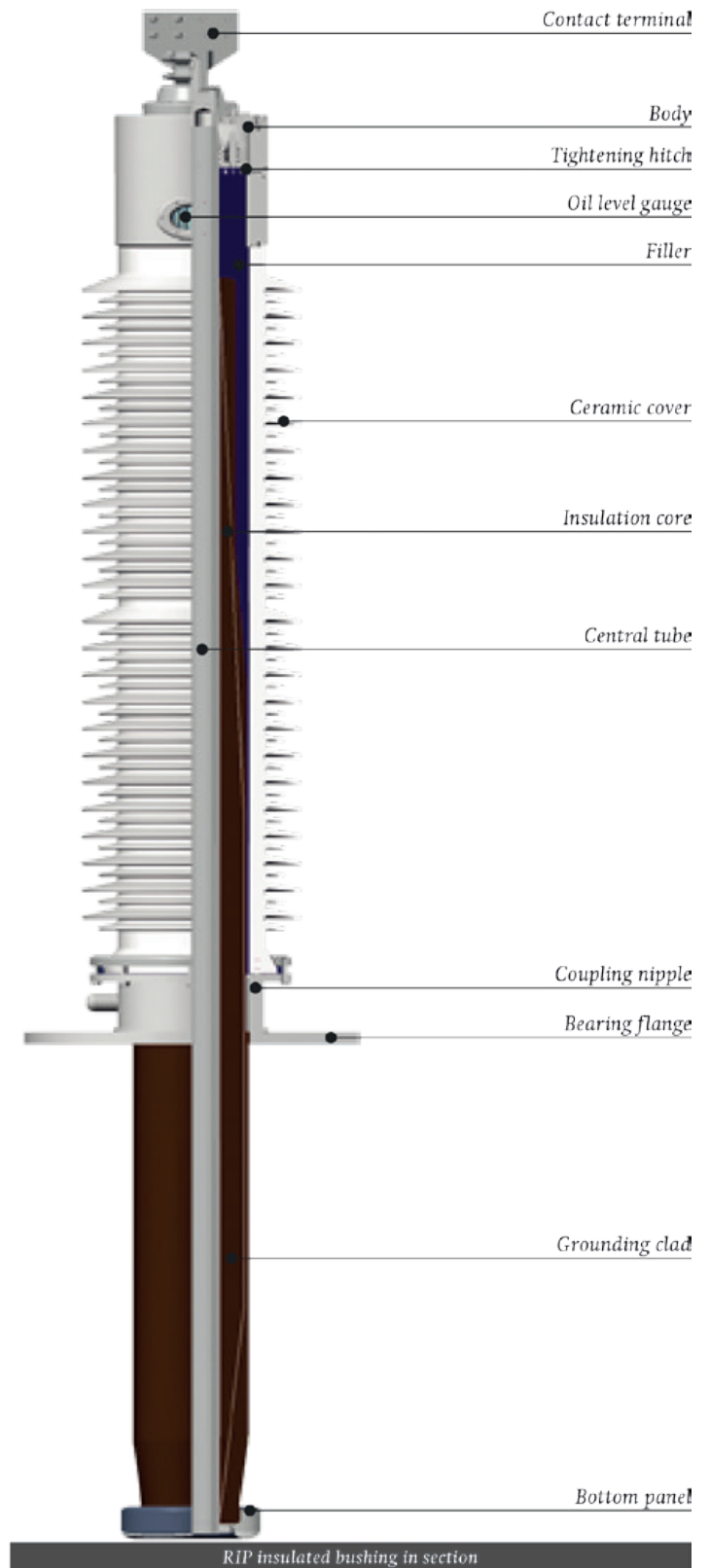
RIP insulated bushings advantages

Internal hard RIP insulation

Resin impregnated paper — paper saturated with resin — is the main construction element of a HV bushing. It is a core which is formed by insulating crepe paper winding on the central tube with subsequent thermal vacuum dryout and a special epoxide compound saturation. After drying out under pressure, any occluded gas is ousted from insulation.

In the winding process, condenser plates are used to level electric field.

- Reliability
- Security
- Advanced design
- Durability
- Ecologically friendly
- Service free
- Ease of operation



Izolyator corporate edition



Izolyator's pilot edition saw light in 2013, and today it is a comprehensive periodical providing information on practically any aspect of the company's activities.

The regular columns are dedicated to actual events in cooperation development with enterprises of power and power engineering industries of Russia and CIS countries, our strategic partners overseas – leading global OEMs of advanced power equipment and largest power grids.

A distinctive feature of this edition is direct speech from our management and specialists who generate the actual news and participate in events. You can find out about the company divisions' activities and corporate life from the Success Factors and Pulse of the Company columns.

We sincerely hope the published materials sparkle interest from the public and offer you subscription to Izolyator corporate edition. In order to subscribe please apply in free form to i.puzakov@mosizolyator.ru stating **Izolyator Subscription in the Subject field and including your full mailing address with the zip code.** From this moment on you will be receiving all new issues and special editions of Izolyator.

We are looking forward to your applications!



Advantages of Izolyator company



 **120 years of experience behind our back, we are the most experienced manufacturer of high-voltage bushings in the world (> 570 000 pcs produced)**

 **Full range of HV bushings
12–1200 kV available**

 **More than 15 year experience of RIP bushings manufacture**

 **Design and develop innovative products**

 **Strive for constant product improvement**

 **Supply reference all around the world**

 **Company and products recognized worldwide**

 **Clients' interests are the main goal in our work**

 **We are always open to cooperation**

 **We stand by modern approaches to partnership and cooperation**

 **We are a professional team**

 **We render a complete services range:**

- Design
- Production
- Testing
- Warranty and post warranty service

Commercial division of izolyator company



Ivan PANFILOV
Commercial Director
1st Deputy
General Director

Our mission is to create basis for stable and sustainable power supply. We can achieve this goal only with common effort in close cooperation, joint creation and development.

That is why we value dialogue with you so highly as it is a starting point towards success in our common goal.

We are looking forward to meet you!



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Any additional information about Izolyator Company is available on request.