OOO "POLYMERPROM" TECHNICAL CATALOGUE



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# **ABOUT OUR COMPANY**

OOO "POLYMERPROM" was founded in 2003, in Taganrog, Southern Russia. The main area of business of our company is manufacturing of polymeric products.

Since 2005, OOO "POLYMERPROM" has been developing and manufacturing thread protectors for casing, drilling pipes and tubings as well as protection pieces for pipework.

Being a production-oriented company, we possess qualified personnel and modern efficient equipment by Russian and foreign companies making us able to perform the entire set of operations including pre-production, engineering, tool manufacturing (casting moulds) in cooperation with leading machine-building companies.

Production of polymeric parts on modern injection-molding machines allows us to manufacture parts of any difficulty category and with the weight up to 2.8 kg.

Painting is performed by electrostatic or tribostatic spraying and is ecologically safe.







Equipment used for manufacturing of protectors conforms to all modern standards. Usage of numeric controlled machines renders it possible to unify production of workpieces and ensure the production of high precision threading of necessary profiles.

Our company has developed and implemented a modern quality management system conforming to requirements of the international standard ISO 9001.

The main principles of OOO "POLYMERPROM" in the sphere of quality are:

Consumer orientation, understanding of the consumer's needs and tasks; the aspiration to exceed the customer's expectations.

Continuous and stable increase of quality factors.

Continuous increase of production efficiency due to the process approach to management and the system concept of process monitoring.









OOO "POLYMERPROM" offers author products protected by international patents.

High quality of our products helped us to be enrolled to the approved supplier list of the TMK Group as a supplier of threading protectors and joint products.

The quality of manufactured products meets the requirements of the standard API Spec.5CT/ISO 11960 and is confirmed by the certificate of SGS (Société Générale de Surveillance).















# PRODUCTS PRODUCTS

Polyethylene thread protectors: reinforced, non-reinforced and with steel shell intented for protection of threads of casing pipes and tubings with couplings, having the following quality levels: PSL-1, PSL-2 and PSL-3, manufactured to TU, GOST and API Spec.5CT rev. 9, manufactured to TU 22910003-7923819-06.









# **Usage of products**

Pipes comprise a large proportion of operational costs of oil companies. During transportation, handling and storage from the moment of manufacturing to arrival to the well site the pipes are exposed to various dangerous factors which can lead to damage of pipes. Such situations occur, for example, during transshipment from rail cars to vessels or lorry vehicles, as damages may be caused by wrong fixation during transportation or corrosion during storage. Damages on thread and sealing surfaces of pipes cost the industry hundreds of millions dollars annually.

Thread protectors are used for reliable protection of pipes from negative impact of external factors because the most serious damages occur on pipe ends. A properly designed and manufactured protector guarantees reliable protection of threading and sealing pipe ends as well as couplings.

Protectors should absorb direct and lateral impacts at temperature from minus 46 to plus 66°C, protect sealing surfaces from mechanical damages and humidity, be vibration resistant and able to sustain axial tension because they are sometimes used for lifting and dragging of pipes.

Direct impacts are possible when manipulating the pipe in restricted space, for example, rail car, vessel, lorry vehicle or in case of any other horizontal movement of the pipe. Lateral impacts are possible when lifting the pipe or if it falls down, for example, while being placed to the drill site bench, ground or other pipes.

Vibrational loads during rail or auto transportation may cause loosening and selfremoval of protector with further damage to threading and sealing surfaces of pipes.

Thread protectors are chosen at will of a metallurgical company-manufacturer of pipes or a company ordering pipes following the requirements of API 5CT/ISO 11960.

OOO "POLYMERPROM" produces external (caps) and internal (nipples) polymeric thread protectors with or without steel shell, reinforced open and close type, intended for protection against mechanical damages of treated surfaces of pipes and couplings during ordinary handling and transport operations, against ingress of dust or moisture into threading during transportation or storage period, at working temperatures from -46°C to +66°C. On the customer's request (under an additional contract), it is possible to negotiate on other working parameters.

Design and material of protectors are in compliance with requirements of API 5CT/ISO 11960. External protectors cover the full length of threading; internal protectors cover the equivalent full length of internal threading of the coupling.

# Thread protectors (cap and nipple) for protection of threaded connections of conventional casing pipes.

Pipe	Nominal			Connect	ion type	PT 1975	
size designation, in	pipe	OTTM	BC	LC	STC	OG-1M	VMZ-1
4 1/2	114	+	+	+	+		
5	127	+	+	+	+		1-13° F
51/2	140	+	+	+	+	+	Prince
53/4	146	+	+	+ /	+		+
65/8	168	+	+	+	+	11 11/10	+
7	178	+	+	+	+	11 11 11 11	
75/8	194	+	+	+	+	+	-
85/8	219	+	+	+	+		
95/8	245	+	+	+	+		
103/4	273	+	+	+	+	Sept and	Enterior and
113/4	299	+	+	+	+	NAME OF TAXABLE PARTY.	1
123/4	324	+	+	+	+	TOTAL PROPERTY.	
133/8	340	+	+	+	+		-



# Thread protectors (cap and nipple) for protection of "Premium" thread connections of casing pipes.

	Pipe	Nominal				Con	nection	type		100	
	size	pipe	<b>OTTG</b>	TMK	TMK	TMK	TMK	<b>TMK</b>	TMK	TMK-	TMK-
	designation, in	diameter,mm		GF	PF	FMC	TTL-	PF ET	CS	1	2
							01	100/4	4000		
	4	102					1546	10//6		+	183
	4 1/2	114		+	+	+	130	+	+	+	
	5	127	+	+	+	+	439	+	+	1/100	100
	51/2	140	+	+	+	+	$A \cup I$	+	+	+	+
	53/4	146	+	+	+	+			1811	-	
	65/8	168	+	+	+	+		+			+
	7	178	+	+	+	+	E WATE	+		-taits	41
	75/8	194		+	+	+		+	-COR		+
	85/8	219	+	+	+	+	+	+3	15		
_	95/8	245	+	+	+	+	+/				
	103/4	273	Vaco	+	+		+			STATE OF THE PARTY.	La legacio
	113/4	299				7 3	#			1	-
	123/4	324	+	+	+	1.+5	+				-
-	13 <sub>3/8</sub>	340		+	+	1.	/Allen	TEE	1970		-



# Thread protectors (cap and nipple) for protection of premium thread connections "ULTRA tm".

Pipe	Nominal		C	Connection typ	)e	2000
size designation, in	pipe diameter, mm	ULTRA FJ	ULTRA SF	ULTRA QX	ULTRA DQX	ULTRA FX
4	102	+	- 10	144		+
4 1/2	114	+	+	+	+	+
5	127	+	+	+	+	+
51/2	140	+	+	+	+	+
65/8	168	+	+	+	+	
7	178	+	+	+	+	The same
75/8	194	+	+	+	+	ANDARON
85/8	219	+	+	+	+	
95/8	245	+	+	+	+	
103/4	273	+	+	+	+	
113/4	299	+	+	+	+	Section 1
117/8	302	+	+	/ / +		-
133/8	340	+	+ 4	1	+	

OOO "POLYMERPROM" is the only Russian company having the right to produce protectors for pipes with premium connection of the "ULTRA tm" line-up.





# Thread protectors (cap and nipple) for protection of premium thread connections of conventional tubings and "Premium" class.

Pipe	Nominal			Connection	type	
size designation, in	pipe diameter, mm	NKT (NU)	NKV (EU)	NKM	TMK FMT	NKTU
-	48	+	+			Aug free men
23/8	60	+	+	+ 7	+	+
27/8	73	+	+	+	+	+
31/2	89	+	+	+	+	+
4	102	+	+	+	Million / A	+
41/2	114	+	+	+	+	000











Thread protectors (cap and nipple) made of polyethylene, reinforced, non-reinforced and with steel shell for protection of tool joint thread of drill pipes produced to TU, GOST, and API Spec. DP, TU 2291-004-79238319-07.









**Technical catalogue 2012** 

# **Protectors for tool joints**

<b>Designation of</b>		Thread	Conicity	Profile	Profile	400
tool joint	tool joint	pitch, mm	4.60	form to	form to	
thread to	thread to			<b>GOST 5286</b>	API Spec 7	
<b>GOST 5286</b>	API Spec 7			As-3	F 55500	Š
3-65	NC-23	6,35	1:6	<b>1V</b>	V-0,038R	+
3-66	2 3/8Reg	5,08	1:4	1	V-0,40	+
3-73	NC-26	6,35	1:6	1V	V-0,038R	+
3-76	2 7/8Reg	5,08	1:4	1	V-0,40	+
3-86л/п	NC-31	6,35	1:6	1V	V-0,038R	+
3-88	3 1/2Reg	5,08	1:4	1	V-0,40	+
3-94	NC-35	6,35	1:6	1V	V-0,038R	+
3-101	3 1/2Reg	5,08	1:4	1	V-0,40	+
3-102	NC-38	6,35	1:6	1V	V-0,038R	+
3-108	NC-40	6,35	1:6	1V	V-0,038R	+
3-117	4 1/2Reg	5,08	1:4	1	V-0,40	+
3-118	NC-44	6,35	1:6	1V	V-0,038R	+
3-121	4 1/2FH	5,08	1:4	T	V-0,40	+
3-122 Т л/п	NC-46	6,35	1:6	1V	V-0,038R	-+
3-133 Тл/п	NC-50	6,35	1:6	1V	V-0,038R	+
3-140	5 1/2Reg	6,35	1:4	П	V-0,50	+
3-147 Тл/п	5 1/2FH	6,35	1:6	Ш	V-0,50	+
3-149	NC-56	6,35	1:4	V	V-0,038R	+
3-152 л/п	6 5/8Reg	6,35	1:6	Ш	V-0,50	<b>*</b>
3-163	NC-61	6,35	1:4	V	V-0,038R	+
3-171	6 5/8Reg	6,35	1:6	Ш	V-0,50	+
3-177	7 5/8Reg	6,35	1:4	, still	V-0,50	+





# **Protectors for high-torque tool joints**

Designation of tool joint thread to GOST 5286	Thread pitch, mm	Conicity	Profile form
<b>Z-81U</b>	8,4667	1:9,6	V-21/17
Z-83	8,4667	1:9,6	V-21/17









**OF THREAD PROTECTORS** 

Thread protectors (cap and nipple) of any type presented in the given catalogue may be produced in various design variants according to the customer's wish.



Any combination of design variants, for example, CORONA type with open bottom or LIFTABLE bottom type is available at customer's option.

Protector (cap and nipple) for casing pipes with a concave bottom.



Protector (cap and nipple) for casing pipes, type LIFTABLE



Protector (cap and nipple) for casing pipes with a flat bottom, "CORONA" type.

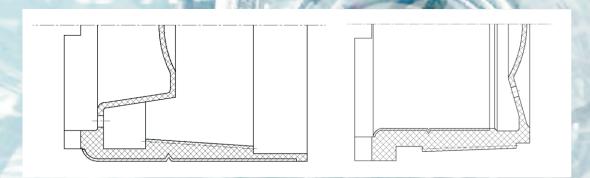


Protector (cap and nipple) for casing pipes, open type.



Protector (cap and nipple)
for casing pipes, type LIFTABLE + "CORONA"





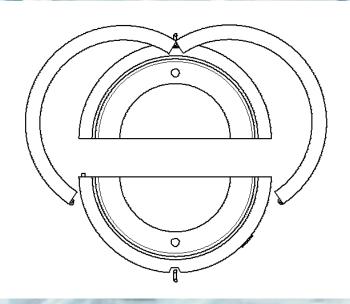
# Protector (cap), knock-down quick-detachable\*

Knock-down quick-detachable protector (cap) is designed to descrease time and efforts spent on release of thread pipe ends. To remove the knock-down protector, it's enough to withdraw lock pins holding the cap pieced together.









\* available for diameters larger than 140 mm.

# PROTECTION PIECES

Protection pieces (caps and plugs) made of polyethylene for protection of pipe ends of pipework and large-diameter pipes manufactured to TU, GOST and API Spec.5L
TU 2292-02-70659485-2005





# Protection pieces (caps and plugs) for protection of pipe ends.

Plugs of specified nominal sizes are produced for the entire range of wall thicknesses.

Draduct type		Nominal pipe diameter												100
Product type	89	114	120	127	140	146	168	178	194	219	245	273	324	340
Ordinary	+	+		+	+	+	+	+	+	+	149	+	-	
Reinforced				+	+		+			+	1			Const





Metallic fiber cradle supports for package, storage and transportation of casing, drill pipes and tubings produced to TU, GOST, API Spec.5CT and API Spec.5DP

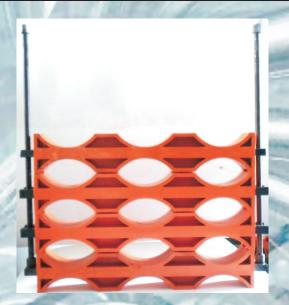


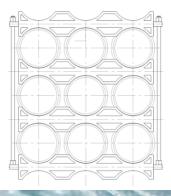


Metallic fiber cradle supports for storage and transportation of casing, drill pipes and tubings.

Cradle support		Nominal pipe size												
sets	73	89	114	120	127	140	168	178	194	219	245	273	324	340
"Economic"	+	+	+	+	+	+	+	+	+	+	+	+	+	+
"Normal"	+	+	+	+	+	+	+	+	+	+	+	+	+	+
"Offshore"	+	+	+	+	+	+	+	+	+	+	+	+	+	+









Technical catalogue 2012

# **SEALING RINGS**

Polymeric rings for sealing of thread connections of casing pipes and tubings produced to TU, GOST and API Spec.5CT





Polymeric O-rings for sealing of threads of casing pipes and tubings.

Connection		Nominal pipe diameter									
type	114	120	127	140	146	168	178	194	219	245	273
OTTM	+	+	+	+	+	+	+	+	+	+	+
BC	+	+	+	+	+	+	+	+	+	+/	+



