Absolutely

Code Name "KUMI" Debut.

Perfect!!

Not only does it have more torque and more cyclic speed;
it is also more tough.
What more can you ask for?

Speed	Over 10,000rpm and more.(4V)
Torque	Over 1,600gcm and more.(4V)
Toughness	Over 30,000rd SEMI AUTO Fire.

SYSTEMA

STRONGEST IN THE WORLD

- 1,600g/cm or more Torque (4V)
- 10,100 rpm or more Speed (4V)
- 30,000 over SEMI AUTO fire (dry fire)

P.T.W. Final Motor 'KUMI' Debut
CODE NAME

SYSTEMA

We recently interviewed a long time fan and owner of multiple custom P.T.W. Mr. A; and asked him what his impression was about our new P.T.W. Motor.

A must read for P.T.W. fans!!

Interviewer (labeled as I) After test firing, what do you think about our new Motor?
Mr. A Oh yea, it was great. I thought it cycled smoother then I expected.

I) I was told that priority was placed in balancing the magnetic force along with the coil winding with a focus on. Is that noticeable?

A) Because the charm of the P.T.W. lies in the crisp feel of the Semi-Auto firing;
I think the starting torque is important.

I) It seems they are able to produce more torque by lowering the magnetic force from the magnet.

A) Hmm, no kidding. It seems complicated.
But, will this work for the SUPER MAX? Will it be able to pull the load? I know it doesn't matter for the Japanese market but. . .

I) The new model works for the MAX model, however the torque needed for the SUPER MAX model, that version will be sold at a later date.

A) Although I don't notice a lack of power, isn't this a bit delicate?
I mean, coming from someone who knows everything about this from the beginning, I'm looking for more power just like when the MAX originally released. By the way, is this thing durable?

I) It seems to be more effective than the conventional model as we are told that it is more heat efficient.

A) Ever since the battery switched to Li-Po, heat efficiency has become important.
So, durability improved as well then?

I) It seems that they had some challenges in achieving durability.
They apparently based their durability on repetitive tests solely on Semi-Auto firing.

A) Wow, that's a tough test.
I shoot tons only because it's fun, I guess it's not all fun when they have to experiment .

I) Well I'm sure, since it's their job. . .
But, it's important that it doesn't break while the end user is casually firing it.

A) That's true, other then the motor, the P.T.W. doesn't fail. No matter how many times you fire.
The motor was the only weak point, I'm hoping that it is ok this time.

I) They seem to be very confident about that.
Plus I thought that the atmosphere surrounding them were bad on my eyes. . . .

A) I must've stepped in a dangerous area.
Personally, I like the silver case.

I) Oh you're referring to the Stainless Magnet Case.
It appears that a high level of technical expertise was needed to produce that shape.

A) Another proud achievement due to over specs! Since they originated from a custom parts shop I guess it's like an addiction; they're addicted.

I) I'll let them know.

A) Well, that's what I like about them and that's why I buy ***SYSTEMA***.

I) They seem to have also changed out the material used for the shaft.

A) So that's why it looks black. What changed?

I) With the steel bearings, it decreased the warping during cycling.

A) Hmm, I wonder if you even notice that while firing.

I) Not sure.
I heard that a lot of effort and care went to development.

A) Inspired by time.
But it seems that the startup on this is much more on the spot. With this I can use this much more comfortably.

I) That's it, that's what I wanted to say the most.
Because with the rigidity of the rotor enhanced this becomes the result.
I also think that this is considerably different (from the original). As expected, you notice this as well.

A) And that's because my history with this product is different from yours.
Because I been shooting P.T.W.'s before you were even born.

I) . . . .

A) Ever since the motor changed to the N7511 type, exchanging the rotor has become easy. Up to that point, I've been sending it to the shop.

I) The motor is also included in the Ultimate Kit.

A) After all, it's best to maintain your own gun.
In that respect, I like it.

I) Thank you.

A) Speaking of maintenance, was the brush changed out?

I) What do you mean?

A) Those brushes wear down way too fast after all that currency running through the motor.

I) Repetitive firing using Semi-Auto will unavoidably wear the brush down.
Replacing the brush is still far more cost effective and less time consuming then wearing down the Commutator; which will require exchanging the Rotor.

A) Well, it depends on what type of cylinder is used, but it sure was a pain to exchange out the brushes.
Plus I need a soldering iron.

I) So true.

A) Sometimes, the motor cord doesn't stick to the brush case using the solder.

I) I believe that the brush case plating has come off exposing the stainless metal. If that's the case, they recommend changing out the case.

A) Why is it necessary to plate a stainless steel case?

I) To allow the solder to bond to the case easier, and because the conduction resistance becomes lower with the plating.

A) Why is there a need to use stainless steel in the first place? There should be a lot of other materials that could be used, such as brass.

I) When the motor is inserted into the grip, the motor cord may pull on the brush case, so to prevent any warping I believe they use this sturdy material.

A) The developer must be sick, I think you need to send him to the hospital.
But, if they perfect the motor, the P.T.W. won't have any blind spots.

I) No, that's just the beginning.

A) What do you mean, there isn't anything left.
It's just like you build your own gun then customize it yourself.
When you run out of things to do, you just build a new one.

I) It's a trade secret.

A) All right, for starters can you give me a few of these new motors as a souvenir before you leave?

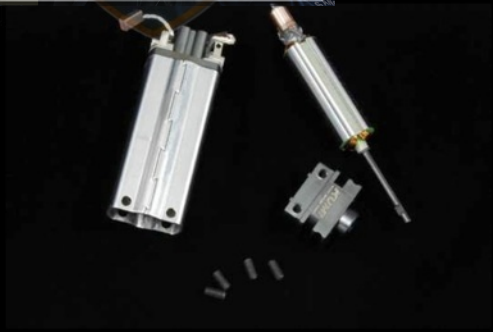
I) We haven't put this out for sale, there's no extras available.

A) Can you stand over there? I want to shoot you with my MAX.

There you have it.

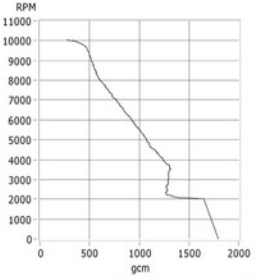
We hope you understand the performance of the new motor from an end user's perspective.

Please be patient as we prepare the release of this motor.



Maximum Speed:	10061.000000
Maximum Torque:	1646.000000
Maximum Current:	45.968182
Maximum Efficiency:	0.858019
Maximum Output Watts:	57.314427
Test Date:	2013/07/22

Comments



Output Watts	gcm	Amps 1	Volts 1	Efficiency	Speed			
28.300	273.900	13.045	3.933	0.579	10061.000	0.000	0.000	0.000
47.425	487.600	15.463	3.931	0.806	9471.000	0.000	0.000	0.000
48.183	513.112	17.070	3.931	0.740	9144.000	0.000	0.000	0.000
48.523	536.863	18.717	3.930	0.671	8801.000	0.000	0.000	0.000
48.937	556.950	19.898	3.930	0.639	8556.000	0.000	0.000	0.000
49.007	579.773	21.547	3.931	0.588	8231.000	0.000	0.000	0.000
50.086	609.108	22.645	3.929	0.572	8007.000	0.000	0.000	0.000
51.896	650.955	23.850	3.929	0.560	7763.000	0.000	0.000	0.000
52.697	682.273	25.123	3.930	0.541	7521.000	0.000	0.000	0.000
54.748	732.706	26.390	3.929	0.534	7276.000	0.000	0.000	0.000
55.134	760.867	27.583	3.929	0.515	7056.000	0.000	0.000	0.000
55.786	797.450	28.872	3.929	0.496	6812.000	0.000	0.000	0.000
56.581	840.656	30.208	3.927	0.481	6554.000	0.000	0.000	0.000
56.824	888.600	31.901	3.928	0.457	6227.000	0.000	0.000	0.000
57.252	931.178	33.186	3.927	0.443	5987.000	0.000	0.000	0.000
56.728	963.023	34.433	3.926	0.422	5736.000	0.000	0.000	0.000
56.618	1004.407	35.687	3.926	0.407	5489.000	0.000	0.000	0.000
56.309	1042.217	36.768	3.926	0.392	5261.000	0.000	0.000	0.000
55.362	1074.525	38.025	3.926	0.373	5017.000	0.000	0.000	0.000
53.824	1098.547	39.457	3.924	0.351	4771.000	0.000	0.000	0.000
53.219	1143.726	40.789	3.924	0.335	4531.000	0.000	0.000	0.000
52.453	1186.713	41.871	3.925	0.321	4304.000	0.000	0.000	0.000
51.515	1234.335	43.134	3.925	0.306	4064.000	0.000	0.000	0.000
49.860	1272.650	44.525	3.924	0.286	3815.000	0.000	0.000	0.000
48.123	1311.880	45.671	3.910	0.271	3572.000	0.000	0.000	0.000
43.735	1289.342	45.160	3.787	0.257	3303.000	0.000	0.000	0.000
40.768	1296.903	45.142	3.706	0.245	3061.000	0.000	0.000	0.000
37.176	1289.641	45.137	3.620	0.228	2807.000	0.000	0.000	0.000
33.564	1280.173	45.136	3.533	0.212	2553.000	0.000	0.000	0.000
30.111	1272.604	45.113	3.464	0.193	2304.000	0.000	0.000	0.000
31.250	1490.200	45.098	3.381	0.205	2042.000	0.000	0.000	0.000
0.000	1793.832	44.979	2.760	0.000	0.000	0.000	0.000	0.000


UNIVERSO SNIPER
AIRSOFT