



## South Manchurian Railway

### The Mantetsu Blade

By Bruce Pennington and Team Mantetsu



{Sources are cited, where known. None of the information in this document may be used for commercial purposes or financial gain}

The Ents of *Lord of the Rings* like to say “Anything worth saying is worth taking a long time to say”! Well, I won’t intentionally take too long to discuss this great topic, but like all stories, it becomes more meaningful when we know the full story, like the story of a blade, that we all cherish when it can be told from beginning to end.

I became part of this story when my dad passed away a few years ago and inherited his worn Japanese sword, missing some parts. He was in the Marines, briefly, just after Korea and picked it up sometime in his service years. In the process of finding parts to replace missing fittings, I learned it was a Mantetsu Kōa Isshin, made in 1941, and got hooked on Japanese guntō, and Mantetsu in particular. I had it polished and it went from an old war horse to a work of art.



The name 滿鐵 “Mantetsu” is actually a contraction of the full factory name - 南滿洲鐵道株式会社 = South Manchuria Railway Co., Ltd. (SMR).

The following is a translation and adaptation of the excellent work by Ohmura San on his website “Military Swords of Imperial Japan (guntō).” Without him, very little would be known about Mantetsu swords. this translation was first published in Italian on a forum called INTK. I was unable to trace the real name of the author but without his Italian contribution, I would have been unable to offer you this English version. Thank you, whoever you are. {Jean-Pierre CESCO, Team Mantetsu}

[Start of Translation of Ohmura’s

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#### A History of the Mantetsu Facilities

The South Manchuria Railway Company (Mantetsu, Dairen main plant) was not a mere railway company. Following the victory of the Russian-Japanese war, the land of the Rising Sun received rights on the railway and exploitation of Manchuria from Czarist Russia. Founded in 1906, Mantetsu developed many activities, including mining, coal mining, iron manufacturing, education, agriculture, shipyards, medical treatment and public works. However, following the creation of the Manchuria Heavy Industry Development Company (Mangyo), many of Mantetsu's activities were transferred to Manchuria, leaving Mantetsu alone with only three responsibilities: The railway, the coal mine in Fushun and research. However, the company remained an industry of enormous proportions, with the financial capital of a medium-sized nation, with 10 000 km of rails and 400 000 employees (during the period of development). It was almost a state within the state.

Japan used to import malleable metal from Sweden and other countries. Mantetsu decided to change course and to take over the production of its own soft metal. Japan's first experiments with the metal extracted in Manchuria were due to Dr. Kazuharu Kusaka of Mantetsu Central Experiment Station, who was able to start production of the metal after researching its properties, and to obtain good-quality, low-fusion point metal ore thanks to the iron-rich raw material extracted in Manchuria. Excellent steel was then made from crude metal through a particular electrolytic production method. According to Dr. Fukunaga Suiken's *Nihon To Daihyakka Jiten*, the Mantetsu metal was developed by the Dairen Manchurian Railroad Factory in September 1937, and was produced exclusively for the forging of swords. The result was close to pure metal.

### **A History of the Kōa Isshin Tō**

The Sword Factory of Dairen of the South Manchuria Railway Company published a handbook on the Kōa Isshin blades on July 25, 1939. The kanji on the cover of this book were written by Yōsuke Matsuoka, the former chairman of the South Manchuria Railway Company. The real specifics of the swords produced by Mantetsu were revealed in this volume.... The steel developed by Niigata Heji was different from the traditional tamahagane steel used in Japanese sword making. Therefore, the problem ... was not just to make a sword, but to try and make a sword with a brand new and never used steel. It can be said that this was a very pioneering job. Facts have proved that the process was quite successful. The "Mantetsu" sword did not have the hada formed by the forging of tamahagane steel in appearance, but it had a straight and regular hamon, showing the superb The autumn of Showa 15 (1940) happened to be the Japanese Imperial year 2600. The Japanese army occupying North Eastern China held a celebration ceremony, and Shigetsugu was awarded a medal. In addition to Shigetsugu, another smith Takeshima Hisakatsu worked for Mantetsu as well.



Shigetsugu's repair group in front of the Army Sword Repairing Factory.

The famous Japanese swordsmith Akira Kurihara once went to Mantetsu for a short-term technical guidance. No other swordsmiths were found to be involved in the manufacture of the Manchurian swords. However, according to speculations, while making a sword on his own, he must also have trained new swordsmiths too. He went back to Japan in 1941, and the production of Manchurian swords continued normally. By this time, there must have been many swordsmiths to carry on the production. After returning home, Kurihara continued to make swords again until the end of the war.

Mantetsu started to develop Mantetsu swords in 1936, and started the production line in December 1937. 100 swords were ordered by the Mantetsu President's office as a gift for North China Army garrison. These swords were made by Wakabayashi Shigetsugu and Takeshima Hisakatsu . Before Mantetsu hired them, some Prototypes had been made by steel workers, not professional swordsmiths. In Showa 11 (1936), the Central Laboratory commissioned the Dalian Railway Factory to manufacture a Japanese sword with a length of 60 cm. Ancient Japanese swords were forged by adding a relatively soft iron core to a hard steel casing. At that time, this method was not used. Instead, pure soft iron containing 0.2% carbon was used. The sword was first forged, quenched, polished, and finally a shirasaya was made for it. This was the first Japanese sword made at the Dalian Railway Plant. During this period, the sword was exhibited at the Swords Club of Dalian Liaodong Hotel. Some appraisers praised it as a "famous sword" and said it was comparable to the works of the Shodai Hizen Tadayoshi. After learning that this sword was a masterpiece production of the Dalian Railway Factory, everyone was greatly amazed, and highly praised Mantetsu's technology. Since then, the reputation of these sword spread among the sword enthusiasts in Dalian, and subsequently, orders followed.

At first, the swords were made using the off time between the manufacturing of tools but slowly it appeared that this time wasn't enough to meet the demand. The production method and process had to be adapted. The soft steel needed to be added to the interior of a hard steel forged casing. The swords became more solid, but the efficiency wasn't improved. President Matsuoka came to the factory and made an inspiring speech: "Even the best swordsmith of ancient times, on his own, will not make 1,000 swords in a lifetime. And Mantetsu has funds and talents, we are bound to produce many good swords. Japan's current shortage of swords should increase research efforts in this area to meet the needs of warfare. During the research process, failures and difficulties are inevitable, but we must not be pessimistic. After many failures, finally half a year later in December of Showa 12 (1937), relying on assembly line operations, the manufacture of Japanese swords finally entered the track of mass

production. the process of making sword became more detailed, and mass production was finally achieved.

### **Mei and Origin of the Koa Isshin Tō**

Fuller and Gregory, in their book "A guide to Showa swordsmiths", wondered whether "Kōa-Isshin" was the name of a particularly gifted swordsmith or a patriotic phrase. Koa Isshin can be translated as "United Asia!", a Japanese patriotic slogan of World War II. It could also refer to the 'Economic sphere of United Asia', the Japanese version of the Monroe doctrine, which began with Japan's occupation of Manchuria in 1932. The slogan Kōa Isshin called for the reunification of the spirit of Asian races in order to restore these peoples to new splendor. The spirit that moved the Japanese Empire was said to be enclosed in this sword.

The blades were originally labeled with the Mantetsu logo on the nakago. With the construction of the first Manchurian plant and the start of the production of Mantetsu-tō in 1937, the blades began to be marked Mantetsu Kitau Tsukuru Kore. The patriotic phrase Kōa Isshin was used for signing in 1939, after Matsuoka, then president of the South Manchuria Railway Company, had renamed the blade on March 23. So we had the start of production. The production began with the Kōa Isshin Mantetsu signature on the nakago followed by the terms kitae tsukuru kore.

### **Technical Data of the Koa Isshin Tō**

According to the book Koa Isshin, which the South Manchuria Railway Company published in 1939, the metal forging method was called Moro-Zutsumi and was used for metal molding and mechanical junction; the tempering was then done through a temperature-controlled system. The book Dai Nippon Token Shoko Meikan, published in 1942, reports that the producing of the Koa Isshin blades was the result of a revolutionary process invented by Kodō Suzuki, the first Mantetsu designer to be responsible for creating the swords within the factory, who in the light of the work carried out renamed them: "New Japanese swords" (shin nihontō). It seems that the idea of a soft metal core inserted in a steel tube came from the observation of train wheels and axles which were composed in a similar fashion.

At the origin of the production of the Koa Isshin tō, there were in-depth studies and scientific studies, which helped the technicians in the choice of metal that would compose the swords which would next equip the army of the Rising Sun. The result was a perfect soft core metal inclusion with a high-carbon metal coating.



Fig. 3 - Sections of Koa Isshin blades, as shown in the book about Koa Isshin. It is shown here how the shingane is correctly positioned inside the kawagane.

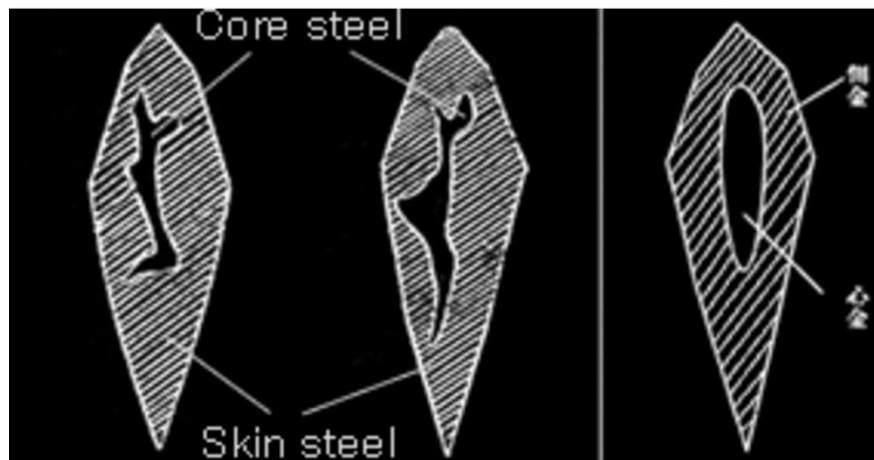


Fig. 4 - Relationship between kawagane and shingane. On the left is the distribution of the shingane inside a blade shaped by traditional technique. On the right is a Koa Isshinto that shows a more regular positioning.

Another substantial difference between nihontō and Koa Isshin-tō is the Yakihi process. The traditional method suffers mainly from the difficulty of finding a water temperature that is ideal for the hardening of the metal and the right moment to plunge the sunobe in it, a process entirely dependent on the empirical skills of the swordsmith, which, if not properly carried out, can lead to imperfections in the blade like ware or, even worse, cracking of the edge (hagiri) . The Kōa Isshin to process, however, is carried out by industrial technology, maintaining the temperature constant and under control through the use of a calorimeter, thus considerably lowering the possibility of error. In ancient times, the swordsmiths believed that the process of hardening blades was a direct consequence of divine benevolence, obtained through rites and prayers. Yakihi is still the focus of the master Swordsmiths today as it is the most difficult part to carry out during the creation of a nihontō. Mantetsu mastered this difficult discipline thanks to modern technology. The hardening process, along with the junction technique of Shingane and kawagane is what characterizes the Mantetsu blades.

The parameters of the blades were provided to Mantetsu by the army, in accordance with criteria strictly linked to the practicality and use of the blades in battle, while remaining as faithful as possible to tradition. These characteristics, combined with the new industrial standards, gave birth to stress-resistant swords that were very good but produced economically and in numbers. The blades bearing the Koa Isshin signature are usually well finished, with Mei incisions well engraved and a good nakago finish. Hada is usually ko-itame or nashiji and hamon is of the suguha type (though a few very rare gunome Hamon have surfaced as you will see below) with a variety of nioi, nie and ko Nie, all accompanied by high-quality koshirae Shin Guntō. One of them, made for Major General Tamoto was surrendered on September 20, 1945, to Lieutenant Colonel A.K. Crookshank in Bentong, Malaysia, is currently exhibited in the National Army Museum in London.

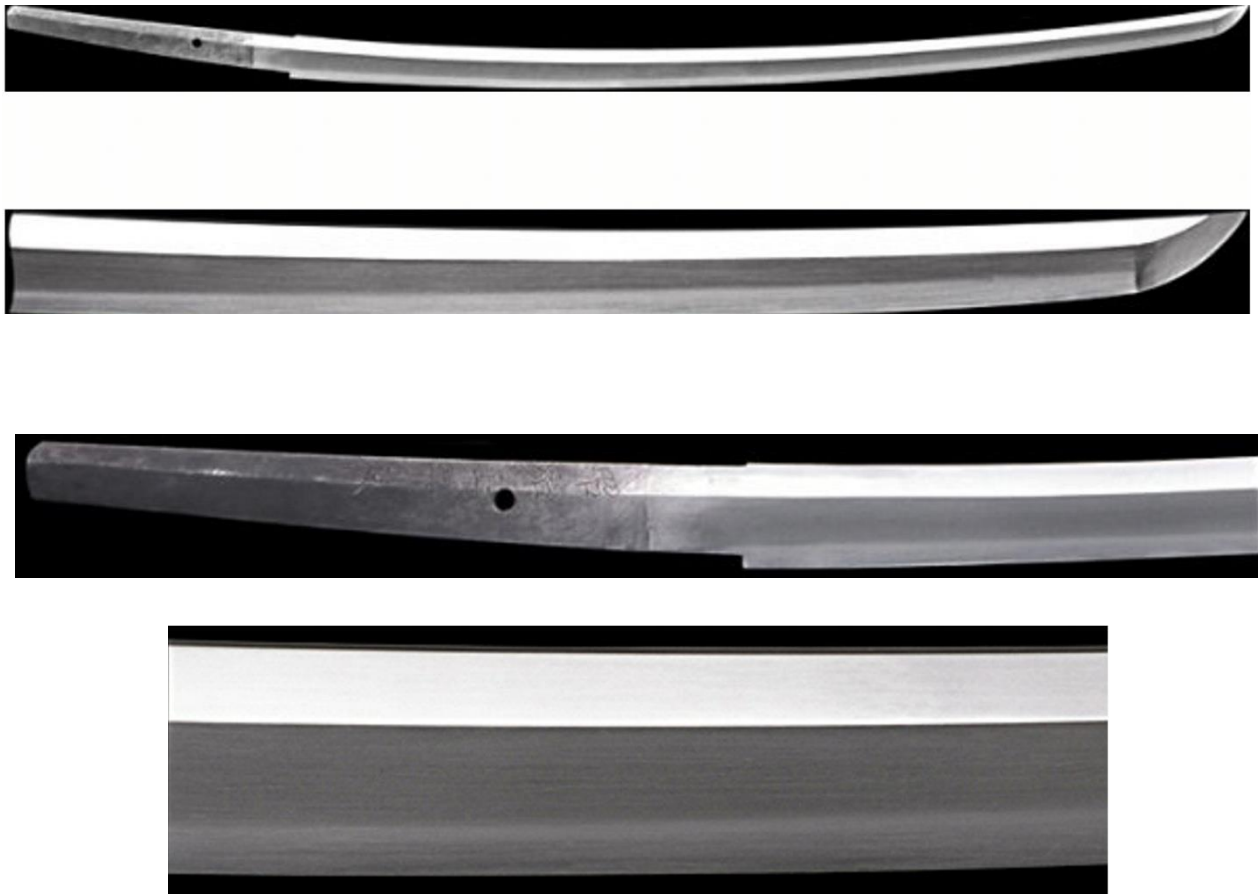


Fig. 5 - Details of the blade: hamon Naka-Suguha and hada Nashiji.

Much testing was done to prove the efficiency of Mantetsu-tō following the production of these blades. The natural qualitative reference in terms of Japanese swords is nihontō produced during the Kotō period. In particular, Prof. Tawara of the Imperial University of Tokyo studied and used the second generation Muramasa as a model.

The following table refers precisely to the results of the studies carried out by Professor Tawara of the University of Tokyo on the hardness of the blades of certain masters.

The Mei of a sword	The surface of an edge			The reverse side of an edge			Average
	Maximum	Minimum	Average	Maximum	Minimum	Average	
Muramasa(Second)	72	50	57	70	50	57	57
Hikomitsu(Truth)	75	60	66	77	59	58	67
Suishinshi Masahide(Truth)	74	52	68	81	60	68	68
Kanesada(Truth)	71	50	63	68	45	61	62
Namihira(Truth)	70	45	61	66	50	60	60
Koa Issin	72	50	57	71	50	57	57

[End Translation of Ohmura's Work]

That might have been a bit lengthy, but I wanted to include it because it highlights that these men were intent on producing a quality sword that would honor of the tradition of Japanese swords, could withstand brutal Chinese winters, and still be produced in the massive numbers required by the Army Department for the war. Ohmura believes they are worthy of the same respect and admiration of any traditionally made blade. Those of us on Team Mantetsu have come to agree with him!

In an attempt to learn more about these great blades, we started to collect serial numbers, dates, and mei of Mantetsu blades. With the help of several fellow collectors at online forums such as the Nihonto Message Board (NMB), War Relics Forum (WRF), Wehrmacht-Awards forum (WRF), and Gunboard's Forum (GBF) (hence the name "Team Mantetsu"! ) we have collected records of 219 Mantetsu blades - less than half of one month's production! – yet have been able to make a few interesting discoveries.

All Mantetsu blades were numbered on the nakago mune. The serial numbering began with Arabic (alpha-numeric) letters and numbers in 1938 and continued through 1940, overlapping the start of the use of Japanese kana/numbers in 1939. 1944 ended with an overlap of the first katakana い [i], but in parentheses (い). 1945 began with the first letter [i], but in hiragana い.



Ohmura briefly mentioned that the poetic Iroha system used in numbering the blades. The system puts the kana chart in a particular order, and the numbers observed fit this order so precisely, that if we were to find a serial number from a blade without a date and season, we could tell you the year it was made.

### Serial Numbers Plotted in Iroha Order (only 1<sup>st</sup> number of each group)

KANJI	1938	1939	1940	1941	1942	1943	1944	1945
I い		376-S						
RO 口		75-S						
HA 八		24-A						

NI	ニ	57-A			
HO	ホ	123-W	546-S		
HE	へ		(not observed)		
TO	と		41-S		
CHI	チ		66-S		
RI	リ		108-S		
NU	ヌ		65-A		
RU	ル		16-A		
WO	ヲ		433-S		
WA	ワ		20-S	158-S	
KA	カ			89-S	
YO	ヨ			349-S	
TA	タ			181-S	
RE	レ			153-S	
SO	ソ			66-S	
TSU	ツ			198-S	
NE	ネ			144-s	
NA	ナ			5-S	
RA	ラ			7-S	
MU	ム			87-S	
U	ウ			20-S	
WI	ヰ			(not observed)	
NO	ノ			34-S	
O	オ			(not observed)	
KU	ク			326-S	
YA	ヤ			79-A 246-W 957-S	
MA	マ			360-S	
KE	ケ			731-S	
FU	フ			624-S	
KO	コ			(not observed)	
E	エ			537-S	
TE	テ			71-S	
A	ア			105-S	
SA	サ			52-S	
KI	キ			144-S	
YU	ユ			479-S	
ME	メ			87-S	
MI	ミ			505-S	
SHI	シ			304-S	
WE	ヱ			299-S	
HI	ヒ			41-S	1155-S
MO	モ				228-S
SE	セ				1143-S
SU	ス				219-S



I (イ)				556-S
i い				622-S
S - Spring - 春	R - Summer - 夏	A - Autumn - 秋	W - Winter - 冬	

As noted by Ohmura, a disproportionately large number of blades are marked 春 Spring - to date, 174 of 219 blades. Reason for this is not known.

We have just recently discovered 2 1945 blades that are mumei, but still numbered. (Both were in late-war Contingency Model fittings. For the moment we will call them "Manchurian Rinji-seishiki" or MRS; but that is not an official designation)

### Date Style

The factory exclusively used the sexagenary (Zodiacal) dating system. You will occasionally find a non-Mantetsu blade with such dating, but it is the only style used on Mantetsu blades. Each date begins with the standard Shōwa kanji, 昭和, which are followed by two zodiacal kanji, and finally the season.

An example:



1941 Spring

### Chinese Sexagenary Cycle

昭和丙子 = 1936-01-24 to 1937-02-10	昭和辛巳 = 1941-01-27 to 1942-02-14
昭和丁丑 = 1937-02-11 to 1938-01-30	昭和壬午 = 1942-02-15 to 1943-02-04
昭和戊寅 = 1938-01-31 to 1939-02-18	昭和癸未 = 1943-02-05 to 1944-01-24
昭和己卯 = 1939-02-19 to 1940-02-07	昭和甲申 = 1944-01-25 to 1945-02-12
昭和庚辰 = 1940-02-08 to 1941-01-26	昭和乙酉 = 1945-02-13 to 1946-02-01

Source: Wikipedia contributors. "Sexagenary cycle." *Wikipedia: The Free Encyclopedia*. 2019-11-25.

### Mei Changes

In 1938, the mei began with simply the date on one side and the SMR logo on the other:

The Kōa Isshin mei began in 1939 and started the use of the Iroha kana system, though the blades that continued the Arabic lettering were non- Kōa and only had the SMR logo.



Two quite rare wakizashi {a shorter blade, between one shaku (30.3cm/12in) and two shaku (60.6cm/24in)} blades bore both the SMR logo and the Kōa Isshin slogan:

1939 Spring “Kōa Isshin”



The Mantetsu mei was partially cut off making this wakizashi and a second hole added for the re-fitting, so the blade was originally full length, but it is the only observed blade with both the logo and slogan. The other wakizashi made in 1940 Winter, was a Kōa Isshin, and for all appearances, was made as a wakizashi.



The mei changed from the Kōa Isshin slogan, to non- Kōa, to Konan Essei, and finally mumei:

Showa 13 (1938) Dalian Railway Stamp; no mei

Showa 14 (1939) to Showa 16 (1941) : 興亜一心 (Kōa-Isshin) 満鉄作之 (Mantetsu Saku Kore)

Showa 17 (1942) : 興亜一心 (Kōa-Isshin) 満鉄謹作 (Mantetsu Kin-Saku)

Showa 17 (1942) to Showa 18 (1943) : 興亜一心 (Kōa-Isshin) 満鉄作 (Mantetsu Saku)

Showa 18 (1943) to Showa 19 (1944) : 満鉄鍛造之 (Mantetsu Tanzo Kore)[Ohmura believes these blades were finished at Nan-Man Arsenal from blades began at Dalian]

Showa 20 (early 1945): 興南一誠 (Kōnan Essei)

Showa 20 (late 1945): Mumei (serial: ㄨ 1170) ["late" is assumed based on high number]

You will sometimes get a different translation of the mei. That is because the kanji 作之 can be said 2 different ways stemming from the Chinese origins of the kanji vs the Japanese pronunciation. The following is a modern Japanese way to translate:

興亜一心満鉄作之 Kōa Isshin Mantetsu de kore wo tsukuru > Kōa Isshin Mantetsu saku kore

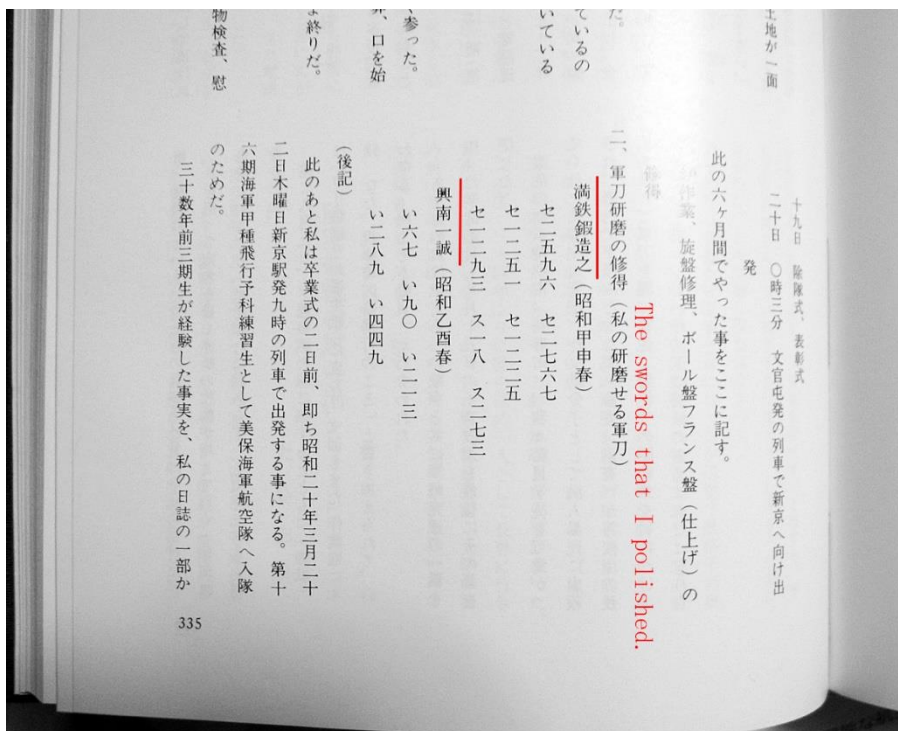
興亜一心満鉄謹作 Kōa Isshin Mantetsu de tsukuru > Kōa Isshin Mantetsu Kin saku

興亜一心満鉄作 Kōa Isshin Mantetsu de tsukuru > Kōa Isshin Mantetsu saku

満鉄鍛造之 Mantetsu de kitaete kore wo tsukuru > Mantetsu Tanzō kore

## Kōnan Essei

This was a brand-new discovery by our group. It had never been mentioned in any reference books. The first blade was discovered while prowling the web for Mantetsu serial numbers, and is owned by a collector in Singapore. It was feared to be a fake, or at least gimei, until the discovery of a book in Japan which contained a diary entry recording the polishing of 1944 and 1945 Mantetsu blades at the Nan-Man Arsenal. Several of the blades recorded were 1945 blades, with serial numbers, and the “Kōnan Essei” slogan! Nick Komiya, at WRF, translates the slogan to “Sincerest Devotion to the Development of the South.”



Shinkyō dai-ni chūgakkō kō-shi henshū iinkai 新京第二中学校  
校史編集委員会. [School History of Shinkyō No. 2 Middle  
School]. Tōkyō 東京: 南嶺会事務局, 1980. Page 335.  
Discovered by K. Morita.

## Production

From Ohmura’s work, we learned that SMR, Mantetsu, was producing 400 blades per month, starting in 1938. A chart found by Nick Komiya, posted at WRF, showed they were producing 500 per month in fiscal year 1944, which ran from April 1944 to March 1945.

昭和十九年度 造兵刀軍刀生産計畫表													昭和十九年度 陸軍兵器行政本部 造兵部 造兵課												
種別	数量	第一期				第二期				第三期				第四期				合計	備考						
		四月	五月	六月	計	七月	八月	九月	計	十月	十一月	十二月	計	一月	二月	三月	計								
普通軍刀	4,800	4,800	4,800	4,800	12,000	4,800	4,800	4,800	12,000	4,800	4,800	4,800	12,000	4,800	4,800	4,800	12,000	48,000	完成1内ハ製造計保持1身						
特殊軍刀	2,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	20,000	26,000 3合入						
特殊鋼刀	4,200	4,200	4,200	4,200	12,600	4,200	4,200	4,200	12,600	4,200	4,200	4,200	12,600	4,200	4,200	4,200	12,600	42,000	( ) 1合入						
特殊鋼刀	1,000	1,000	1,000	1,000	3,000	1,000	1,000	1,000	3,000	1,000	1,000	1,000	3,000	1,000	1,000	1,000	3,000	3,000	( ) 1身 20,000 象他 保持						
特殊鋼刀	2,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	20,000							
特殊鋼刀	2,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	20,000							

昭和十九年度 特殊鋼刀軍刀生産計畫表													昭和十九年度 陸軍兵器行政本部 造兵部 造兵課												
種別	数量	第一期				第二期				第三期				第四期				合計	備考						
		四月	五月	六月	計	七月	八月	九月	計	十月	十一月	十二月	計	一月	二月	三月	計								
特殊鋼刀	2,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	20,000							
特殊鋼刀	2,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	2,000	2,000	2,000	6,000	20,000							

1944 Kou-A-Isshin Gunto Production Plan													15th April 1944												
種別	数量	第一期				第二期				第三期				第四期				合計	備考						
		April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	計											
普通軍刀	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000					
特殊鋼刀	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500					
特殊鋼刀	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500	5,500					

This particular chart also shows that the Army had ordered Mantetsu to supply 6,000 Kōa Isshin blades to the Tokyo 1<sup>st</sup> Army Arsenal in fiscal year 1944, 5,500 were to be “partially completed” and 500 were to be completed.

So the factory was making between 4,800 to 7,200 blades per year. For numbers guys – if we use an average of 6,000 per year, with production years 1938-1945 (7 years), there were approximately 42,000 Mantetsu blades made during WWII.

**Arsenal Oversight**

Since the South Manchurian Railway Company was a “semi-privately held” operation authorized by Emperor Meiji as a “National Policy Company”, led by an Army General, and held government-like power it is possible their initial sword production was independent of any of the Army arsenals.

It is not stated anywhere I am aware of that their sword production was under the authority and/or oversight of any arsenal at the beginning. The stamping of non-traditionally made blades was ordered in 1938 and became widely practiced by 1940, yet stamps do not appear on Mantetsu blades until 1942. It is possible that Mantetsu was not under the supervision of any arsenal until that year, when the 南 “NAN” stamps of the Nan-Man Arsenal appear.

We have discovered a document that shows the Nan-Man Arsenal began oversight of SMR production later in the war. In 1944 the arsenal created a dedicated office for the SMR factory which began using the Ren stamp.

南 NAN	南滿陸軍造兵廠監督課 Nan-Man Army Arsenal Supervisory Section
連 REN	南滿陸軍造兵廠大連監督班 Dairen Supervisory Unit of Nan-Man Army Arsenal

Source: Japan. Rikugunshō 陸軍省 [War Ministry]. Rikugun Heiki Gyōsei Honbu 陸軍兵器行政本部 [Army Ordnance Administration Headquarters]. Ken'in oyobi hyōshiki kitei 檢印及標識規定 [Regulations for Inspection Marks and Signs]. General Order 2389. 19 October 1943.

## The “W” stamp

A fair number of blades in 1942-1944 have 1 to 3 “M” stamps. They can also be found on non-Mantetsu blades, kyu-gunto, guns, canteens, and shovels. There is strong evidence that the stamp is an inverted double chevron, or “M”. It is found in this document:

X	M	☆	種	附 表 第 二
檢 印 準 ス	檢 印 準 ス	檢 印 準 ス	補 助 大 歩	

(chart provided by Kiipu via NMB and translation by Nick Komiya via WRF)

It says the stamp is used to mark inspected items “midway/halfway” through production. American collectors have been referring to it as a partial inspection mark/symbol for the last 40 years. See *Military Rifles of Japan* by Fred Honeycutt! The production chart revealed by Nick Komiya ordered SMR Dalian to provide 5,500 “unfinished” blades to the Tokyo 1<sup>st</sup> Army Arsenal, where they were to be finished. It is possible the unfinished blades received this “M” stamp as they were transferred to Tokyo. But they are not just found on 1944 blades. They are also found on 2 1942 Kōa’s and on 1943 and 1944 non- Kōa blades marked with the 南 “Nan” stamp. So, it is possible the SMR factory was supplying blades to Tokyo as early as 1942. (It is a puzzle why the characters are placed upside-down on the nakago. Kanji on nakago are normally read with the blade tip up. To see these stamps as a double chevron, the blade tip must be pointed down, although there are a couple of them “right-side up”.)

If SMR Dalian was in fact supplying 6,000 blades (500 finished, 5,500 unfinished) to the Tokyo arsenal, as the chart shows, it is my belief that it was highly unlikely that they had the production capability to ALSO be supplying unfinished blades to the Nan-Man arsenal at the same time. I believe the Nan-Man Arsenal was producing their own Mantetsu blades, as Ohmura speculated. We have several 1943 and 1944 Kōa Isshin blades with none of the stamps. These were likely the ones made by SMR and sent to the Tokyo arsenal. All the 南 (Nan) and 連 (Ren) stamped blades are non- Kōa mei and could have been made at the Nan-Man arsenal.

This theory comes with its own problem as it raises the question as to why Nan-Man-produced blades would have the “M” stamp. It could be as simple as the inspectors randomly picked blades part way through production for spot inspections.

Our team is divided on the issue, some holding that SMR was making all the blades and sending unfinished blades to both the Tokyo and Nan-Man arsenals for finish work. When the Soviets invaded Manchuria, significant government documents were lost and/or destroyed. Hopefully an answer will arise someday.

A rarity discovered is the stamping of 3 1944 blades with both a Ren and a rail emblem:



Purpose/meaning of the rail stamp is unknown

Another rare discovery is, what we believe to be, a mumei 1945 Mantetsu blade. Richard Fuller mentions the same thing in his 1996 edition, *Japanese Military and Civil Swords and Dirks*, page 82. Both are mounted in very late war Contingency model (MRS) fittings.



### Swordsmiths

Many wonder if the smiths working the Mantetsu blades are known, or if particular lines of production can be tied to a particular smiths. For the most part, the answer is NO. There were 3 known swordsmiths who helped establish production and teach at the SMR factory. As mentioned in Ohmura's discussion:

Wakabayashi Shigetsugu trained Dalian workers. He left in 1941 to return to Tokyo. (info from K. Morita, NMB, <http://www.militaria.co.za/nmb/topic/7445-tang-your-opinion/?hl=%2Bshigetsugu+%2Bdalian#entry73318>)

Hisakatsu, real name Takeshima Masao, "directed the production of Koa Isshin blades":



This Gendaito is made by Hisakatsu. His original name was Takeshima Masao, born in 28, Feb., 1909. He learned swordmaking from Horii Toshihide in Zuisen Tantoshō at 1926 and founded his own forging center at Yamaguchi Prefecture in 1934. He was the winner of the Shinsaku Nihonto Daikyoshinkai Yushusho and the 1st Nihonto Denrankai Tokusen and Honory President Award in 1935. In the next year of 1936, he won the Ministry Award at the 2nd competition. In 1938, he went to Manchu Railway Ltd. and directed the production of Koa Isshin blades. He is listed in the book, Gendai Toko Meikan, pp. 149

{From [www.jp-sword.com](http://www.jp-sword.com) }

栗原昭秀 is Kurihara Akihide, was said to have worked at the factory for a short time.

We do have one 1942 blade with the added mei: 鷹信焔之 (“Takanobu kore o niragu” or “Takanobu quenched this”). Suzuki Takanobu (鈴木鷹信) was the engineer managing the Mantetsu blade production for SMR.

## Fittings

The majority of all Mantetsu blades observed are in standard Type 94/98 fittings, from high-end quality to poor, and a few in combat saya. Exception:

There are 13 1944 and 1945 blades observed with double ana mounted in unique fittings dubbed



“Manchurian Rinji Seishiki” or “MRS” by Neil Freeland of NMB. All are in the “Se セ” serial number range, third series of the 1944 year group. Two blades with double-ana found in Type 98 fittings were not “Se セ” numbers, but one “Hi ヒ” and one “Mo モ” which were the first 2 series of the 1944 year group. All were Nan or Ren stamped. Three had the 連工, or ‘renko’ stamp. One exception – there is a 1938 blade in these fittings (NGF collection).

The fittings resemble the Rinji seishiki fittings but have their own unique style. To date, only Mantetsu blades have been found in MRS fittings which leads us to believe they were made by the SMR sword operation.





Two blades made with tachi-meai (all others are katana-meai) and mounted in full tachi fittings. Both were



made late in 1941. This one above, from Ohmura's website, was presented to an employee for 25 years of service. Others, such as the one below, may have been given as gifts to VIP's.



The final point of interest - while the vast majority of these blades are made with sugu hamon, we have found one blade in almost all of the years with a different style. The blade quenched by Takanobu:



So there you have it! Probably more than you ever thought you'd want to know about the famous Mantetsu blade, but we hope you've found something interesting. Ohmura-san has written extensively about the merits of the "modern" updates to the traditional Samurai sword, especially in the area of the SMR Mantetsu blade. The Internet was not as prominent when he first did his research, so we've had an advantage over him in that aspect of digging into the topic. But his Japanese access to documents, and particularly living persons with vital information, cannot be equaled and the world is indebted to him for his fabulous work. Our work confirms some of his points and in a sense, completes it with our discoveries of the second "Kōnan Essei" motto, the reasons for the Nan, Ren, and "M" stamps, the seemingly exclusive use of MRS fittings, and the most recent finding of mumei blades. It is a work still in progress.

