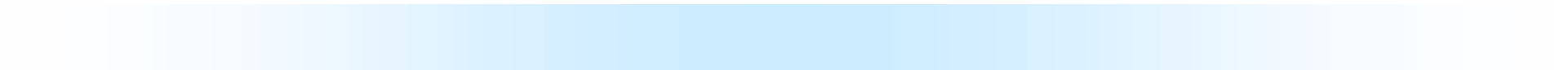




KTX

2004. 6. 4



---

. KTX ( )

.

. ( )

1.

2.

3.

. G7

.

# . KTX ( )

: TGV

➤ : EUKORAIL

➤ : , : LG / , : LG /

가 : 1 6,800 ( : 8,240 , : 8,560 )

	(12 )	99 10 ~ 01 8	
	(34 )	02 7 ~ 03 10	
	46 (920 )		

➤ 46 / / /

➤ , , , ,

➤ , , 2

➤ 가 50%

.

1.

, 가 50%



2.

( )

, , , ,

3.

: 1,000

: 500 /

: / / ,

4.

	23,867	591	
	541	227	➤ /
	389	885	➤ / , ,
	206	28	
	25,003	1,731	

5.

- 100 ISO 9000 ,
- (99 ) 0.5% → (03 ) 93.8%

➤ Family 1 : Alstom

가 Alstom

➤ Family 2 : Alstom

➤ Family 3 : Alstom

가

Family 1	Motor Block, Auxiliary Block, Cab Cubicle		➤ Frame
Family 2			
	HVAC		
		Klein Korea	
		Sab wabco	
	Wheel set		
		SDS	
	SAFT Korea		

Family 3	Steel		Standards
	Steel casting		
	Alu casting		
	Alu Profile		
	FRP		
	Window Mask		
	Rubber	LG	
	Glass wool		
	Coil Spring		
	Air Reservoir		
	Cable	LG	
		SDS	
	Reading Lamp converter Ballast		

( )

1.

		KTX		
		- UIC 200 STEEL , - STEEL	- UIC AL / - STEEL AL	200 STEEL -
		- 300km/h	- AL	-
		- - - - Steel	- - - - Steel AL	- - - -



		KTX		
		- . HVAC	- .	- .
		- . Control specification - . 300km/h Faively Door - .	- . Control specification - . 350km/h Bode Door - .	
			- . SKILL 350Km/h (G7 )	- . ( )
			- . / (G7 )	- .
		300km/h	- . 350Km/h 가 (G7 )	- . (가 , )

		KTX		
	T/M	<ul style="list-style-type: none"> <li>- &lt; &gt;</li> <li>-</li> <li>- Interface</li> <li>-</li> <li>-</li> <li>- (Slip Ring )</li> </ul>	<ul style="list-style-type: none"> <li>- &lt; &gt;</li> <li>- (Class 200)</li> <li>- ( )</li> <li>- Interface ( )</li> <li>- Frameless /</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- ( )</li> <li>-</li> <li>- ( )</li> </ul>
		<ul style="list-style-type: none"> <li>-</li> <li>- ( )</li> <li>-</li> <li>- (Relay )</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- Heat Pipe Heat Sink</li> <li>-</li> <li>- 가</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> <li>-</li> <li>- Active Filter</li> </ul>

		KTX		
			<ul style="list-style-type: none"> <li>- Redundancy</li> <li>-</li> <li>-</li> <li>-</li> <li>(ZVS/ZCS)</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>-</li> <li>-</li> </ul>
	OBCS ( )	<ul style="list-style-type: none"> <li>- (TORNAD*)</li> <li>- BUS+RING</li> <li>- (Floating Flat Connector )</li> <li>- (Vigilance )</li> </ul>	<ul style="list-style-type: none"> <li>- (TCN, IEC61375 )</li> <li>- (BUS )</li> <li>- Floating Flat Connector / Vigilance</li> <li>- RTOS (Real Time Operating System)</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- 가</li> </ul>

2.

/

				가	
1		- . MAGNETIC / - . ( 10 )	11	가	
2		- . SIDE DOOR - . CLEAN	13	가	
3		- . AXLE BEARING (END PLAY) - . SIDE END FRAME POSITIONER	6	가	
			30		

( )

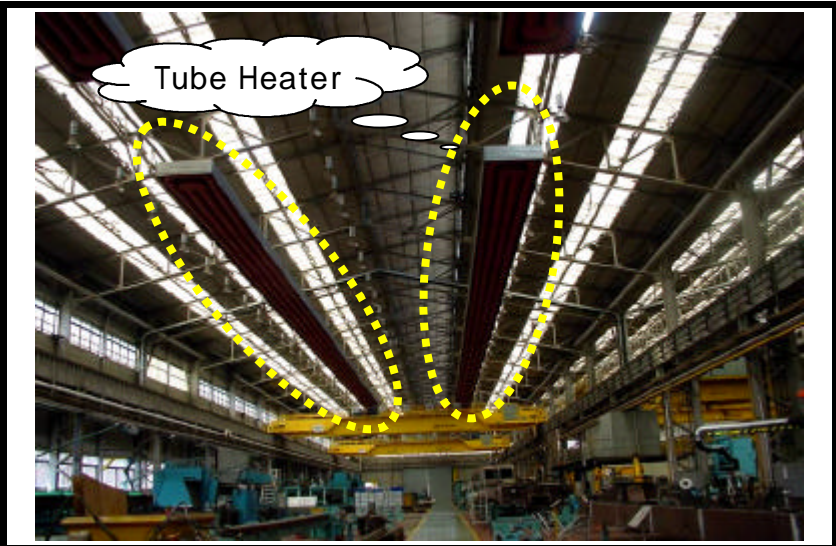
MAGNETIC /



[ / ] (SIDE)

가

( 10 )



[ / ] 10

가

( )

SIDE DOOR



[ / ]  
DOOR 가

DOOR 가 가 가 .

Clean



[ / ]  
TYPE & PUSH-PULL ,  
CLEAN SHOP

가 ,

( )

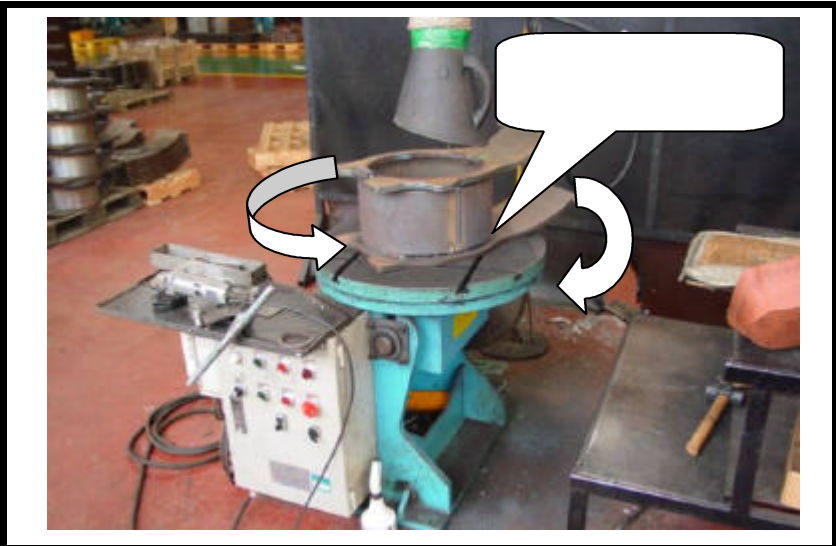
AXLE BEARING (END PLAY)



[ / ]  
BEARING SCREW

가  
AXLE BEARING 가

SIDE END FRAME POSITIONER



[ / ]  
POSITIONER 가

가  
가 ( )

3.

1	QA/QC	→ QA/QC	-. Quality PM
2		LOG BOOK → →	-. -
3		→ ( , )	-. -
4		→	-. Audit



1		→	-.
2		→ /	-.
3		,	-.
4	Test Bench	→ ,	-.
5		→ D/B 가	-.

# . G7

1.

: 350km/h

→ KTX

→

→

1,2		96.12~02.10 (6 )	2,100	, 50%
3		02.12~07.10 (5 )	515	75%, 25%




2.

→ / ( 92%)

→ 1,100 kw : 3

→ : (IGCT)

3.

	TGV-R		G7
			
	300km/h	300km/h	350km/h
	10 1	20 1	7 1
	(Mild Steel)	(Mild Steel)	
	GTO VVVF	GTO VVVF	IGCT VVVF
	2 ( + )	3 ( + + )	4 ( + + + )
			+ 가

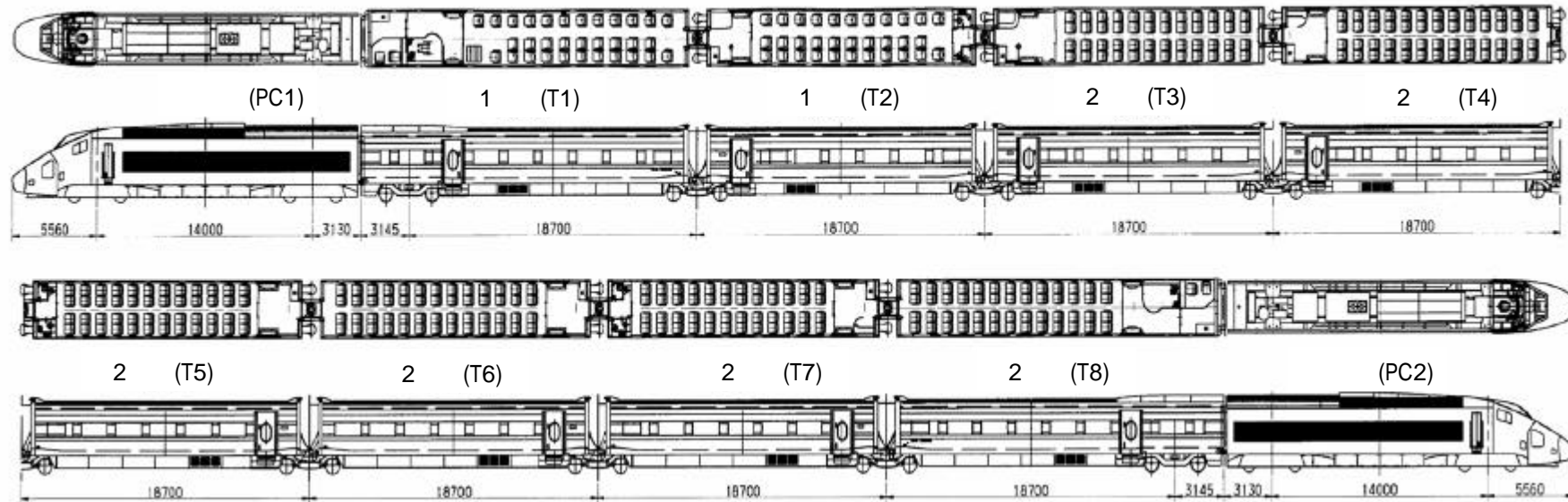
4.

		(KTX)	G7 10	
		300 km/h	300 km/h	-
		(mild steel)		( 15%)
				( 30%)
		PFC+ + VVVF (PWM )	PWM + VVVF ( )	
		GTO	IGCT	/
Blending		+	+	-
		(Bp)	PWM	
		/ Blending	/ Blending + Blending	Total Blending
			가	
			+	
		Tornad( )	TCN( )	UIC, IEC

5. KTX G7 10

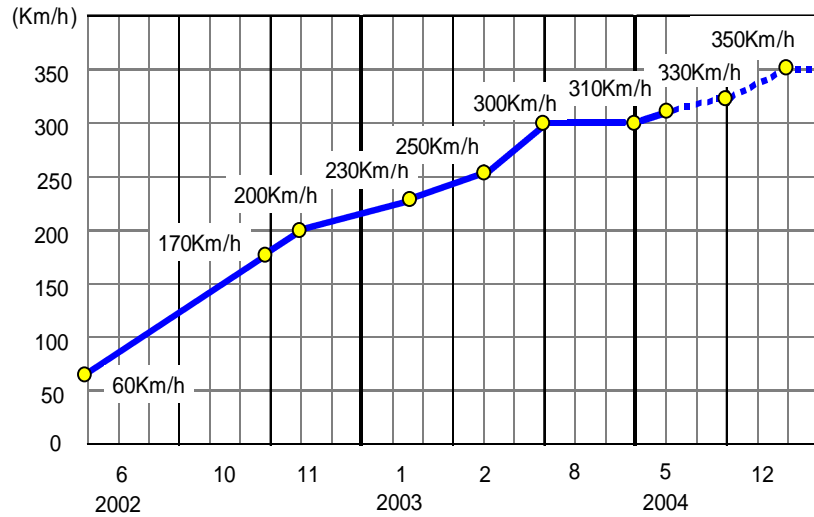
1		G7	2100	
		(KTX	5000	)
2		AL	IGCT	, TCN
3			(KTX	)
		30%	(	10%
		(3%)	(KTX	2%)
4		( 3%)	(KTX	5%)
		KTX	5%	
		( - , 25 , 1 2	,	8.2
5	가	가 2	,	가 /
		가	,	가
6		2	가	

6. 10



		6	8	10	12
		2P+2ET+2T	2P+2ET+4T	2P+2ET+6T	2P+2ET+8T
		290	352	416	479
	가	1.59 /m <sup>2</sup>	1.27 /m <sup>2</sup>	1.12 /m <sup>2</sup>	1.03 /m <sup>2</sup>
	1	32	64	64	64
	2	148	200	300	400
		180	264	364	464
		27.7 kWh/	23.0 kWh/	19.7 kWh/	17.8 kWh/

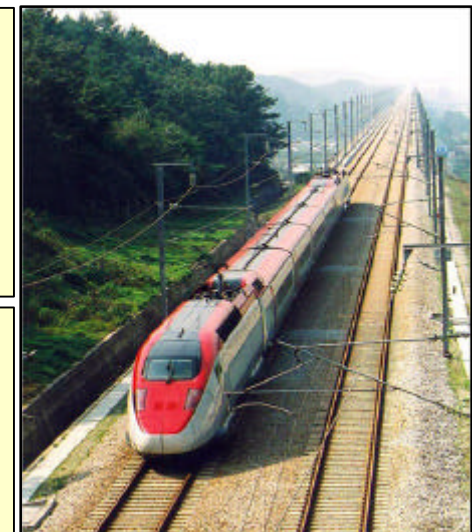
7.



		02 03 04 05 06 07					
	3	[Orange bar]					
	1				[Pink bar]		
KTX	2					[Green arrow]	

- 2002. 5                    7    1
- 2002. 8                    300km/h                    ( 16,000km )
- 2004. 6                    , 330km/h
- 2004                    , 350km/h

- 2005                    300km/h
- “                    ”                    100,000km/h
- ( )                    ( / 가 )



KTX

G7

·  
, , ( , , )  
, , 가 \_\_\_\_\_ (HTE)

Acela

G7

→

→

→ KTX, G7

LCC



