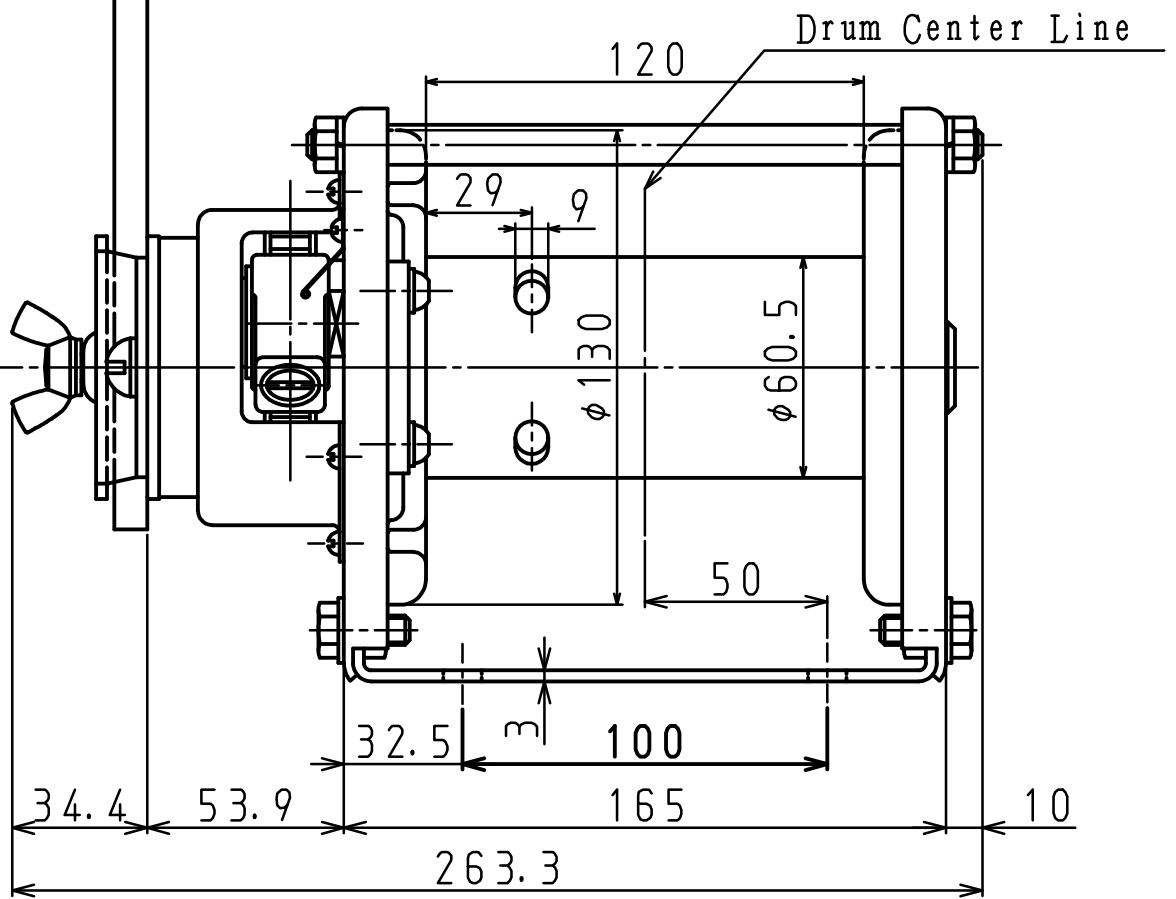


REVISION	..				
△x	..		△x	..	
△x	..		△x	..	

[Materials of the main parts]

Side frame A, Side frame B, Drum, Bed plate, Clutch cover, Handle arm	SUS304
Drum shaft	SUS304
Bolts/Nuts, Retaining rings, Springs, etc.	SUS304
Ball bearings	SUS440C
Clutch	CAC403
The mechanical brake parts except Clutch	SUS303
	SUS304
	SUS420J2

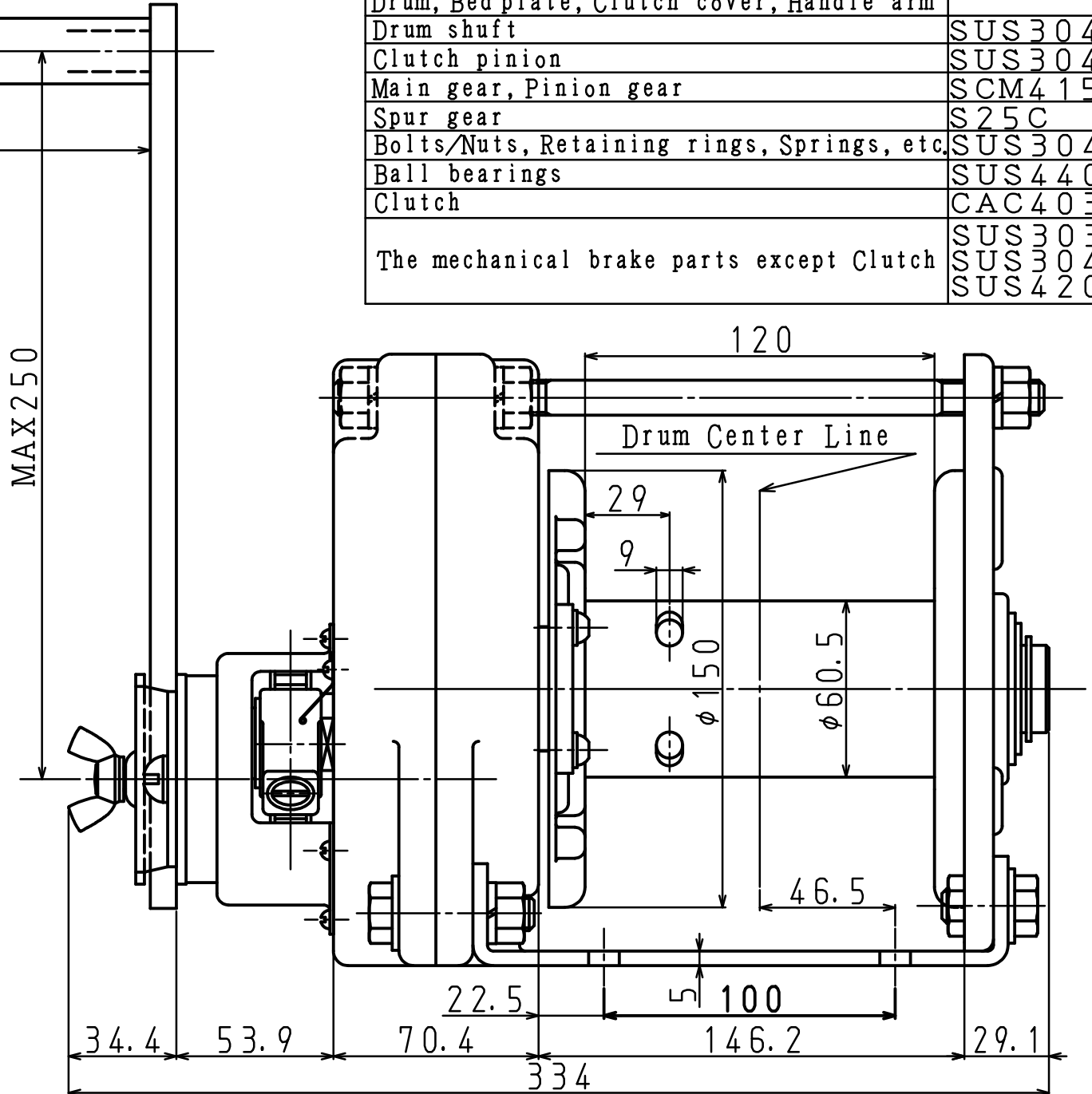
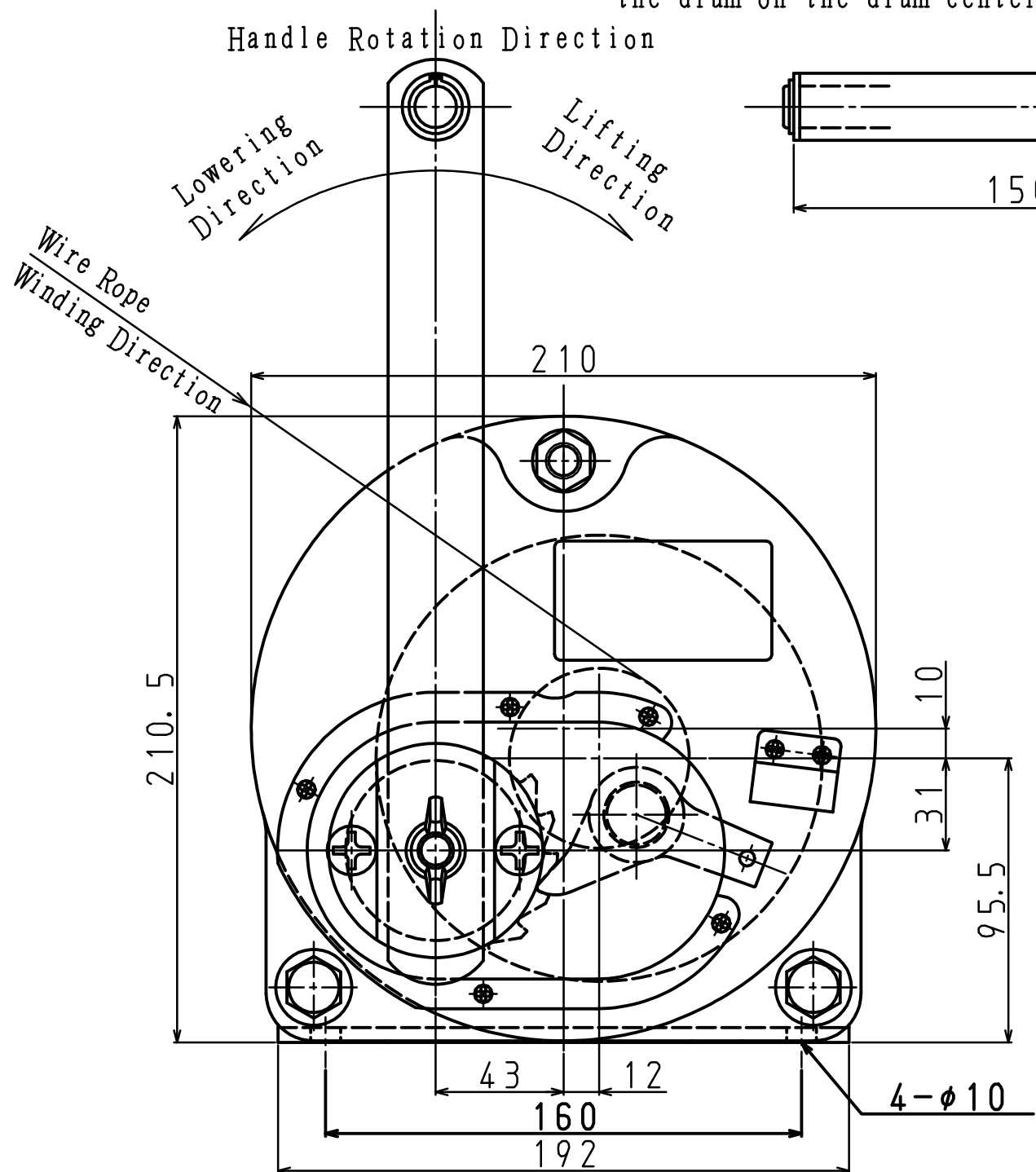
It is necessary the fleet angle is 2 degrees or less to prevent the wire rope being unevenly wound to wind the wire rope uniformly.
Please install the pulley 1800mm or more away from the drum on the drum center line.



Specifications		(The wire rope composition is a manufacturer recommendation.)	
Model	ESB-1	Handle Operation Power	Handle Length 250mm Wire Rope Tension 980N
Load Rating Wire Rope Tension	980N (=100kgf) (4th Layer or Less)		1st Layer 143N (=14.6kgf) 3rd Layer 187N (=19.0kgf) 4th Layer 208N (=21.2kgf)
Wire Rope Length	φ5mm (6×19)×35m (6th Layer)	Weight (Winch+Handle)	7.4 kg
Gear Ratio	1/1	Standard Accessories	One Handle One Hex Wrench for Wire Lock
Handle Length	250 mm (Effective Max.)		

MARK	PARTICULARS	MATERIAL	TEST PIECE	WORKING NO. REQUIRED	SPARE	TOTAL	PER ONE	TOTAL	REMARKS
MANAGER									WORK NO.
DEPUTY MANAGER									QUANTITY
CHIEF	I. Takahashi								CLASSIFICATION
ENGR IN CHARGE		MAXPULL STAINLESS WINCH (ELECTROLYTIC POLISHING)							SCALE
CHECKED BY									DRAWING NO.
DRAWN BY	T. Yonezawa	MODEL ESB-1							ESB1-101201-01E
DATE DRAWN	2010/12/01								

It is necessary the fleet angle is 2 degrees or less to prevent the wire rope being unevenly wound to wind the wire rope uniformly.
Please install the pulley 1800mm or more away from the drum on the drum center line.



REVISION	..				
△x	..		△x	..	
△x	..		△x	..	

[Materials of the main parts]

Gear case, Gear case cover, Side frame, Drum, Bedplate, Clutch cover, Handle arm	SUS304
Drum shaft	SUS304
Clutch pinion	SUS304
Main gear, Pinion gear	SCM415
Spur gear	S25C
Bolts/Nuts, Retaining rings, Springs, etc.	SUS304
Ball bearings	SUS440C
Clutch	CAC403
The mechanical brake parts except Clutch	SUS303 SUS304 SUS420J2

Specifications

(The wire rope composition is a manufacturer recommendation.)

Model	ESB-3	Handle Operation Power	Handle Length 250mm Wire Rope Tension 2.940N	1st Layer 76N (= 7.7kgf) 3rd Layer 103N (=10.5kgf) 5th Layer 131N (=13.3kgf)
Load Rating Wire Rope Tension	2,940N (=300kgf) (5th Layer or Less)	Weight (Winch+Handle)	14.2 kg	
Wire Rope Length	φ6mm (6×37)×32m (6th Layer)	Standard Accessories	One Handle One Hex Wrench for Wire Lock	
Gear Ratio	1/6.25			
Handle Length	250mm (Effective Max)			

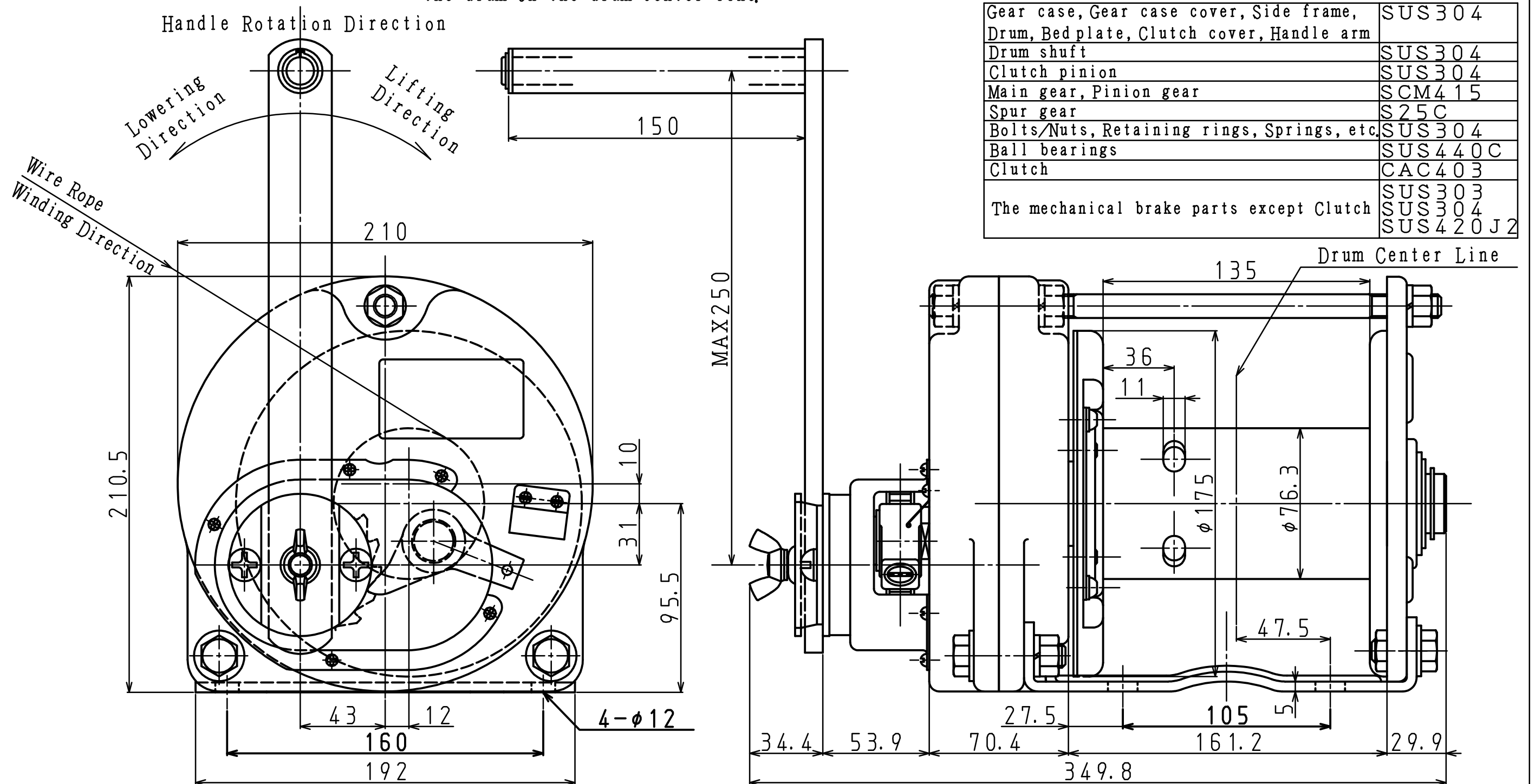
MARK	PARTICULARS	MATERIAL	TEST PIECE	WORKING NO. (PBR)	SPARE NO. (PBR)	TOTAL NO. (PBR)	PER ONE WEIGHT IN g	TOTAL WEIGHT IN g	REMARKS
MANAGER							WORK NO.		QUANTITY
DEPUTY MANAGER									
CHIEF	I. Takahashi						CLASSIFICATION		SCALE
ENG'R IN CHARGE		MAXPULL STAINLESS WINCH (ELECTROLYTIC POLISHING)							/
CHECKED BY							DRAWING NO.		
DRAWN BY	T. Yonezawa	MODEL ESB-3							
DATE DRAWN	2010/12/01							ESB3-101201-01E	

It is necessary the fleet angle is 2 degrees or less to prevent the wire rope being unevenly wound to wind the wire rope uniformly.
Please install the pulley 1800mm or more away from the drum on the drum center line.

REVISION	..				
△x	..		△x	..	
△x	..		△x	..	

[Materials of the main parts]

Gear case, Gear case cover, Side frame, Drum, Bedplate, Clutch cover, Handle arm	SUS304
Drum shaft	SUS304
Clutch pinion	SUS304
Main gear, Pinion gear	SCM415
Spur gear	S25C
Bolts/Nuts, Retaining rings, Springs, etc.	SUS304
Ball bearings	SUS440C
Clutch	CAC403
The mechanical brake parts except Clutch	SUS303 SUS304 SUS420J2



Specifications

(The wire rope composition is a manufacturer recommendation.)

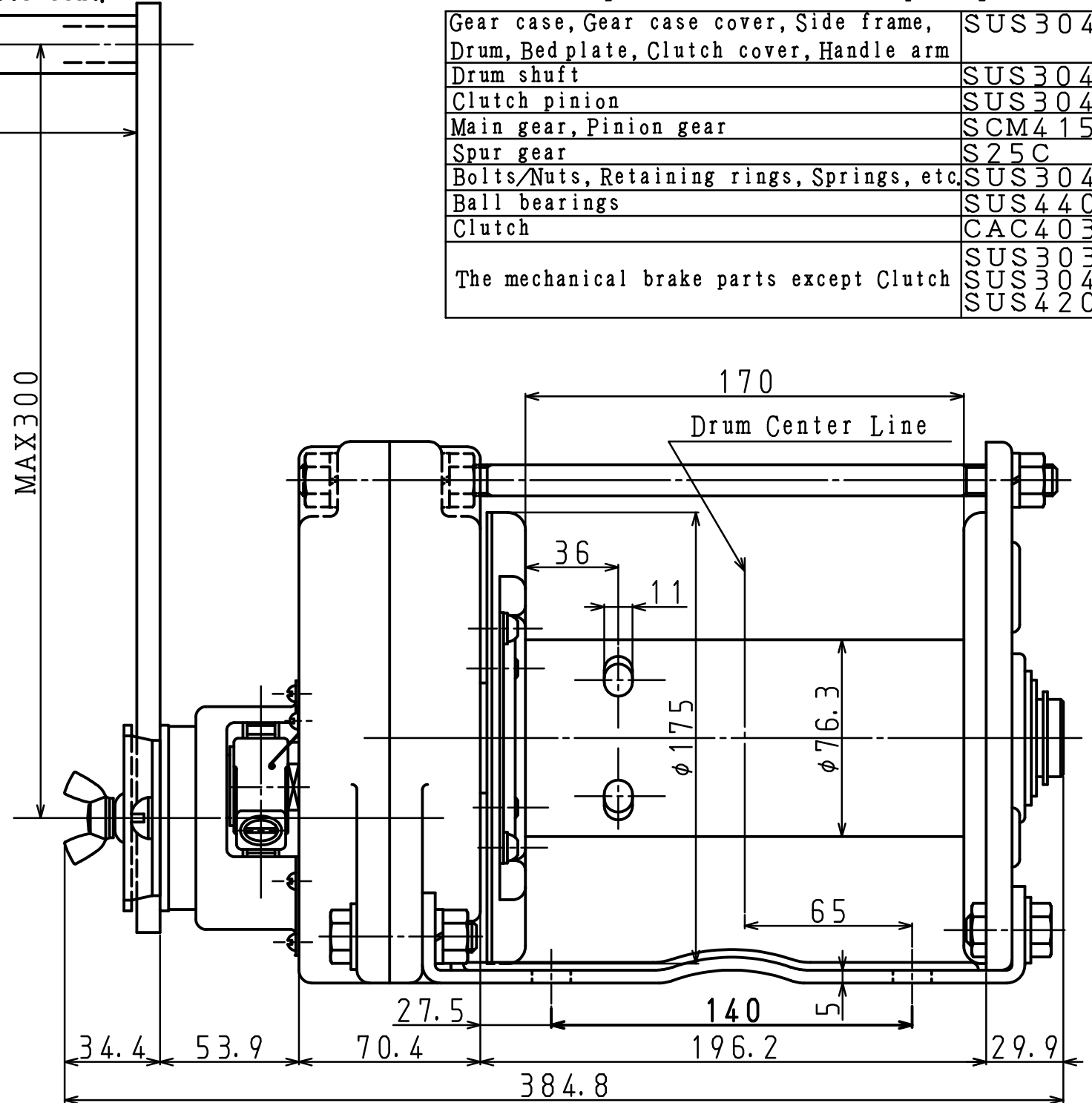
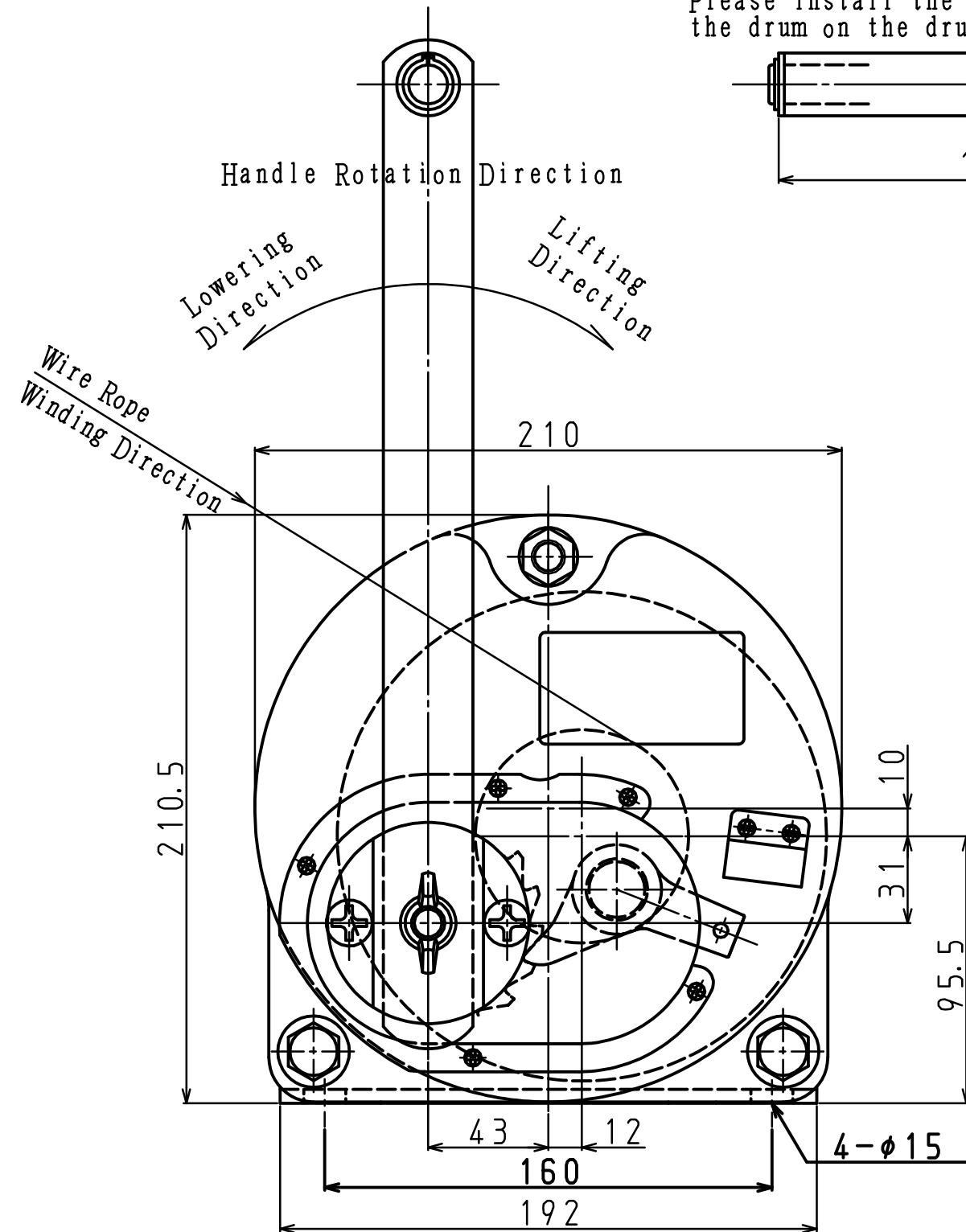
Model	ESB-5	Handle Operation Power	Handle Length 250mm Wire Rope Tension 4,900N	1st Layer 109N (=11.1kgf) 3rd Layer 142N (=14.4kgf) 5th Layer 174N (=17.7kgf)
Load Rating Wire Rope Tension	4,900N (=500kgf) (5th Layer or Less)	Weight (Winch+Handle)	15.6 kg	
Wire Rope Length	φ6mm (6×37) × 40m (6th Layer)	Standard Accessories	One Handle One Hex Wrench for Wire Lock	
Gear Ratio	1/8.9			
Handle Length	250mm (Effective Max)			

MARK	PARTICULARS	MATERIAL	TEST PIECE	WORKING NO. REQUIRED	SPARE (PRR)	TOTAL	PER ONE WEIGHT IN g	TOTAL	REMARKS
MANAGER							WORK NO.		QUANTITY
DEPUTY MANAGER									
CHIEF	I. Takahashi	MAXPULL STAINLESS WINCH (ELECTROLYTIC POLISHING)					CLASSIFICATION		SCALE
ENGR IN CHARGE									/
CHECKED BY							DRAWING NO.		
DRAWN BY	T. Yonezawa	MODEL ESB-5							
DATE DRAWN	2010/12/01								ESB5-101201-01E

MAXPULL MACHINERY & ENGINEERING CO., LTD.

It is necessary the fleet angle is 2 degrees or less to prevent the wire rope being unevenly wound to wind the wire rope uniformly.
Please install the pulley 2550mm or more away from the drum on the drum center line.

REVISION	..				
△x	..		△x	..	
△x	..		△x	..	



[Materials of the main parts]

Gear case, Gear case cover, Side frame, Drum, Bedplate, Clutch cover, Handle arm	SUS304
Drum shaft	SUS304
Clutch pinion	SUS304
Main gear, Pinion gear	SCM415
Spur gear	S25C
Bolts/Nuts, Retaining rings, Springs, etc.	SUS304
Ball bearings	SUS440C
Clutch	CAC403
The mechanical brake parts except Clutch	SUS303 SUS304 SUS420J2

Specifications		(The wire rope composition is a manufacturer recommendation.)	
Model	ESB-10	Handle Operation Power	Handle Length 300mm Wire Rope Tension 9,800N
Load Rating Wire Rope Tension	9,800N (=1,000kgf) (3rd Layer or Less)		1st Layer 133N (=13.5kgf) 2nd Layer 157N (=16.0kgf) 3rd Layer 182N (=18.5kgf)
Wire Rope Length	φ8mm(6×37)×35m (5th Layer)	Weight (Winch+Handle)	16.6 kg
Gear Ratio	1/12.6	Standard Accessories	One Handle One Hex Wrench for Wire Lock
Handle Length	300mm (Effective Max)		

MARK	PARTICULARS	MATERIAL	TEST PIECE	WORKING NO. REQUIRED	SPARE (PRR)	TOTAL	PER ONE WEIGHT IN g	TOTAL	REMARKS
MANAGER							WORK NO.		QUANTITY
DEPUTY MANAGER									
CHIEF	I. Takahashi						CLASSIFICATION		SCALE
ENG'R IN CHARGE		MAXPULL STAINLESS WINCH (ELECTROLYTIC POLISHING)							/
CHECKED BY							DRAWING NO.		
DRAWN BY	T. Yonezawa	MODEL ESB-10					ESB10-101201-01E		
DATE DRAWN	2010/12/01								

MAXPULL MACHINERY & ENGINEERING CO., LTD.