# OPERATING & MAINTENANCE MANUAL

PLEASE READ AND STUDY THIS MANUAL THOROUGHLY,
BEFORE YOU OPERATE THE MACHINE.

# HEAVY REBAR CUTTER

# **REFLEX-RHD42A**











- PLEASE READ THIS MANUAL THOROUGHLY AND STUDY THE STRUCTURE OF THE EQUIPMENT, SAFETY INFORMATION AND PRECAUTIONS, BEFORE YOU TRANSPORT, INSTALL, OPERATE, MAINTAIN OR CHECK THE EQUIPMENT.
- IN THIS MANUAL, SAFETY PRECAUTION IS DIVIDED INTO <Warning> AND <Caution>.



IF THE EQUIPMENT IS WRONGLY HANDLED, A DANGEROUS SITUATION INCLUDING DEATH OR SERIOUS INJURY IS LIKELY TO TAKE PLACE.



IF THE EQUIPMENT IS WRONGLY HANDLED, PHYSICAL INJURY OF A MEDIUM LEVEL OR PROPERTY DAMAGED IS LIKELY TO TAKE PLACE.



MAY ALSO RESULT IN SERIOUS HAZARDS. SINCE ALL MAJOR POSSIBILITIES ARE WRITTEN IN THIS MANUAL, PLEASE MAKE SURE TO OBSERVE THEM WITHOUT FAIL.

- ° IF CUTTING PROCESS IS PERFORMED BEYOND THE CUTTING CAPACITY OF THE MACHINE, IT WILL CRITICALLY LEAD TO SERIOUS DAMAGE IN CUTTER BLOCKS OR THE MACHINE ITSELF.
- RUN THE MACHINE IDLE FOR MORE THAN 1 MINUTE BEFORE GOING INTO THE ACTUAL CUTTING PROCESS.
- CHECK THE BOLTS AND NUTS OF BLADE TIGHTENED BEFORE OPERATING.
- ° DO NOT USE THE CUTTER WITH WET HANDS AND KEEP IT DRY TO PREVENT AN ELECTRIC SHOCK.
- •ALWAYS BE CAREFUL SO THAT YOU MAY NOT GET YOUR FINGERS HURT WHEN YOU PERFORM CUTTING PROCESS, WITH THE BAR HELD ON YOUR HAND.
- STOP THE CUTTING PROCESS BY PRESSING THE OFF SWITCH WHEN THERE OCCURS AN ABNORMAL PHENOMENON IN THE COURSE OF CUTTING PROCESS.
- MAKE SURE THAT YOU WILL BE CAUTIOUS TO AVOID A POSSIBILITY OF INJURIES IN HAND DURING CUTTING PROCESS.
- THE ADJUSTABLE STOPPER (HOLDER OF BLADE) FUNCTIONS TO MAINTAIN THE BAR IN A CORRECT POSITION AND KEEP THE BAR(S) FROM SHAKING DURING CUTTING PROCESS AND MUST BE PROPERLY SET FOR EACH SIZE OF BAR BEFORE MAKING CUT.
- FOR BETTER PERFORMANCE AND LONGER LIFE OF THE MACHINE, YOU ARE RECOMMENDED TO PERFORM CUTTING PROCESS WITH INTERMITTENT PAUSE, AFTER CUTTING FOR A LONG PERIOD OF TIME.
- PRIOR TO USE, MAKE SURE THAT THE OPERATOR SHOULD TIGHTEN PROPERLY BOTH THE BOLT FOR ADJUSTING CUTTER BLOCK AND FOR FIXING CUTTER BLOCK AS THE BOLT MIGHT GET LOOSENED BY THE VIBRATION CAUSED DURING CUTTING PROCESS. ESPECIALLY, THE BOLT FOR FIXING CUTTER BLOCK MUST BE STRICTLY CHECKED.







#### **SPECIFICATION**

**NOMENCLATURE** 

**OPERATION** 

MAINTENANCE AND CHECKPOINTS



THANK YOU VERY MUCH FOR SELECTING **REFLEX-RHD42A**, A STEEL BAR CUTTING EOUIPMENT PRESENTED BY REFLEX MACHINERY.

THIS MANUAL IS PREPARED FOR THE PURPOSE TO MAINTAIN A GOOD CONDITION OF THE EQUIPMENT FOR AN EXTENDED PERIOD OF TIME, ENHANCE WORK EFFICIENCY, AND ALLOW THE MACHINE TO BE OPERATED SAGELY AND ACCURATELY. PLEASE KEEP THE MANUAL CLOSE AT HAND AT ALL TIME, SO THAT IT CAN BE SUFFICIENTLY UTILIZED FOR DAILY OPERATION.







THIS EQUIPMENT IS A CUTTING SYSTEM THAT IS CAPABLE OF CUTTING HARD-STEEL BARS (HIGH-BARS) WITH DIAMETERS RANGING FROM 10mm TO 42mm RAPIDLY AND ACCURATELY.

THIS MACHINE DEVELOPED FOR YOUR MAXIMUM OUTSTANDING GROWTH IN PRODUCTIVITY.

#### SUPPLY MATERIAL

1) DIAMETER OF APPLICABLE HARD-STEEL BAR: HD10 ~ HD42

2) APPLICABLE STEEL BAR: DEFORMED STEEL BAR

3) LENGTH OF STEEL BAR: ∞

#### MAX SIMULTANEOUSLY APPLICABLE STEEL BARS

mm	Ø10	Ø13	Ø16	Ø19	Ø22, Ø25	Ø <b>29~</b> Ø <b>42</b>
SD500	8	6	5	3	2	1



MAKE SURE TO OBSERVE THE ABOVE MAX LIMITS

#### **POWER SUPPLY**

1) ELECTRIC POWER: THREE PHASE; ¿220V~450V; ¿50Hz/60Hz

2) WIRING : OBSERVE SPECIFIED WIRING REQUIREMENTS. THE WIRE SIZE SHOULD BE AT LEAST 2.0mm IN DIAMETER.

#### **EQUIPMENT DIMENSION AND WEIGHT**

1) EQUIPMENT DIMENSION: 838(L); 2688(W); 21,313(H)

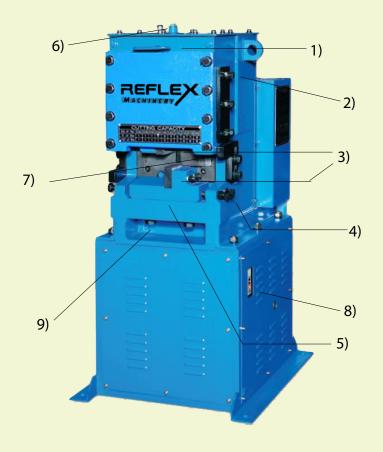
2) TOTAL WEIGHT: 836Kg











- 1) PULLING KNOB
- 2) BOLT FOR ADJUSTING SLIDE RAM
- 3) CUTTING BLADES
- 4) BOLT FOR ADJUSTING CUTTER BLOCK
- 5) CUTTER BLOCK
- 6) OIL INJECTOR
- 7) REBAR SUPPORTER
- 8) ON/OFF SWITCH
- 9) BOLT FOR FIXING CUTTER BLOCK







#### **OPERATION**

- 1) OPEN THE OIL CAP (No.6 IN ILLUSTRATION) AND REFILL THE OIL TILL THE LEVEL OF OIL GAUGE COMES TO 1/3.
- 2) WHEN YOU PRESS THE "ON" BUTTON, THE MACHINE BECOMES READY TO OPERATE. AT THE SAME TIME, THE POWER LAMP WILL SIGNAL WITH THE LIGHT.
- 3) INSERT THE BAR BETWEEN 2 CUTTER BLOCKS WITH ADJUSTMENT OF BOTH ADJUSTABLE STOPPERS.
- 4) A CUTTING PROCESS CAN BE COMPLETED BY PULLING AND RELEASING THE KNOB ONE TIME.

#### **NOTICE**

- 1) DO NOT RE-RUN THE MACHINE IMMEDIATELY AFTER CUTTING. WAIT UNTIL CUTTING IS COMPLETE AND THE MOTOR STOPS.
- 2) KEEP THE SURROUNDINGS CLEAN AND REMOVE ALL THE STEEL DUST AND FRAGMENT AROUND THE MACHINE.
- 3) DO NOT RUN THE MACHINE FOR A LONG TIME (TAKE A BREAK EVERY 20 MINUTES) IN CASE THE MACHINE IS BEING USED FOR LONG TIME WITHOUT A BREAK-TIME, OIL LEAKING HAPPEN TO BE BECAUSE OF THE DAMAGE OF SOME SPECIFIC PARTS, ROAD SEAL OR OIL SEAL.
- 4) DURING A LONG TIME USING THE ELECTRONIC MOTOR MAY BE HEAT THEN THE MOTOR COIL ENAMEL MAY DAMAGE.
- 5) CHECK THE OIL FREQUENTLY. (OIL MIGHT LEAK OR CONSUME ITSELF)
- 6) CHECK IF BLADE IS TIGHTLY FASTENED. IT MIGHT BE LOOSENED AFTER SEVERAL CUTTING ACTIONS)

IN CASE OF THE MACHINE IS BEING USED FOR LONG TIME WITHOUT A BREAK, IT MAY BRING OUT THE DAMAGE OF THE MOTOR OR OF THE BEARING THEN SOME NOISE MAY HAPPEN.







# MAINTENANCE & CHECKPOINT

#### **CHECK-UP AND REPAIR**

- 1) IF THE UPPER CUTTER BLOCK MOVES WITH A SLIGHT SHAKE, CHECK RELATED SCREWS AND BOLTS ARE PROPERLY TIGHTENED.
- 2) IF V BELT IS EXCESSIVELY ABRADED, CHECK THE TENSION. TENSION CAN BE ADJUSTED WITH HEXAGONAL BOLT.
- 3) IF THE MACHINE OPERATES WITH EXCESSIVE NOISE OR DOES NOT OPERATE NORMALLY, CHECK IF THE LUBRICANT IS SUFFICIENTLY FILLED UP IN OIL PUMP.
- 4) IF THE CUTTER BLOCK(S) MOVES BACK TO ITS INITIAL POSITION WITH A "CLICKING" NOISE, CHECK THE BOLT FOR ADJUSTING SLIDER RAM THAT IS PROPERLY TIGHTENED.
- 5) IF CUTTING EDGES OF EACH CUTTER BLOCK BECOME BLUNT WITH PERSISTENT USE, USE ANOTHER CUTTING EDGES OF THE CUTTER BLOCK. ALL FOUR CUTTING EDGES OF EACH CUTTER BLOCK ARE AVAILABLE FOR CUTTING PROCESS.
- 6) FOR USING THE OTHER EDGES OF CUTTER BLOCK, LOOSEN THE BOLT FOR FIXING CUTTER BLOCK (No.9 IN ILLUSTRATION) AND THEN, REVERSE THE CUTTING EDGE.
- 7) PRIOR TO USE, CHECK IF MAJOR BOLT AND NUT ARE PROPERLY TIGHTENED. SPECIALLY, THE BOLT FOR FIXING CUTTER BLOCK SHOULD BE STRICTLY CHECKED.
- 8) IF THE LAMP DOES NOT WORK NORMAL, DESPITE CORRECT SUPPLY OF POWER, CHECK THE ELECTRIC CORD LINKING POWER SOURCE TO THE MACHINE. IF THE CORD IS NORMAL, OPEN THE CONTROL BOX AND CHECK IF THE FUSE IN IT WELL CONNECTED.

#### DAILY CHECK POINT

- 1) USE THE PROPER OIL (SHELL TELLUS OIL #46)
- 2) KEEP THE MACHINE CLEAR AFTER USING.





# RETURN CHECK BEFORE WORK

CHECK POINT	SOLUTION		
DID YOU CHECK	ACCORDING TO THE MACHINE SPECIFICATION.		
THE POWER VOLTAGE?			
DID YOU CHECK	IF THERE IS OIL-LEAKING, FEEL FREE TO		
THE MACHINE'S OIL?	CONTACT OUR AFTER SALES CENTER.		
DID YOU FASTEN THE BOLTS?	ESPECIALLY AT THE KNIFE, AIR RELEASE BOLTS		
DID TOO PASTEN THE BOLTS:	AND OIL SUPPLYING BOLTS.		
DID YOU HAVE ANY	CHECK THE MOTOR,		
ABNORMAL NOISE?	STATE OF THE MACHINE, ETC		
DID YOU WORK WITH ANY	NO MORE THAN HD42mm REBAR.		
MATERIAL WITHIN CAPACITY?	NO MORE I HAN HU42MM REBAK.		
DID YOU HAVE ANY DANGEROUS	CAFETY CECURITY		
OBSTACLE?	SAFETY SECURITY.		

# CHECK BEFORE CALLING TO A/S CENTER

CHECK POINT	CAUSE	SOLUTION	
MOTOR DOES NOT RUN OR	MOTOD WILL NOT DUN	- CHECK THE ON/OFF SWITCH	
RUNS IMPROPERLY	- MOTOR WILL NOT RUN	WITH THE CABLE.	
OII I FAKAGE	SEALANT OF OIL MIGHT BE	- CHECK THE OIL GAUGE.	
OIL LEAKAGE	LOOSENED		
MACHINE OPERATES BUT	- SHORT OF OIL	- REFILL THE OIL	
NOT PERFORM THE CUTTING	- AIR TRAP	- TAKE OUT THE TRAPPED AIR.	
MOTOR RUNS BUT BLADE	SHORT OF OIL	SHELL TELLS #46	
DOES NOT WORK	SHOKT OF OIL		





#### **EXTENSION CABLE**

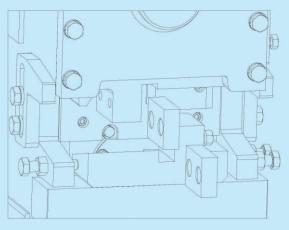
- 1) YOU WILL HAVE TO PREPARE EXTENSION CABLE, IF THE POWER SOURCE IS FAR AWAY FROM THE MACHINE.
- 2) THE EXTENSION CABLE MUST BE PROPERLY THICK FOR THE LENGTH. IF IT IS NOT ADEQUATELY THICK, THE VOLTAGE TENDS TO FLUCTUATE. THIS MAY LEAD TO WEAKENED MOTOR POWER.
- 3) WITH RESPECT TO LENGTH OF THE CABLE, SHORTER IS BETTER THAN THICKER.
- 4) REFER TO THE FOLLOWING THICKNESS OF CABLE

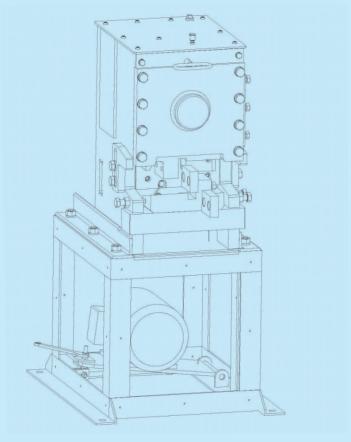
MAX LENGTH	THICKNESS NOMINAL CROSS SECTIONAL AREA		
15M	2.0sq×3C		
25M	3.5sq×3C		
45M	5.5sq×3C		





# Replacement of Blades









# Replacement of Blades

