

NOTES:

- 1- ALL DIMENSION ARE IN MILLIMETERS.
- 2- DO NOT SCALE THE DRAWING
- 3- DIAMETERS OF HOLE ARE AS FOLLOWS:  
Ø21.5 mm FOR M20, Ø17.5 mm FOR M16  
Ø13.5 mm FOR M12 BOLTS.
- 4- EACH BOLT ASSEMBLY INCLUDES ONE BOLT  
ONE NUT AND ONE SPRING WASHER.
- 5- EACH STEP BOLT ASSEMBLY INCLUDES ONE STEP BOLT  
TWO NUTS AND TWO SPRING WASHER.
- 6- GRADE OF BOLTS IS 5.8
- 7- THE STEEL MEMBER IDENTIFIED BY "R" ARE ST52  
OTHER MEMBERS ARE ST37

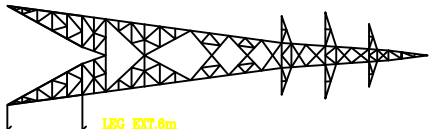
SYMBOLS AND ABBREVIATIONS

DESCRIPTION	SYMBOL
CENTER LINE	C.L.
PLATE	PL
ANGLE	L
SPRICE	SP
HIGH TENSILE	HL
BEND LINE	B.L.
NEAR SIDE	N.S.
FAR SIDE	F.S.
Ø14 mm HOLE	●
Ø17.5 mm HOLE	○
Ø22 mm HOLE	⊙
HOLE FOR STEP BOLT	⊙
SPECIFICATION FOR MATERIALS	
REFERENCE	
NO.	ITEM
1	ANGLE DIN EN 10066-2 M16 STEEL, GRADE S235JR DIN EN 10066-2 M16 STEEL, GRADE S235JR
2	SPRICE DIN EN 10066-2 M16 STEEL, GRADE S235JR DIN EN 10066-2 M16 STEEL, GRADE S235JR
3	PLATE DIN EN 10066-2 M16 STEEL, GRADE S235JR DIN EN 10066-2 M16 STEEL, GRADE S235JR
4	BOLT DIN 9136 S20 060-part1, Grade 5.8
5	NUT DIN 9136 S20 060-part2, Grade 5
6	WASHER DIN 127 DIN 9136-part 20
7	PLATE DIN EN 10066-2 M16 STEEL, GRADE S235JR DIN EN 10066-2 M16 STEEL, GRADE S235JR
8	GALVANIZED STEEL & NUTS & WASHERS ASTM A153 ASTM A153

Note: 1- Application of an equal and approved material is allowed only after the written permission of consultant.

LIST OF BOLT & NUTS & WASHERS INCLUDING 3% EXTRA

LENGTH	QTY.	LENGTH	QTY.
M16x35mm	60	STEP BOLT	11
M16x40mm	14	STD. SPR. WASHER	132
M16x35mm	10		
M16x35mm	26		



PROJECT	DESCRIPTION	DATE	BY	CHKD.	DATE
YAZD REGIONAL TRANSMISSION LINE	63 KV D.C.T. TRANSMISSION LINE	20/10/14	YASAN	YASAN	20/10/14

YAZD REGIONAL TRANSMISSION LINE

MONENCO IRAN CO.

YASAN CO.

TENSION YTM60

LEG EXT. 6m

YASAN

YASAN